

Consumer Behavior under the COVID-19

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ABSTRACT: The topic makes us think deeply. By dividing the words of a topic, the changes in consumer psychology and behavior are the main things we are concerned about, each factor would influence the results of the study. The topic relates to economics and psychology, and it is limited by special roles, places, and challenges.

1. Introduction

During the period of COVID-19, different countries taken various ways to treat the situation. Many aspects changed a lot. Policies, economic development, lifestyle, life attitude, and so on. Consumption is one necessary part of people's lives. Although some people do not consume goods that they think are not meaningful, they must buy necessities such as food, cloth, tissue, etc. Young people always follow fashion goods. High school students lead the progress of society. As a teenager, the financial sources for high school students are supported by their parents, but as the part of citizens, high school students can be the standards as well. And high school students are pressured by study, family, and so on. Purchasing goods to make them gain power and be stimulated to work harder.

The rules of China or Beijing that treat COVID-19 are different from other countries or places. China's specific epidemic prevention and control strategies include digital technology epidemic prevention, zero case policy, nucleic acid testing of all staff, vaccination of all staff, a long-term isolation system, and official accountability. The challenges facing China's epidemic prevention and control: facing by China's epidemic prevention and control are mainly manifested in three aspects: the epidemic has continued to spread, the economic pressure has increased, and the people of the society have become exhausted. Sometimes other countries media doubt why China uses this strategy that is really different from other countries. Things always have two sides, each strategy has disadvantages and advantages. The reasons China government uses this strategy is suitable for China's condition, Demographic characteristics, the rapid spread of the virus, high infectivity, people and life first, economic development requires a safe and