

FACTORS AFFECTING PURCHASING BEHAVIOR OF CHINESE

STUDENT TOWARDS ONLINE EDUCATION PLATFORM

QI XIAOPENG

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ใบรับรองสารนิพนธ์

้วิทยาลัยบริหารธุรกิจนวัตกรรมและการบัญชี มหาวิทยาลัยธุรกิจบัณฑิตย์

ปริญญา บริหารธุรกิจมหาบัณฑิต

หัวข้อสารนิพนธ์

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เสนอ โดย

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อาจารย์ที่ปรึกษาสารนิพนธ์

คร.ศยามล นองบุญนาก

้ได้พิจารณาเห็นชอบโดยคณะกรรมการสอบสารนิพนธ์แล้ว

*N. m*ประธานกรรมการ

(ผู้ช่วยศาสตราจารย์ คร.ศิริเคช คำสุพรหม)

(คร.ศยามล นองบุญนาก)

Calizzi nossunos

(ผู้ช่วยศาสตราจารย์ คร.ลีลา เตี้ยงสูงเนิน)

วิทยาลัยบริหารธุรกิจนวัตกรรมและการบัญชี รับรองแล้ว

พ.พ. คณบดีวิทยาลัยบริหารธุรกิจนวัตกรรมและการบัญชี

(ผู้ช่วยศาสตราจารย์ คร.ศิริเคช คำสุพรหม)

วันที่ 20 เดือน ธันวาคม พ.ศ. 2564



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Author	Qi Xiaopeng	
Individual Study Advisor	Dr. Sayamol Nongbunnak	
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ABSTRACT

This study aims to explore Chinese students' purchasing behavior from primary school to high school towards online education platform. A purposive sampling method was used with from Hebei province in China. Data were collected through a self-filled questionnaire. The questionnaire consists of four parts: respondents' demographic background, parents' attitude towards online education platform, purchasing behavior and view on service marketing mix (7 Ps). 385 completed responses were used for analysis. The results showed that the majority of respondents' purchasing behavior towards online education platform was affected by demographic profile, parents' attitude and service marketing mix. Linear regression was used to measure the relationship between demographic, parents' attitude, service marketing mix and purchasing behavior toward online education platform. It is found that there is a significant correlation between demographic profile, parents' attitude, service marketing mix and purchasing behavior toward online education platform. The results show that there are significant differences in the purchasing behavior of different genders and educational backgrounds to online education platform. The study found that gender, educational background, parents' attitude and service marketing mix directly affect students' purchasing behavior towards online education platform. Further research is needed to explore other factors that influence students' purchasing behavior towards online education



platform through a broader population and more representative sampling methods.

Keyword: Online education, service marketing mix, purchasing behavior.



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CHAPTER 1 INTRODUCTION

1.1 Background to the Study

The Internet appeared in China in 1994, and online education in China started slowly at the end of the 20th century. Statistical report on Internet Development in China (2021) showed that by December 2020, China's Internet users population had reached 989 million, accounting for one fifth of the world's Internet user's population. Meanwhile, China's Internet penetration rate has reached 70.4%, higher than the global average.

Venture capital funding for education technology startups surged in 2020. It attracted \$10.5 billion of funding last year.

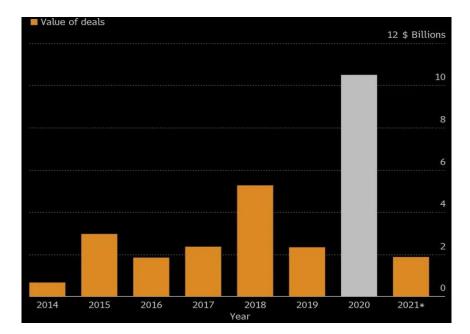


Figure 1.1 Venture capital funding for education technology

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The early development of online education was limited by the external environment, mainly including the development of Internet technology (such as the limitation of network bandwidth) and the use of personal computers. On the other hand, users have not yet developed the habit of receiving online education, let alone paying to receive online education.

The year 2000 is an important time node: Online video courseware in the form of "threepart screen" appeared, and online education entered the multimedia stage.

List of 68 modern distance education pilot schools approved by the Ministry of Education (2000) showed that the Ministry of Education has approved 68 colleges and universities as pilot colleges for modern distance education nationwide, and allowed the establishment of online education colleges and the issuance of online education diplomas. Statistical report on Internet Development in China (2000) showed that the overall scale of the colleges accounted for more than 90% of the total online education market in China at that time.

New Oriental Online School went online in 2000, marking that online education has entered the stage of recording and broadcasting online schools.

Online school at the end of the 1990s was a distance education platform using the Internet as a medium. Its biggest feature was that it was no longer limited by time and space, but it simply paid and shared the power of teachers in the Internet community.

Around 2010, the operating model of the Khan Academy in the United States began to influence the world. At this time, China's Internet industry had few opportunities for investors, such as e-commerce and online games, and online education became the "new favorite".

In 2012, the large-scale financing of the three major US MOOC (Massive Open Online Courses) platforms strongly impacted people's psychological expectations, leading to a new round of development in domestic online education researched by Li Manli (2013). China has the most active online education market in the world. Six of the top ten online education Unicorns are from China.



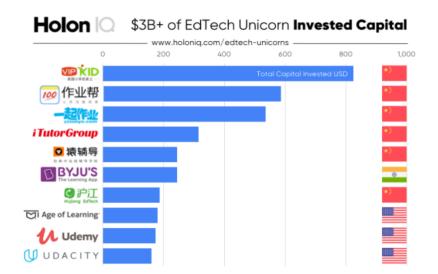


Figure 1.2 Top 10 online education platform in the world

China online Education Industry Research Report (2020) showed that the online education market in China grew rapidly from 2016 to 2020. As of 2020, the number of paying users reached 331 million, increased 209% than 2016. In the face of the sudden epidemic in 2020, Internet companies launched free live classes with the fastest response speed, initially only for the Hubei region, and soon expanded to the whole country. From a subjective point of view, no company wants the epidemic to happen, but from the objective results, the number of users of online education companies in this special time window has indeed increased.

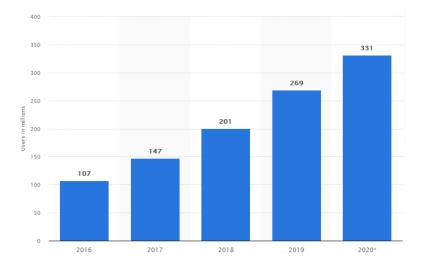
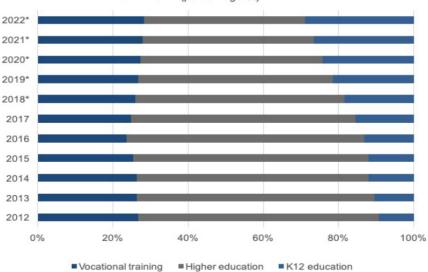


Figure 1.3 Number of users who pay for online education in China



Under the call of "stop classes without stopping study" and with the blessing of emerging technologies such as big data, cloud computing, and artificial intelligence, 265 million students and 16 million teachers in China have jointly launched online teaching, which has pushed online education to the forefront of the education industry, which is more reasonable created the capital hustle and bustle of online education, explained by Economic Daily (2020).

The online education market in China is in a critical period (2020) showed that higher education and vocational training account for 75% of the total market share. The K12 education sector in China has grown rapidly, and its share has almost doubled in the past 6 years.



Market share of online education course types in China 2012-2022 (percentage %)

Figure 1.4 Market share of online education course types in China

1.2 Research Problem

Under the influence of multiple factors, such as the epidemic stimulus policies, the technology wave and so on, China's online education market in 2020 was no matter in terms of new users, user recognition, capital market activity, etc. all had shown a trend of development beyond the previous industry expectations, and thus promoted the online education industry user



consumption habits market pattern brand value further adjustment, China's online education industry in 2020 after the new period, entered a new stage of development.

In this context, I intend to study the factors which effect on purchasing behavior of Chinese students towards online education platform, so as to help practitioners understand user needs, review and adjust their own product, layout marketing strategies in a more targeted way, and promote a more benign and orderly development of the industry.

1.3 Research Question

What are the factors affecting purchasing behavior of Chinese students towards online education platform?

1.4 Research Objectives of the Study

The aims of this study are as follows:

1. To determine the effect of demographic profile on purchasing behavior of Chinese students towards online education platform.

2. To determine the effect of service marketing mix 7Ps on purchasing behavior of Chinese students towards online education platform.

3. To determine the effect of parents' attitude on purchasing behavior of Chinese students towards online education platform.



1.5 Conceptual Framework

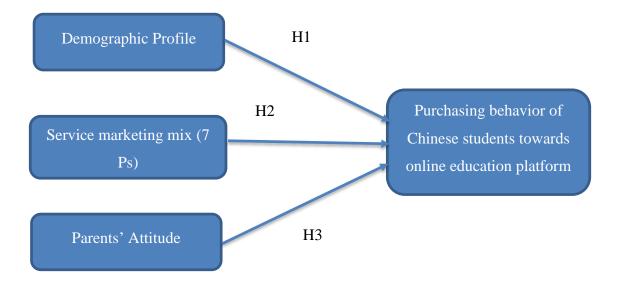


Figure 1.5 Conceptual framework

1.6 Hypothesis of the Study

The hypotheses are listed as follow:

H1: Chinese students from different profile will have different purchasing behavior towards online education platform.

H1.1: Chinese students in different gender will have different purchasing behavior towards online education platform.

H1.2: Chinese students from different age/grade will have different purchasing behavior towards online education platform.

H1.3: Chinese students from different region will have different purchasing behavior towards online education platform.

H2: Service marketing mix (7Ps) will have effect on the purchasing behavior of Chinese students towards online education platform.

H2.1: Product will have effect on the purchasing behavior of Chinese students towards online education platform.

H2.2: Price will have effect on the purchasing behavior of Chinese students towards online education platform.

H2.3: Place will have effect on the purchasing behavior of Chinese students towards online education platform.

H2.4: Promotion will have effect on the purchasing behavior of Chinese students towards online education platform.

H2.5: People will have effect on the purchasing behavior of Chinese students towards online education platform.

H2.6: Process will have effect on the purchasing behavior of Chinese students towards online education platform.

H2.7: Physical evidence will have effect on the purchasing behavior of Chinese students towards online education platform.

H3: Parents' attitude will have effect on the purchasing behavior of Chinese students towards online education platform.

H3.1: Parents' attitude about cost will have effect on the purchasing behavior of Chinese students towards online education platform.

H3.2: Parents' attitude about flexible time will have effect on the purchasing behavior of Chinese students towards online education platform.

H3.3: Parents' attitude about students' attention will have effect on the purchasing behavior of Chinese students towards online education platform.

H3.4: Parents' attitude about space at home will have effect on the purchasing behavior of Chinese students towards online education platform.

H3.5: Parents' attitude about beneficial will have effect on the purchasing behavior of Chinese students towards online education platform.

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1.7 Scope and Limitations of the Study

This study aims to research the influence of demographic profile, service marketing mix and parents' attitudes on students' purchasing behavior of online education platforms. Data collection will only focus on these aspects, Other factors that do not belong to these three aspects are beyond the scope of this study. This study will use questionnaires to investigate and reference students. Through their strategies, researchers will be able to understand the impact of demographic profile, service marketing mix and parents' attitudes on students' purchasing behavior of online education platforms.

According to this study, the sample size used is small compared to the online course users in China. This makes it more difficult to determine the close relationship between the variables being studied. And the questionnaires will be sent to China through online channel, only the participates with Internet access can response to the survey. In this case, it may not be easy to determine how the factors influence on students' purchasing behavior towards online education platform.

1.8 Population and Sample

1. Sampling Method: Randomly select some students who applied courses through online education platform in Hebei province to fill questionnaire to collect data.

2. Study Variables:

Independent variables:

- X1: Demographic Profile.
- X2: Service marketing mix (7 Ps).
- X3: Parents' Attitude.

Dependent variables: Purchasing behavior of Chinese students towards online education platform.

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1.9 Definition of Terms

Online education platform refers to an application on mobile devices that provides online education for students, such as Yuanfudao APP, and 51 Talk App.

1.10 Significance of the Study

At present, the online education industry is developing rapidly, the number of online education platform is increasing, and the operating conditions are uneven. Under the background of complex and changeable industry situation, this study hopes to realize the significance of both in theoretical and practitioners' parts by analyzing students' purchasing behavior:

Theoretical contribution

Combined with the relevant experience of domestic online education platforms, through the study of students' purchasing behavior, to provide online education start-ups with theoretical method in strategic planning.

Practitioners' contribution

In order to realize the development of online education, companies should be able to define the development direction of the company at the early stage, accurately carry out strategic positioning according to the needs of students, and reasonably arrange relevant courses and development goals of the enterprise. By studying the purchasing behavior of different students, the result of this study hope to provide practical method for the development strategy of online education platform.

1.11 Organization of the Study

The Independent Study comprises five chapters: (1) introduction, (2) literature review, (3) research method, (4) findings, and (5) conclusions and recommendations.

The research problems, research questions and objectives of this research study are introduced in chapter 1 including contributions and limitations. Chapter 2 reviews the uniqueness



of online education platform and students' purchasing behavior. Chapter 3 elaborates the research design and methodology for factors that affect purchasing behaviors of Chinese students towards online education platform. Chapter 4 is presentation of the data analysis and results. Chapter 5 includes discussions, conclusion, implications, and recommendations for future research.



CHAPTER 2

LITERATURE REVIEW

This chapter reviews the existing literature to frame the main theory that underpins this study. The chapter is divided into three parts. Firstly, relevant concepts are defined and explained. Secondly, review the current relevant research literature both in China and abroad. Thirdly, research the service marketing mix and parents' attitudes relevant to the purchasing behavior of Chinese students.

2.1 Relevant Concept

2.1.1 Online Education

Xu Suyan (2014) pointed out that online education is revolutionary, which will shift the focus of the classroom from teachers to students. Guan Jia and Li Qitao (2014) divide the online education products on the market from different perspectives-refer to products or services, which can be divided into platform, resource, and tool; refer to education stage, can be divided into K12, advanced Education, continuing education and vocational education. Yang Xiaohong and Zhou Xiaozhang (2018) survey research found that examination education, foreign language education and vocational education have developed more mature market vertical segmentation and can accurately target consumer groups. However, the market division of online education field is relatively extensive, and the platform pursues large and comprehensive but lacks personalized innovation.

2.1.2 China MOOC

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MOOC (Massive Open Online Courses) is an online teaching platform for MOOC resources of well-known schools in China that is open to the public. It was jointly launched by NetEase and Higher Education Press in 2014. During the epidemic, the Chinese MOOC, as a leader among many platforms, played an irreplaceable role among school teachers and students.

Relevant scholars have investigated and studied the factors affecting the learning willingness of users of the MOOC platform of Chinese schools. Among these factors, gender has little effect, Age and learning motivation have a greater impact. The results show that learners aged 26 to 35 tend to take the initiative to use the platform to learn for professional purposes, with strong motivations and greater willingness to learn than students at school. Of course, the lecturer's teaching method and the difficulty setting of the course are also the focus of the learner's attention, which needs to be paid attention to by the platform. Zeng Ziming and Zheng An'an (2019) built a model of the factors affecting the continuous use of MOOC learners in Chinese schools based on the model of continuous use of information systems, choosing three elements of social interaction, perceived interest, and MOOC platform quality. The results show that the relationship between the three elements and learners' willingness to use is positively correlated, that is, the increase in the proportion of the three elements can promote the positive growth of the willingness to use.

However, the MOOC of Chinese schools is still in the initial stage of development. Yuan Songhe and Liu Xuan (2014) combined the construction practice of MOOC in six universities including Tsinghua University, and believed that MOOC is fulfilling the goal of promoting the opening of high-quality educational resources to the whole society and promoting educational fairness. There is a lack of motivation for social responsibility, a self-sufficient and sustainable business operation model has not been formed; the completion rate of learners without credit certification is low, etc., MOOC should be more open in vocational education, for the construction of a lifelong education system Contribute to the cooperation with companies or third-party operating platforms to establish online universities to provide credits for learners who have completed courses and enhance social recognition.

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2.1.3 Tencent Classroom

Tencent Classroom is a professional online education platform launched by Tencent, with functions such as screen sharing, mic connection, and live playback. Shi Xuliu, and Yan Jiankun (2020) and others combined with student feedback and concluded that the sound quality of Tencent's classroom live broadcast was better, with less noise and chucking, which largely simulates a real classroom and is favored by many students. However, the answer sheet function provided by Tencent Classroom can only reflect the overall accuracy of students, and cannot accurately derive each student's answering status like Rain Classroom. In this regard, teachers may consider using Tencent Classroom to teach, using Rain Classroom statistics and assessment. Zhang Fei (2018) found that Tencent Classroom uses QQ client as the core, which naturally has a grouping effect, but the interaction between teachers and students is currently only a discussion forum, which is too single. In response to this problem, teachers can use tools such as WeChat groups to develop more effective ways of interaction.

2.1.4 Rain Classroom

As a new smart teaching solution, Rain Classroom is a work jointly created by Xuetang Online and Tsinghua University. Xiao Kang, Wang Qiong, and Chen Yuehua (2017) believe that Rain Classroom can provide comprehensive and detailed classroom data based on big data analysis, including courseware data, student data, exercise data, etc., which provides timely feedback to teachers on the real learning status of students. Convenient channels allow teachers to better adjust classroom progress. Lin Guangli, and Gong Xiubin (2019) and others set up six first-level indicators of pre-class preview, classroom teaching, after-class interaction, final evaluation, student feedback, procedures and supporting facilities, and 20 subordinates of the second-level indicators Together they constitute the rain classroom evaluation index system, and use the G1 weighting method to study the rain classroom practice effects as a whole. The research results show that the final application effect of Rain Class has passed the quantitative assessment, and student performance has improved, but there are still shortcomings in the stability of the program, and problems such as stuttering have a certain negative impact on the teaching effect.

2.2 Relevant Research

2.2.1 Research in Abroad

Online education first emerged in the United States, Canada and other places. Western scholars' research on online education mainly focuses on the theoretical rules of online education. The research direction mainly involves the impact of online education on teachers or students, the design and design of online education curriculum systems. Online education and teaching effects, etc.

DeBoer (2014) conducted an empirical analysis on the relationship between online education and student Beijing and learning effects. The results show that student background can directly affect the online learning experience. At the same time, a well-designed online education curriculum system can provide learners with a richer and more effective learning experience. Barbour, (2014) and others summarized the empirical analysis of online education in the United States, Canada, Mexico, Australia, New Zealand, Singapore, South Korea and Turkey. The results show that large-scale online education can have a significant impact on both teachers and students. Among them, the impact on teachers is the most significant. With the help of online education, teachers can initiate new teaching topics and online seminars, as well as actively update knowledge and promote professional development.

Ebben and Murphy (2014) conducted empirical research on the design of online education curriculum system based on questionnaire surveys, and found that a good online education curriculum system should have autonomy, diversity, and openness and interactivity.

Regarding the effects of online education courses, Western scholars have formed two camps. Proponents believe that online education constitutes a revolution and subversion of traditional education, and its advantages such as high openness, low cost, and freedom from time

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and space provide a reliable guarantee for obtaining ideal teaching effects (Costa & Teixeira, 2014). Critics believe that online education has shortcomings such as shallow content and low completion rate, and the teaching effect is not as high as the public opinion boasted.

According to the review of relevant literature, foreign scholars have not much influence on the development strategy of online education companies. It can be speculated that this may be due to the fact that most online education institutions in foreign countries have higher education backgrounds and most online education companies have not really achieved profitability.

2.2.2 Research in China

China's online education started relatively late, but the theoretical circle paid more attention to its development, and some research results were obtained, mainly in several aspects such as industry strategy, business model, and corporate strategy.

Liu Yan (2018) used relevant theories of strategic management, combined with the development history and specific characteristics of the online education industry, and conducted empirical research on the policy environment, market demand, competition status and main issues of the online education industry. He believes that the key to developing online education is to handle the contradiction between public welfare and industry, improve the quality of online education, and build an online education brand. Shi Chen and Wang Lin (2015) found that the overall development of the school education industry requires three conditions: a resource dissemination carrier represented by computers and the Internet, sufficient online teaching resources and high-quality personalized services. Taking Fangzhi Technology as the research object, Qu Xinming (2018) explored the transformation process of traditional education software companies, and conducted an in-depth analysis of its strategic planning and business model construction in the mobile Internet environment, which can be used to develop and develop online education companies. Strategy provides useful reference. Li Jian (2019) uses online high-end postgraduate entrance examination counseling as the starting point to analyze the strategic implementation points of the online education industry, that is, accurate product positioning according to the internal and external

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environment and the status quo of the enterprise, implement a centralized differentiation strategy, and obtain professional and efficient services. Competitive advantages.

Through a comparative analysis of the three major business models of online education at home and abroad (B2C, B2B, C2C), Zou, Yongqiang et. al. (2014) summarized the key factors for a successful business model in the field of online education, namely: creating content with its own copyright and shaping the platform The professionalism of the content, the cultivation of loyal customers, etc. On this basis, the business model of online education can be further divided into B2C, B2B, B2B2C, C2C, O2O, etc.

Zhang Ge and Zhou Dongdai (2012) believes that the number of online registrations and the stickiness of personnel will be the core factors that determine the profitability of online education, and all business models should be developed around this core factor.

There are also some scholars who summarize their business models from the perspective of business practices in the online education industry. In their view, the business model of online education includes self-reliance, reliance on giants, open learning data or recorded and broadcast lesson models, live lesson models, interactive communities, and online one-on-one.

As an important field of education, the research on online education is also becoming a theoretical hot spot. Kong, and Qi (2014) summarized and reviewed the development process, operating status, project construction, evaluation standards, evaluation index system, and management strategies of online education in the United States. On the basis of comparative analysis, combined with the characteristics of domestic online education, it puts forward strategic suggestions such as reforming educational concepts, optimizing teaching design principles, and establishing independent online course evaluation institutions. Junlong, Li, et. al. (2016) conducted a comparative analysis of the development status of K12 online education at home and abroad, and believed that domestic online education companies should conduct professional diagnosis and adjustments in strategic choices, business models, business promotion, and operational strategies. Xu Dan (2011) refers to an in-depth analysis of the safeguard measures for the development strategy

of domestic online education companies. These measures include strengthening brand building, expanding marketing channels, increasing research and development of new products and technologies, improving human resources construction, and seeking strategic alliances. As well as optimizing the organizational structure, etc.

Through combing the relevant literature, it is found that the theoretical research on online education has become a hot topic, and some theoretical results with rich reference value have also been formed. However, there are relatively few theoretical studies on specific enterprise market strategies. At the same time, it is worth pointing out that domestic scholars pay more attention to the practice of online education, but ignore its theoretical rules. The research in this paper is based on this as a starting point, and strives to provide a useful theoretical basis and practical reference for the environmental analysis, strategy formulation and strategy implementation of online education enterprises.

2.3 Students' Purchasing Behavior and Service Marketing Mix Theory

Jorge Fontenla Gonzalez (2009) stated that the functions of online education products should be set by users according to their needs. This is because every student's living habits and learning habits are different. If the product has the function of free setting, then users can set the course content and study time according to their own preferences or habits to meet the individual needs of users. In this case, the user experience is better. Therefore, in the process of product development, random customization functions should be added, and the product must not be cured. Kotler, Armstrong, Harris, and Piercy (2013) said that the purpose of network marketing work is roughly summarized as follows: First, in order to meet customer needs, It is necessary to introduce differentiated strategies, market segmentation strategies, target positioning strategies and channel strategies and other theories to transform marketing strategies; second, in the process of online marketing, promotion strategies, product prices, concept applications, service and marketing innovations, etc., need Reasonable and effective planning and use; third, in order to ensure that

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individual needs or organizational needs can be met, transactions need to be created. This platform uses the power of the Internet to carry out teaching work, allowing users to make reasonable use of their fragmented time to learn, meet this personalized demand, and gain support from users to get profit in a short time.

Teng Yan, et. al. (2017) stated that teaching products under the Internet environment will more quickly promote the way of learning to become active and interactive. Free learning, mobile learning, and personalized learning will become popular. Knowledge can be found everywhere, mass rapid dissemination speed and rapid update, multiple exchanges of learners, interactive completion of the learning process and self-upgrading, and other new features, will push education to a height that could not be achieved before. At the same time, are there many factors that make it difficult for Internet education companies to successfully carry out brand communication activities? Analyzing the difficulties faced by Internet education companies in brand communication and optimizing the communication strategies of Internet education companies are issues that companies should think deeply about. Moogan (2011) believes that advocacy, search engine optimization, free courses, and online advertising are all part of online education promotion can be quickly rolled out in a short period of time. Users see the value and advantages of online education to meet the personalized education needs of current customers.

2.4 Service Marketing Mix (7Ps)

McCarthy (1964) put forward the 4 Ps service marketing mix, namely Product, Price, Place and Promotion. Booms and Bitner (1981) built on this in a service marketing mix (7Ps), in which three elements, People, Physical Evidence, and Process, were added. 7 Ps constitutes the basic framework of service marketing.

The difference between 4Ps and 7Ps is mainly reflected in the last 3Ps of 7Ps. Generally speaking, 4Ps focus on early marketing's attention to products, which is the basis of physical

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marketing, while 7Ps focus on service marketing's attention to services other than products, which is the basis of service marketing. In terms of the marketing process, 4Ps focus on the process at the macro level, from the birth of the product to the formulation of the price, and then through marketing channels and promotion means, the product finally reaches consumers. Such a process is rough and does not take into account the details in the marketing process. In comparison, 7Ps adds micro elements to these macro levels. It begins to pay attention to some details in the marketing process, so it is more detailed and specific than 4Ps. It takes into account customers' waiting for purchase, their consumption knowledge and their requirements for the people they contact in the process of consumption.

Fan Meiying (2019) mentioned that the products launched by online education must match the needs of users, facilitate collaboration, and make full use of the advantages of the Internet. Operation is based on the maturity of the product to increase the number of users. Only when there are more users, will there be the possibility of selling users, and there will be revenue. Li Jian (2019) and others believe that there is a lack of knowledge content suitable for online education. When online education appeared, the progress of hardware tools was very obvious, but the soft content did not keep up with the development speed of online education. Compared with traditional education, the learning channels, learning habits, and learning methods of online education are significantly different. Blindly moving offline content to online can no longer meet the development needs of this era, and there is a shortage of Internet and education talents. There is a clear difference between the dispersal and the education area. Although online education solves the problem of imbalanced educational resources and solves the problem of time and space, education itself is very similar to medical care. They are deeply personalized and effect-oriented, and at the same time they are irreversible, so they are the most important for users. What matters is the opportunity cost. Based on the characteristics of education, if you want to do a good job in education, you rely on word of mouth instead of advertising.

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2.5 Parents' Attitude

Parents' consumption habits have an important influence on children. Children will not only imitate their parents' consumption impulse and consumption desire, but also may imitate their parents' consumption tendency.

A recent study by Spinelli, Lionetti, Pastore, and Fasolo (2020) found that parents who reported greater difficulties in supporting their children's learning were more stressed than before the pandemic. When parents perceive their children's learning to be manageable and they are satisfied with the learning provided by the school, their parental stress decreases and both the quantity and quality of parental involvement increases. The results of a meta-analysis also showed that parental involvement and home-school connection were important predictors of learning outcomes in early childhood education. However, the extent to which parents are experiencing difficulties in supporting children's distance learning due to COVID-19 is unknown and could have a significant impact on their involvement in promoting children's learning.

In addition to learning, children's use of electronic media is also a concern. With schools closed and societies alienated, families, including children, are increasingly relying on social media to stay connected. In addition, with their daily routines disrupted, many parents may rely on electronic devices to occupy their children's time. Together, these conditions have led to electronic media becoming a more integral part of everyday life. Ma Xiao, et. al. (2016) thought that although there are some benefits to media use, such as opportunities for new knowledge and social contact, excessive screen time is also associated with exposure to unsafe and inappropriate content, increased risk of obesity, sleep disturbances, language delays, and internalization and externalization issues. Collier, Coyne, Rasmussen, Hawkins, Padilla-Walker, Erickson, and Memmott-Elison (2016) pointed parental mediating, such as setting and enforcing rules on media use, discussing content on media, and using media with children was found to increase media use and reduce the potential risk of benefits with media use with children.



CHAPTER 3

RESEARCH METHODOLOGY

3.1 Identifying Population and Sample

3.1.1 Population: Students from primary school to high school who are in Hebei province in China.

3.1.2 Sample: Students from primary school to high school who applied courses through online education platform.

3.1.3 Sample size: 385 students who applied online courses from Hebei province.

3.1.4 Sampling method: Nonrandom sampling.

Sample size is calculated using Taro Yamane table method. (Poldongnok, 2009) Sample size table for the precision level of $\pm 5\%$, $\pm 2.5\%$ and $\pm 1\%$ with the confidence level is 95% and P=0.05.

		Confidence level	
	Precision level		
Population	5%	2.5%	1%
100	80	94	99
500	217	377	475
1,000	278	606	906
10,000	370	1,332	4,899
100,000	383	1,513	8,762
500,000	384	1,532	9,423
1,000,000	385	1,534	9,512

 Table 3.1
 Sample size and confidence level



(Source: https://www.tspweb.com/key/aql2.5%204.0%E6%8A%BD%E6%9F%A5%E6%A3%8 0%E9%AA%8C%E8%A1%A8.html)

Due to the number of students who applied online courses is more than 1,000,000, according to the sample size and confidence level table, when the population is more than 1,000,000, the sample size should be 385 with the confidence level being 95%, see Table 1.

3.2 Measurement Items and Validations

3.2.1 Measurement Items

Questionnaire method will be applied to understand students' underlying reasons. It helps to reveal common trends in views and attitudes.

- 4 items used to measure the effect of demographic profile to Chinese students' purchasing behavior towards online education platform: gender, age, education level and hometown.
- 28 items will be used to measure the effect of service marketing mix (7 Ps) to Chinese students' purchasing behavior towards online education platform: product, price, promotion, place, people, process and physical evidence.
- 10 items will be used to measure the effect of parents' attitude to Chinese students' purchasing behavior towards online education platform.
- 5 items will be used to measure purchasing behavior of Chinese students towards online education platform.

3.2.2 Measurement Validations

The validity test of the survey questionnaire has two steps:

3.2.2.1 Content validity: Establish a research structure on the basis of related research to ensure the validity of the research content literature and recommendations of academicians and practitioners (Malhotra 2007).



3.2.2.2 Reliability validity: The coefficient of the data is alpha, or Cronbach's Alpha, about 0.6 for 385 items. This indicates that the research structure has moderately fair internal consistency (Malhotra 2007).

3.3 Data Collection

The method of collecting the required data is by email and social medias such WeChat, QQ. The tool used is a well-designed questionnaire with a total of 47 questions. Public data is also used, including published materials such as journals, books, and Internet resources. The research period is from 15 October 2021 to 15 November 2021.

3.4 Data Analysis

Data was analyzed by using the following methods:

3.4.1 Descriptive statistic:

Calculate and analyze the percentage, mean and standard deviation.

- Each item (statement) is assigned a numerical score, ranging from 1 to 5 as follows: Calculate the cutting/ interval score = (5-1)/5 = 0.80
- Thus, descriptions of the revised score are as follows:

Range of Score Level of agreement

- 1.00 1.80 = strongly disagree with the statement
- 1.81 2.60 = disagree with the statement
- 2.61 3.40 = feel neutral with the statement
- 3.41 4.20 = agree with the statement
- 4.21 5.00 = strongly agree with the statement
- 3.4.2 Inferential statistics:



Chi-Square (X²-test) was used to test the relationship between demographic profile, parents' attitude, service marketing mix (7Ps) and Chinese students purchasing behavior towards online education platform.

The confidence level of 95% or $\alpha < 0.05$ was adopted to test the hypotheses of the study.



CHAPTER 4

FINDINGS

This chapter is divided into two sections to introduce and discuss the results of data analysis. The first part presents the descriptive results of demographic, parents' attitude and service marketing mix (7 Ps). The second part analysis the results of hypothesis testing (Chi-Square).

4.1 Descriptive Results

Descriptive statistics include percentages, mean values, and standard deviations to report information about the individual characteristics of the sample.

4.1.1 Demographic profile

Category	Frequency	Percentage (%)
Gender		
Female	208	54.0
Male	177	46.0
Age		
Under 7 years old	106	27.5
7-13 years old	110	28.6
14-16 year old	67	17.4
17-20 years old	61	15.8
More than 20 years old	41	10.6

Table 4.1 Demographic characteristics of respondents of online study (N = 385)

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Education			
Primary school	215	55.8	
Middle school	68	17.7	
High school	102	26.5	
Hometown			
Hebei province	330	85.7	
Other province	55	14.3	

Table 4.1 showed the demographic profile data of respondents as follows:

1. Gender - The proportion of female (54%) surveyed was slightly higher than that of male (46%).

2. Age - the majority of respondents' age were between 7-13 years old (28.6%), followed by under 7 years old (27.5), 14-16 years old (17.4%), 17-20 years old (15.8%) and more than 20 years old (10.6%).

3. Education - the majority of respondents are in primary school (55.8%), followed by high school (26.5%) and middle school (17.7%).

4. Hometown - the majority of respondents are from Hebei province (85.7%) and the proportion of other province is lower (14.3%).

4.1.2 Parents' attitude

The table below showed the results of parents' attitude. From table 2. it was found that the overall of respondents agreed that shows in parents' attitude. Respondents agree that their parents think online courses are beneficial to them. (Mean = 3.96). Respondents agree that their parents think they should study online courses because they have facilities at home such as notebook and internet connection. (Mean = 4.01). Respondents agree that their parents think they should study online courses because of the Covid-19 situation. (Mean = 4.03). Respondents agree that their parents think online course saves a lot of money for traveling and other costs. (Mean = 3.62). Respondents agree that their parents think online course has a flexible study hour. (Mean = 3.62). Respondents agree that their parents think online course has a flexible study hour. (Mean = 3.62).



4.01). Respondents agree that their parents think they overuse electronic devices if they study online course. (Mean = 4.03). Respondents agree that their parents think online course is cheaper. (Mean = 4.03). Respondents agree that their parents think online study may be interrupted by other family members. (Mean = 3.61). Respondents agree that their parents think online course does not capture students' attention/interest. (Mean = 4.01). Respondents disagree that their parents think they shouldn't study online courses because lack of space at home. (Mean = 2.03).

			Level of
Parents' Attitude	Mean	SD.	Agreement
1. My parents think online courses are beneficial to me.	3.96	1.169	Agree
 My parents think I should study online courses because we have facilities at home such as notebook and internet connection. 	4.01	1.070	Agree
3. My parents think I should study online courses because of the Covid-19 situation.	4.03	1.071	Agree
4. My parents think online course saves a lot of money for traveling and other costs.	3.62	1.121	Agree
5. My parents think online course has a flexible study hour.	4.01	1.066	Agree
6. My parents think I overuse electronic devices if I study online course.	4.03	1.052	Agree
7. My parents think online course is cheaper.	4.03	1.067	Agree
8. My parents think online study may be interrupted by other family members.	3.61	1.121	Agree

 Table 4.2 Descriptive results of parents' attitude.

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Total	3.74	1.09	Agree
courses because lack of space at home.	2.05	1.119	Disagree
10. My parents think I shouldn't study online	2.03		
capture students' attention/interest.	4.01	1.070	Agree
9. My parents think online course does not			

4.1.3 Service marketing mix (7Ps)

The tables below showed the results of service marketing mix.

a) Product

As showed on Table 4.2, the majority of the respondents agreed that shows in product. (Mean = 3.91). Respondents agree that they believe the course in online education platform is high quality and will purchase again. (Mean = 3.97). followed by respondents agree that they believe online education platform offer more variety of courses compare to traditional tutorium. (Mean = 4.01). Respondents agree that they like online education platform because it has value package. (Mean = 4.03). And respondents agree that they like online education platform because it has more alternative choices. (Mean = 3.61).

Product	Mean	SD.	Level of
Froduct	wiean	5D.	Agreement
1. I believe the course in online education			
platform is high quality and will purchase	3.97	1.167	Agree
again.			
2. I believe online education platform offer			
more variety of courses compare to traditional	4.01	1.061	Agree
tutorium.			

Table 4.3 Descriptive Results of Product

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Total	3.91	1.103	Agree	
has more alternative choices.	5.05	1,111	rgree	
4. I like online education platform because it	3.63	1.111	Agree	
because it has value package.	4.03	1.071	Agree	
3. I like online online education platform				

b) Price

As showed on Table 4.3, the majority of the respondents agreed that shows in price. (Mean = 4.02). Respondents agree that they believe online education platform offer lower price than traditional tutorium. (Mean = 4.01). followed by respondents agree that they believe that price spending on online education platform is worth-spending. (Mean = 4.03). Respondents agree that they are satisfying with pricing from online education platform. (Mean = 4.03).

Price	Mean	SD.	Level of
The	Wiean	50.	Agreement
1. I believe online education platform offer	4.01	1.067	A creat
lower price than traditional tutorium.	4.01	1.007	Agree
2. I believe that price spending on online	4.02	1.0.40	
education platform is worth-spending.	4.03	1.048	Agree
3. I am satisfying with pricing from online	4.02	1.0.0	
education platform.	4.03	1.062	Agree
Total	4.02	1.059	Agree

Table 4.4 Descriptive Results of Price

c) Place

As showed on Table 4.4, the majority of the respondents agreed that shows in place.



(Mean = 3.89). Respondents agree that they believe that online education platform is convenient place to study. (Mean = 3.62). followed by respondents agree that they believe that online education platform is user-friendly. (Mean = 4.01). And respondents agree that they are satisfying with online channel in term of studying. (Mean = 4.03).

Place	Mean	SD.	Level of
Tiace	Ivican	50.	Agreement
1. I believe that online education platform is convenient place to study.	3.62	1.121	Agree
2. I believe that online education platform is user-friendly.	4.01	1.070	Agree
3. I am satisfying with online channel in term of studying.	4.03	1.071	Agree
Total	3.89	1.087	Agree

Table 4.5 Descriptive Results of Place

d) Promotion

As showed on Table 4.5, the majority of the respondents agreed that shows in promotion. (Mean = 3.86). Respondents agree that they believe that online education platform offers many promotions. (Mean = 3.62). followed by respondents agree that they believe that online education platform offers better loyalty programs. (Mean = 4.01). Respondents agree that they like online education platform because of friend's recommendation. (Mean = 4.03). And respondents agree that they like online education platform because I see advertisement on social media. (Mean = 4.04). Respondents agree that they like online education platform because I see advertisement from poster or flyer. (Mean = 3.62).



Table4.6 Descriptive Results of Promotion

Promotion	Mean	SD.	Level of
rromotion	Ivican	50.	Agreement
1. I believe that online education platform	3.62	1.114	Agree
offers many promotions.	5.02	1.114	Agree
2. I believe that online education platform	4.01	1.067	
offers better loyalty programs.	4.01	1.007	
3. I like online education platform because of	4.03	1.055	Agree
my friend's recommendation.	4.05	1.055	Agree
4. I like online education platform because I	4.04	1.061	Agree
see advertisement on social media.	4.04	1.001	Agree
5. I like online education platform because I	3.62	1 1 2 2	A
see advertisement from poster or flyer.	3.02	1.123	Agree
Total	3.86	1.084	Agree

e) People

As showed on Table 4.6, the majority of the respondents agreed that shows in People. (Mean = 3.93). Respondents agree that the customer service staff is helpful. (Mean = 4.01). followed by respondents agree that the staff are knowledgeable about courses. (Mean = 4.04). Respondents agree that the seller provided a clear information about their courses. (Mean = 4.03). And respondents agree that the staff respond to the customer quickly. (Mean = 3.63).

People	Mean	SD.	Level of
	Witchi	50.	Agreement

Table 4.7 Descriptive Results of People

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Total	3.93	1.074	Agree
(in 60 minutes)	5.05	1.114	Agiet
4. The staff respond to the customer quickly.	3.63	1.114	Agree
about their courses.	4.03	1.071	Agree
3. The seller provided a clear information	4.03	1.071	Agree
2. The staff are knowledgeable about courses.	4.04	1.045	Agree
1. The customer service staff is helpful.	4.01	1.067	Agree

f) Process

As showed on Table 4.7, the majority of the respondents agreed that shows in process. (Mean = 3.92). Respondents agree that it's easy to apply a course from online education platform. (Mean = 4.01). followed by respondents agree that payment method is easy through internet banking. (Mean = 4.04). Respondents agree that there are more options for date and time to study. (Mean = 3.62). And respondents agree that application procedure is easy to understand. (Mean = 4.02).

Process	Mean	SD.	Level of
Frocess	wiean	5D.	Agreement
1. It's easy to apply a course from online	4.01	1.069	A 2700
education platform.	4.01	1.009	Agree
2. Payment method is easy through internet	4.04	1.062	
banking.	4.04	1.062	Agree
3. There are more options for date and time to	2.62	1 100	
study.	3.62	1.123	Agree

Table 4.8 Descriptive Results of Process

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4. Application	procedure	is	easy	to	4.02	1.057	Agree
understand.						1.007	19100
Total					3.92	1.078	Agree

g) Physical Evidence

As showed on Table 4.8, the majority of the respondents agreed that shows in physical evidence. (Mean = 3.95). Respondents agree that the application (or website) pages have good quality pictures. (Mean = 4.03). followed by respondents agree that the application (or website) have colorful theme. (Mean = 4.04). Respondents agree that it is easy to get the information. (Mean = 3.62). And respondents agree that the design of each product is in a category. (Mean = 4.02). Respondents agree that Size of character is easy to read. (Mean = 4.03).

Physical Evidence	Mean	SD.	Level of	
i nysical Evidence	Ivican	50.	Agreement	
1. The application (or website) pages have	4.03	1.052	Agroo	
good quality pictures.	4.05	1.052	Agree	
2. The application (or website) have colorful	4.04	1.061	Agree	
theme.	4.04	1.001	Agree	
3. It is easy to get the information. (2-3	3.62	1.125	Agree	
clicks).	5.02	1.125	Agree	
4. The design of each product is in a category.	4.02	1.057	Agree	
5. Size of character (alphabet) is easy to read.	4.03	1.053	Agree	
Total	3.95	1.070	Agree	

Table 4.9 Descriptive Results of Physical Evidence



4.1.4 Purchasing behavior

The respondents' purchasing behavior can be described as follows.

Table 4.10 Which course do you usually purchase from online edu

Items	Percentage (%)
K12 courses	42.1
Language courses	41.0
Extra curricular activities	13.0
Other	3.9
Total	100.0

As showed on Table 4.9, the majority of the respondents applied K12 courses (42.1%),

followed by language courses (41.0%), extracurricular activities (13.0%) and others (3.9%).

Items	Percentage (%)
Every month	1.0
Once every 3 months	11.4
Once every 6 months	59.5
Once a year	28.1
Total	100.0

Table 4.11How often do you purchase online courses?

As showed on Table 4.10, the majority of the respondents' purchasing frequency is once every 6 months (59.5%), followed by once a year (28.1%), once every 3 months (11.4%) and every month (1.0%).



Items	Percentage (%)
Friends	28.1
Family	53.2
Celebrities	14.0
Other	4.7
Total	100.0

 Table 4.12
 Who influence your decision on purchasing online course?

As showed on Table 4.11, the majority of the respondents were influenced by family (53.2%), followed by friends (28.1%), celebrities (14.0%) and others (4.7%).

Table 4.13 Why do you choose to study online course?

Items	Percentage (%)
Flexible study time	41.3
Personalized course plans	40.3
Lower costs	14.5
Other	3.9
Total	100.0

As showed on Table 4.12, the majority of the respondents applied online courses because of flexible study time (41.3%), followed by personalized course plans (40.3%), lower costs (14.5%) and others (3.9%).



Table 4.14How do you buy online course?

Items	Percentage (%)
Directly from the online platform	4.7
Visit the tutorial school and buy online courses	19.5
Send the application by email	50.1
Other	25.7
Fotal	100.0

As showed on Table 4.13, the majority of the respondents purchased online course by email (50.1%), followed by visit the tutorial school (19.5%), others (25.7%) and directly from the online platform (4.7%).

4.2 Result of Hypothesis Test

Chi-Square test was used to test hypothesis 1.

H1: Chinese students from different profile will have different purchasing behavior towards online education platform.

Demographic profile was described by gender, age, education level and region.

Purchasing behavior was described by which course did the respondents usually purchase, how often do they purchase, who influenced their decision on purchasing online course, the reason they purchase and the way to purchase online course.

Table 4.15 This study found a partly support of H1 as follows:

Factors	Value	Df.	Sig.	Resu

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1. The course to purchase	2.060	3	0.560	Insignificant
2. The frequency to purchase	6.395	3	0.094	Insignificant
3. People who influenced decision	1.688	3	0.640	Insignificant
4. The reason to purchase	1.746	3	0.627	Insignificant
5. The way to purchase	2.616	3	0.455	Insignificant
Age				
1. The course to purchase	111.146	12	0.006	Significant
2. The frequency to purchase	116.405	12	0.004	Significant
3. People who influenced decision	96.536	12	0.000	Significant
4. The reason to purchase	10.225	12	0.596	Insignificant
5. The way to purchase	11.074	12	0.532	Insignificant
Education level				
1. The course to purchase	203.125	6	0.003	Significant
2. The frequency to purchase	103.096	6	0.005	Significant
3. People who influenced decision	85.823	6	0.003	Significant
4. The reason to purchase	5.452	6	0.487	Insignificant
5. The way to purchase	3.424	6	0.754	Insignificant
Hometown				
1. The course to purchase	1.439	3	0.696	Insignificant
2. The frequency to purchase	2.287	3	0.515	Insignificant
3. People who influenced decision	2.715	3	0.438	Insignificant
4. The reason to purchase	2.119	3	0.548	Insignificant
5. The way to purchase	3.084	3	0.379	Insignificant
* Level of significant $\boldsymbol{\alpha} = 0.05$				

* Level of significant α =0.05



The table above showed that the significant α <0.05 when test the Chi-square of age and education level to the course to purchase, the frequency to purchase and the people who influenced decision. But the α >0.05 when test the Chi-square of gender and hometown to the purchasing behaviors. It means that age and education level have some influence on Chinese students' purchasing behavior towards online education platform, but age and hometown don't have influence on Chinese students' purchasing behavior towards online education platform.

Chi-Square test was used to test hypothesis 2.

H2: Service marketing mix (7Ps) will have effect on the purchasing behavior of Chinese students towards online education platform.

Service marketing mix was described by product, price, place, promotion, people, process, physical evidence. Purchasing behavior was described by which course did the respondents usually purchase, how often do they purchase, who influenced their decision on purchasing online course, the reason they purchase and the way to purchase online course.

Hypothesis 2.1 Product will have effect on the purchasing behavior of Chinese students toward online education platform, see Table 4.16.

Factors	Value	Df.	Sig.	Result
Product (High quality)				
1.The course to purchase	437.907	12	0.000	Significant
2. The frequency to purchase	725.640	12	0.000	Significant
3.People who influenced decision	411.175	12	0.000	Significant
4. The reason to purchase	396.507	12	0.000	Significant
5. The way to purchase	367.757	12	0.000	Significant

 Table 4.16
 Hypothesis testing results of hypothesis 2.1

Product (More variety)

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1.The course to purchase	659.868	12	0.000	Significant
2. The frequency to purchase	331.543	12	0.000	Significant
3.People who influenced decision	610.035	12	0.000	Significant
4. The reason to purchase	612.531	12	0.000	Significant
5.The way to purchase	212.094	12	0.000	Significant
Product (Value package)				
1.The course to purchase	363.859	12	0.000	Significant
2. The frequency to purchase	1155.00	12	0.000	Significant
3.People who influenced decision	310.536	12	0.000	Significant
4. The reason to purchase	354.826	12	0.000	Significant
5.The way to purchase	538.594	12	0.000	Significant
Product (Alternative choice)				
1.The course to purchase	211.772	12	0.000	Significant
2. The frequency to purchase	592.161	12	0.000	Significant
3.People who influenced decision	207.959	12	0.000	Significant
4. The reason to purchase	204.882	12	0.000	Significant
5.The way to purchase	394.931	12	0.000	Significant

Remark: $\alpha < 0.05$

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The table 4.16 showed that the significant α =0.000 (<0.05) when test the Chi-square of product. It means that product has a significant influence on Chinese students' purchasing behavior towards online education platform.

Hypothesis 2.2 Price will have effect on the purchasing behavior of Chinese students toward online education platform, see Table 4.17.

Factors	Value	Df.	Sig.	Result
Price (Lower)				
1.The course to purchase	730.802	12	0.000	Significant
2. The frequency to purchase	362.576	12	0.000	Significan
3.People who influenced decision	702.599	12	0.000	Significan
4.The reason to purchase	669.184	12	0.000	Significan
5. The way to purchase	221.507	12	0.000	Significant
Price (Worthy)				
1.The course to purchase	328.832	12	0.000	Significan
2. The frequency to purchase	962.699	12	0.000	Significan
3.People who influenced decision	296.574	12	0.000	Significan
4.The reason to purchase	321.823	12	0.000	Significan
5. The way to purchase	468.813	12	0.000	Significan
Price (Satisfy)				
1.The course to purchase	365.864	12	0.000	Significan
2. The frequency to purchase	1053.59	12	0.000	Significan
3.People who influenced decision	303.565	12	0.000	Significan
4. The reason to purchase	360.372	12	0.000	Significan
5.The way to purchase	540.916	12	0.000	Significan

Table 4.17Hypothesis testing results of hypothesis 2.2

Remark: **α** < 0.05

The table 4.17 showed that the significant α =0.000 (<0.05) when test the Chi-square of price. It means that price has a significant influence on Chinese students' purchasing behavior towards online education platform.



Hypothesis 2.3 Place will have effect on the purchasing behavior of Chinese students toward online education platform, see Table 4.18.

Factors	Value	Df.	Sig.	Result
Place (Convenient)				
1.The course to purchase	199.639	12	0.000	Significant
2. The frequency to purchase	688.647	12	0.000	Significant
3.People who influenced decision	201.260	12	0.000	Significant
4.The reason to purchase	194.587	12	0.000	Significant
5.The way to purchase	391.070	12	0.000	Significant
Place (User friendly)				
1.The course to purchase	662.984	12	0.000	Significant
2.The frequency to purchase	355.747	12	0.000	Significant
3.People who influenced decision	614.122	12	0.000	Significant
4.The reason to purchase	603.687	12	0.000	Significant
5.The way to purchase	212.859	12	0.000	Significant
Place (Online channel)				
1.The course to purchase	363.859	12	0.000	Significant
2. The frequency to purchase	1155.00	12	0.000	Significant
3.People who influenced decision	310.536	12	0.000	Significant
4.The reason to purchase	354.826	12	0.000	Significant
5.The way to purchase	538.594	12	0.000	Significant

 Table 4.18
 Hypothesis testing results of hypothesis 2.3

Remark: $\alpha < 0.05$



The table above showed that the significant α =0.000 (<0.05) when test the Chi-square of place. It means that place has a significant influence on Chinese students' purchasing behavior towards online education platform.

Hypothesis 2.4 Promotion will have effect on the purchasing behavior of Chinese students toward online education platform, see Table 4.19.

Factors	Value	Df.	Sig.	Result
Promotion (Promotion)				
1. The course to purchase	208.554	12	0.000	Significant
2. The frequency to purchase	600.187	12	0.000	Significant
3.People who influenced decision	205.670	12	0.000	Significant
4. The reason to purchase	201.946	12	0.000	Significant
5. The way to purchase	400.017	12	0.000	Significant
Promotion (Loyalty program)				
1.The course to purchase	730.802	12	0.000	Significant
2. The frequency to purchase	362.576	12	0.000	Significant
3.People who influenced decision	702.599	12	0.000	Significant
4. The reason to purchase	669.184	12	0.000	Significant
5. The way to purchase	221.507	12	0.000	Significant
Promotion (Recommendation)				
1.The course to purchase	465.801	12	0.000	Significant
2. The frequency to purchase	322.437	12	0.000	Significant
3.People who influenced decision	963.987	12	0.000	Significant
4. The reason to purchase	291.912	12	0.000	Significant

Table 4.19Hypothesis testing results of hypothesis 2.4

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5.The way to purchase	315.387	12	0.000	Significant
Promotion (Ads on social media)				
1.The course to purchase	362.288	12	0.000	Significant
2. The frequency to purchase	1058.75	12	0.000	Significant
3.People who influenced decision	301.805	12	0.000	Significant
4.The reason to purchase	357.482	12	0.000	Significant
5.The way to purchase	546.117	12	0.000	Significant
Promotion (Ads on poster or flyer)				
1.The course to purchase	196.441	12	0.000	Significant
2. The frequency to purchase	683.570	12	0.000	Significant
3.People who influenced decision	197.574	12	0.000	Significant
4.The reason to purchase	191.410	12	0.000	Significant
5.The way to purchase	385.991	12	0.000	Significant

Remark: **α** < 0.05

The table 4.19 showed that the significant α =0.000 (<0.05) when test the Chi-square of promotion. It means that promotion has a significant influence on Chinese students' purchasing behavior towards online education platform.

Hypothesis 2.5 People will have effect on the purchasing behavior of Chinese students toward online education platform, see Table 4.20.

Table 4.20Hypothesis testing results of hypothesis 2.5

Factors	Value	Df.	Sig.	Result
People (Helpful)				

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1. The course to purchase	730.802	12	0.000	Significant
2. The frequency to purchase	362.576	12	0.000	Significant
3.People who influenced decision	702.599	12	0.000	Significant
4. The reason to purchase	669.184	12	0.000	Significant
5. The way to purchase	221.507	12	0.000	Significant
People (Knowledgeable)				
1.The course to purchase	324.654	12	0.000	Significant
2. The frequency to purchase	867.823	12	0.000	Significant
3.People who influenced decision	293.749	12	0.000	Significant
4. The reason to purchase	319.453	12	0.000	Significant
5. The way to purchase	481.276	12	0.000	Significant
People (Clear information)				
1.The course to purchase	363.859	12	0.000	Significant
2. The frequency to purchase	1155.00	12	0.000	Significant
3.People who influenced decision	310.536	12	0.000	Significant
4. The reason to purchase	354.826	12	0.000	Significant
5.The way to purchase	538.594	12	0.000	Significant
People (Quickly respond)				
1.The course to purchase	207.298	12	0.000	Significant
2. The frequency to purchase	600.540	12	0.000	Significant
3.People who influenced decision	208.896	12	0.000	Significant
4. The reason to purchase	198.066	12	0.000	Significant
5.The way to purchase	395.521	12	0.000	Significant
$P_{\text{omark}} : 0 < 0.05$				

Remark: **α** < 0.05



The table above showed that the significant α =0.000 (<0.05) when test the Chi-square of people. It means that people has a significant influence on Chinese students' purchasing behavior towards online education platform.

Hypothesis 2.6 Process will have effect on the purchasing behavior of Chinese students toward online education platform, see table 4.21.

Factors	Value	Df.	Sig.	Result
Process (Easy to apply)				
1.The course to purchase	653.656	12	0.000	Significant
2. The frequency to purchase	629.948	12	0.000	Significant
3.People who influenced decision	604.870	12	0.000	Significant
4. The reason to purchase	595.483	12	0.000	Significant
5.The way to purchase	210.748	12	0.000	Significant
Process (Payment method)				
1.The course to purchase	366.604	12	0.000	Significant
2. The frequency to purchase	1053.51	12	0.000	Significant
3.People who influenced decision	304.787	12	0.000	Significant
4. The reason to purchase	361.168	12	0.000	Significant
5.The way to purchase	540.987	12	0.000	Significant
Process (More options)				
1. The course to purchase	196.441	12	0.000	Significant
2. The frequency to purchase	683.570	12	0.000	Significant
3.People who influenced decision	197.574	12	0.000	Significant
4. The reason to purchase	191.410	12	0.000	Significant

 Table 4.21
 Hypothesis testing results of hypothesis 2.6

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5.The way to purchase	385.991	12	0.000	Significant
Process (Application procedure)				
1.The course to purchase	328.328	12	0.000	Significant
2. The frequency to purchase	701.425	12	0.000	Significant
3.People who influenced decision	664.962	12	0.000	Significant
4.The reason to purchase	214.783	12	0.000	Significant
5.The way to purchase	195.663	12	0.000	Significant

Remark: **α** < 0.05

The table 4.21 showed that the significant α =0.000 (<0.05) when test the Chi-square of process. It means that process has a significant influence on Chinese students' purchasing behavior towards online education platform.

Hypothesis 2.7 Physical evidence will have effect on the purchasing behavior of Chinese students toward online education platform, see Table 4.22.

Table 4.22Hypothesis testing results of hypothesis 2.7

Factors	Value	Df.	Sig.	Result
Physical evidence (Picture)				
1. The course to purchase	322.327	12	0.000	Significant
2. The frequency to purchase	303.408	12	0.000	Significant
3.People who influenced decision	292.789	12	0.000	Significant
4. The reason to purchase	315.854	12	0.000	Significant
5. The way to purchase	471.762	12	0.000	Significant

Physical evidence (Theme)

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1.The course to purchase	368.131	12	0.000	Significant
2. The frequency to purchase	1050.89	12	0.000	Significant
3.People who influenced decision	309.966	12	0.000	Significant
4.The reason to purchase	354.869	12	0.000	Significant
5.The way to purchase	536.046	12	0.000	Significant
Physical evidence (Easy to get				
information)				
1.The course to purchase	193.309	12	0.000	Significant
2. The frequency to purchase	678.585	12	0.000	Significant
3.People who influenced decision	193.969	12	0.000	Significant
4.The reason to purchase	188.299	12	0.000	Significant
5.The way to purchase	381.006	12	0.000	Significant
Physical evidence (Category)				
1.The course to purchase	727.037	12	0.000	Significant
2. The frequency to purchase	338.757	12	0.000	Significant
3.People who influenced decision	697.412	12	0.000	Significant
4.The reason to purchase	678.034	12	0.000	Significant
5.The way to purchase	220.740	12	0.000	Significant
Physical evidence (Character)				
1.The course to purchase	328.844	12	0.000	Significant
2. The frequency to purchase	974.125	12	0.000	Significant
3.People who influenced decision	299.398	12	0.000	Significant
4.The reason to purchase	321.796	12	0.000	Significant
5.The way to purchase	475.918	12	0.000	Significant

Remark: **α** < 0.05



The table above showed that the significant α =0.000 (<0.05) when test the Chi-square of physical evidence. It means that physical evidence has a significant influence on Chinese students' purchasing behavior towards online education platform.

The tables 4.16-4.22 showed that the significant α =0.000 (<0.05) when test the Chisquare of service marketing mix including product, price, promotion, place, people, process and physical evidence to purchasing behavior including course to purchase, the frequency to purchase, the people who influenced decision, the reason to purchase and the way to purchase. It means that service marketing mix (7 Ps) has a significant influence on Chinese students' purchasing behavior towards online education platform.

Chi-Square test was used to test hypothesis 3.

H3: Parents' attitude will have effect on the purchasing behavior of Chinese students towards online education platform.

Parents' attitude was described by parents' mind on online courses about beneficial, facilities at home, Covid -19, save money, flexible time, overuse electronic devices, students' attention and space at home. Purchasing behavior was described by which course did the respondents usually purchase, how often do they purchase, who influenced their decision on purchasing online course, the reason they purchase and the way to purchase online course.

1 able 4.23	This table show the hypothesis testing result of H3 as follows:	

Factors	Value	Df.	Sig.	Result
Beneficial				
1.The course to purchase	444.055	12	0.000	Significant
2. The frequency to purchase	734.931	12	0.000	Significant
3.People who influenced decision	405.688	12	0.000	Significant

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4. The reason to purchase	401.964	12	0.000	Significant
5. The way to purchase	372.537	12	0.000	Significant
Facilities at home				
1.The course to purchase	662.984	12	0.000	Significant
2. The frequency to purchase	355.747	12	0.000	Significant
3.People who influenced decision	614.122	12	0.000	Significant
4. The reason to purchase	603.687	12	0.000	Significant
5. The way to purchase	212.859	12	0.000	Significant
Covid - 19				
1.The course to purchase	363.859	12	0.000	Significant
2. The frequency to purchase	1155.00	12	0.000	Significant
3.People who influenced decision	310.536	12	0.000	Significant
4. The reason to purchase	354.826	12	0.000	Significant
5. The way to purchase	538.594	12	0.000	Significant
Save money				
1.The course to purchase	199.639	12	0.000	Significant
2. The frequency to purchase	688.647	12	0.000	Significant
3.People who influenced decision	201.260	12	0.000	Significant
4. The reason to purchase	194.587	12	0.000	Significant
5. The way to purchase	391.070	12	0.000	Significant
Flexible time				
1.The course to purchase	730.802	12	0.000	Significant
2. The frequency to purchase	362.576	12	0.000	Significant
3.People who influenced decision	702.599	12	0.000	Significant

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4 The masses to supplies	660 194	10	0.000	Ciquificant
4. The reason to purchase	669.184	12	0.000	Significant
5. The way to purchase	221.507	12	0.000	Significant
Overuse electronics				
1.The course to purchase	328.844	12	0.000	Significant
2. The frequency to purchase	974.125	12	0.000	Significant
3.People who influenced decision	299.398	12	0.000	Significant
4. The reason to purchase	321.796	12	0.000	Significant
5. The way to purchase	475.918	12	0.000	Significant
Cheaper				
1.The course to purchase	359.856	12	0.000	Significant
2. The frequency to purchase	1144.74	12	0.000	Significant
3.People who influenced decision	314.489	12	0.000	Significant
4. The reason to purchase	350.943	12	0.000	Significant
5. The way to purchase	532.890	12	0.000	Significant
Family members				
1.The course to purchase	199.639	12	0.000	Significant
2. The frequency to purchase	688.647	12	0.000	Significant
3.People who influenced decision	201.260	12	0.000	Significant
4. The reason to purchase	194.587	12	0.000	Significant
5. The way to purchase	391.070	12	0.000	Significant
Capture attention				
1.The course to purchase	739.516	12	0.000	Significant
2. The frequency to purchase	357.755	12	0.000	Significant
3.People who influenced decision	694.900	12	0.000	Significant

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4. The reason to purchase	672.320	12	0.000	Significant
5.The way to purchase	225.057	12	0.000	Significant
Lack of space				
1.The course to purchase	585.522	12	0.000	Significant
2. The frequency to purchase	155.622	12	0.000	Significant
3.People who influenced decision	421.076	12	0.000	Significant
4. The reason to purchase	525.115	12	0.000	Significant
5.The way to purchase	116.581	12	0.000	Significant

The table 4.23 showed that the significant α =0.000 (<0.05) when test the Chi-square of parents' attitude related with the costs, covid, flexible time, overuse electronics, family members and house space etc. to purchasing behavior including course to purchase, the frequency to purchase, the people who influenced decision, the reason to purchase and the way to purchase. It means that parents' attitude has a significant influence on Chinese students' purchasing behavior towards online education platform.

Table 4.24	Summary of Hypothesis results
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Hypothesis Test	Result	
H1: Chinese students from different profile will have different purchasing	Partial support	
behavior towards online education platform.		
H2: Service marketing mix (7Ps) will have effect on the purchasing behavior	Supported	
of Chinese students towards online education platform.		
H3: Parents' attitude will have effect on the purchasing behavior of Chinese	Supported	
students towards online education platform.	Supported	

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The table above shows hypothesis test result as follows:

H1: Chinese students from different profile will have different purchasing behavior towards online education platform was partially supported. Because only some items of age and education are significantly affecting the purchasing behavior of Chinese students, but gender and hometown are not significantly affecting the purchasing behavior of Chinese students.

H2: Service marketing mix (7Ps) will have effect on the purchasing behavior of Chinese students towards online education platform was supported. Because all the items are significantly affecting the purchasing behavior of Chinese students.

H3: Parents' attitude will have effect on the purchasing behavior of Chinese students towards online education platform was supported. Because all the items are significantly affecting the purchasing behavior of Chinese students.



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

The findings showed that service marketing mix (7 Ps) have an impact on Chinese students' purchasing behavior towards online education platform. Product (Mean = 3.91), respondents agree that they believe the course in online education platform is high quality and will purchase again (Mean = 3.97), some respondents believe online education platform offer more variety of courses (Mean = 4.01), and some like its' value package (Mean = 4.03) or alternative choices (Mean = 3.63). Respondents believe that online education platform can offer lower price and worth spending, satisfying with the price (Mean = 4.02). Place has a significant effect on their purchasing behavior (Mean = 3.98). Promotion (Mean = 3.86) also influenced their decision. The staff's service quality has a significant influence on their decision (Mean = 3.93). Their decision of online education platform is also affected by process (Mean = 3.92) and physical evidence (Mean = 3.95).

The findings also revealed that how parents' attitude affects Chinese student's purchasing behavior towards online education platform. Parents' attitude (Mean = 3.74) has influence on Chinese students' purchasing behavior. Respondents agree that their parents think online courses are beneficial to them. (Mean = 3.96). Respondents agree that their parents think they should study online courses because they have facilities at home such as notebook and internet connection. (Mean = 4.01). Respondents agree that their parents think they should study online courses because of the Covid-19 situation. (Mean = 4.03). Respondents agree that their parents

think online course saves a lot of money for traveling and other costs. (Mean = 3.62). Respondents agree that their parents think online course has a flexible study hour. (Mean = 4.01). Respondents agree that their parents think they overuse electronic devices if they study online course. (Mean = 4.03). Respondents agree that their parents think online course is cheaper. (Mean = 4.03). Respondents agree that their parents think online study may be interrupted by other family members. (Mean = 3.61). Respondents agree that their parents think online course does not capture students' attention/interest. (Mean = 4.01). Respondents disagree that their parents think they shouldn't study online courses because lack of space at home. (Mean = 2.03).

The finding also explained that how demographic profile effect on their purchasing behavior toward online education platform. Gender has a little influence on purchasing behavior, 54% of females and 46% of males purchased online education courses. The age of respondents is an important factor that effect on their purchasing behavior, 56.1% of the respondents are under 13 years old. Education level also influenced their decision, 55.8% of respondents are from primary school and 26.5% is from high school, only 17.7% of respondents are from middle school. Geographic also influenced their decision, 85.7% of respondents are from Hebei province and 14.3% are from other province.

The factors below also influence Chinese students purchasing behavior towards online education platform.

1. The course that students purchased: Respondents mainly purchased K12 courses (42.1%) and language courses (41%), followed by extracurricular activities (13.0%) and others (3.9%).

2. The frequency to purchase: the majority of the respondents' purchasing frequency is once every 6 months (59.5%), followed by once a year (28.1%), once every 3 months (11.4%) and every month (1.0%).

3. The person who influenced their decision: the majority of the respondents were influenced by family (53.2%), followed by friends (28.1%), celebrities (14.0%) and others (4.7%).

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4. The reason to choose online course: most of the respondents applied online courses because of flexible study time (41.3%), followed by personalized course plans (40.3%), lower costs (14.5%) and others (3.9%).

5. The way to buy online course: the majority of the respondents purchased online course by email (50.1%), followed by visit the tutorial school (19.5%), others (25.7%) and directly from the online platform (4.7%).

5.2 Discussion

Due to the impact of COVID-19, the Ministry of Education in China launched a policy to close schools without suspension, which accelerated the penetration rate of online education industry. With the rise of household disposable income and the development of Internet technology, online education industry has ushered in a new round of growth in the post-epidemic era. According to the 47th Statistical Report on Internet Development in China released by the China Internet Network Information Center (CNNIC) (2021), China had 989 million Internet users by December 2020, with the Internet penetration rate reaching 70.4 %. Meanwhile, the number of online education users in China reached 342 million, accounting for 34.6% of the total Internet users. The number of mobile online education users reached 341 million, accounting for 34.6 percent of mobile Internet users. The number of online education users has increased by 109 million since June 2019, although the number of online education users has decreased due to the gradual resumption of classes and the positive progress made in COVID-19 prevention and control.

Hypothesis 1 indicates that Chinese students from different profile will have different purchasing behavior towards online education platform. Meanwhile, the proportion of female who choose online education is higher than the proportion of male. The result also indicated that the proportion of primary school students and the students under 13 years old choosing online education is the highest, because there are fewer courses in primary school compared with high school, students have plenty of time to learn extra-curricular subjects through online education

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platforms. The geographic factors also affect with the purchasing behavior, most of the respondents are from Hebei province, it can be seen that most students choose local online education platforms, because the publicity of education platforms has regional limitations. The result was supported by Korgaonkar and Wolin (1999) who found that age and gender impacted the likelihood of online purchasing.

In line with Hypothesis 2, the result showed that the service marketing mix has an important influence on Chinese students' purchasing behavior towards online education platform. The finding indicated that most of the students believe the online course is high quality and will purchase again, because the online education companies developed fast in recent years, they can provide high quality courses in the same level or higher than traditional tutorials. The result showed that many respondents believe online education platform offer more variety of courses and value package or alternative choices. The curriculum of online education platform is flexible and can be customized for students according to their requirement. The price and promotion are also key factors to affect Chinese students' purchasing behavior, the students agree that online education platform can offer lower price and worth spending, because online education does not require a real classroom, it saves the cost. The result showed that the service quality from sales staff and the experience with their application or website also strongly effect on the purchasing behavior. Students are more likely to choose a platform that is simple and quick and can provide customers with a good purchasing experience. The result seems to be consistent with previous research. Agarwal (2021) mentioned "Digital and online learning is gaining popularity due to its advantages, such as greater flexibility, wider access and low cost.

In line with Hypothesis 3, the result indicated that parents' attitude has significant effect on the purchasing behavior of Chinese students towards online education platform. The result indicated that respondents agree that their parents think online courses are beneficial to them and they should study online courses because they have facilities at home such as notebook and internet connection. Because many Chinese parents believe in not letting their children lose at the starting line, so they will let children to study more courses than in school. The result showed that their parents think online course saves a lot of money and has a flexible study hour. Some parents also have concern about online education platform, they think children overuse electronic devices if they study online course and online study may be interrupted by other family members and can't capture students' attention/interest. Because many families are limited by the size of the house, they cannot provide a separate room for students and have to share a room with other family members. This result seems like with previous research (Chuanmei Dong, Simin Gao, and Hui Li, 2020) "They believed that online education lacked a learning atmosphere and social interactions to engage young children, resulting in poor learning outcomes".

5.3 Implications of the Study

Theoretical implication: Online education, as a rapidly rising industry in recent years, has received limited research before. This study analyzes the influence of demographic profile, service marketing mix (7 Ps) and parents' attitude on students' purchasing behavior towards online education platform in detail, which provides valuable reference for subsequent researchers to continue to study online education.

Practitioners' implication: The findings of the study could be valuable for those who want to start a online education business. This finding could improve the understanding of marketers in the field of online education, enabling them to conduct effective and persuasive market plan. Marketers will realize how to use service marketing mix effectively and efficiently, resulting in increased sales. In addition, lecturers in the field of online education have gained more knowledge about customers' attitude to online education.

5.4 Limitations of the Study

According to this study, the sample size used is small and from limited region compared to the online course users in China. This makes it more difficult to determine the close relationship between the variables being studied. And the questionnaires will be sent to China through online channel, only the participates with Internet access can response to the survey. In this case, it may not be easy to determine how the factors influence on students' purchasing behavior towards online education platform.

5.5 Recommendations for future research

This study makes the following recommendations for future research:

For next research it is suggested to have more samples who come from different regions to determine the close relationship between the variables being studied.

For next research it is suggested to use different methods to collect data, including online channels and offline channels to make sure that all the respondents are able to access to the questionnaire.

For next research it is suggested to add more variables such as family income level and student's willing to apply online course to to research whether there are other factors affecting Chinese students' purchasing behavior towards online education platform.



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APPENDIX



APPENDIX A

Questionnaire: Factors affecting purchasing behavior of Chinese student towards online education platform

This questionnaire is a partial fulfillment of the requirements for the degree of Master of Business Administration. This is Questionnaire related to purchasing behavior of Chinese students towards online education platform. We will keep as confidential data and use for the education purpose only. Please answer all the questions based on your experience.

Sincerely thanks for your participation.

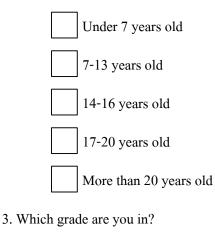
Part I: Demographics

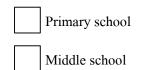
1. What's your gender?





2. What is your age?





67





4. Which province are you from?

Part II: Parents Attitude

Instruction: Please mark " $\sqrt{}$ " on the number that most describes your level of agreement to the below statements using the scale:

5=Strongly agree 4= Agree 3=Neutral 2=Disagree 1=Strongly disagree

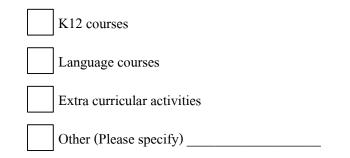
	5	4	3	2	1
My parents think online courses are beneficial to me.					
My parents think I should study online courses because we have facilities at home such as notebook and internet connection.					
My parents think I should study online courses because of the Covid-19 situation.					
My parents think online course saves a lot of money for traveling and other costs.					
My parents think online course has a flexible study hour.					
My parents think I overuse electronic devices if I study online course.					



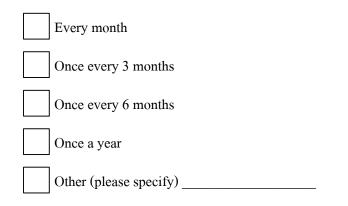
	5	4	3	2	1
My parents think online course is cheaper.					
My parents think online study may be interrupted by other family members.					
My parents think online course does not capture students' attention/interest.					
My parents think I shouldn't study online courses because lack of space at home.					

Part III: Purchasing Behavior

5. Which course do you usually purchase from online education platform?



6. How often do you purchase online courses?

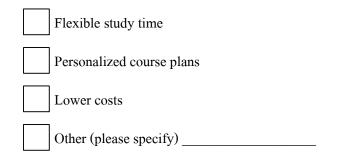




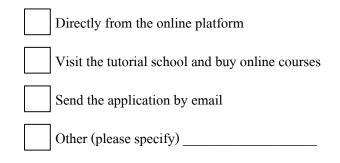
7. Who influence your decision on purchasing online course?

Friends	
Family	
Celebrities	
Other (please specify)	

8. Why do you choose to study online course?



9. How do you buy online course?



Part IV: service marketing mix (7Ps)

Instruction: Please mark " $\sqrt{}$ " on the number that most describes your level of agreement to the below statements using the scale:

5=Strongly agree 4= Agree 3=Neutral 2=Disagree 1=Strongly disagree



Product

	5	4	3	2	1
I believe the course in online education platform is high quality.					
I believe online education platform offer more variety of courses compare to traditional tutorium.					
I like online online education platform because it has value package.					
I like online education platform because it has more alternative choices.					

Price

	5	4	3	2	1
I believe online education platform offer lower price than traditional tutorium.					
I believe that price spending on online education platform is worth-spending.					
I am satisfying with pricing from online education platform.					



Place

	5	4	3	2	1
I believe that online education platform is convenient place to study.					
I believe that online education platform is user- friendly.					
I am satisfying with online channel in term of studying.					

Promotion

	5	4	3	2	1
I believe that online education platform offers many promotions.					
I believe that online education platform offers better loyalty programs.					
I like online education platform because of my friend's recommendation.					
I like online education platform because I see advertisement on social media.					
I like online education platform because I see advertisement from poster or flyer.					



People

	5	4	3	2	1
The customer service staff is helpful.					
The staff are knowledgeable about courses.					
The seller provided a clear information about their courses.					
The staff respond to the customer quickly. (in 60 minutes)					

Process

	5	4	3	2	1
It's easy to apply a course from online education platform.					
Payment method is easy through internet banking.					
There are more options for date and time to study.					
Application procedure is easy to understand.					



Physical evidence

	5	4	3	2	1
The application (or website) pages have good quality pictures.					
The application (or website) have colorful theme.					
It is easy to get the information. (2-3 clicks).					
The design of each product is in a category.					
Size of character (alphabet) is easy to read.					



INDIVIDUAL AUTHOR'S BIOGRAPHY

Name

Mr. Qi Xiaopeng

Education background

Year 2014 Bachelor at the Hebei University of

Engineering, China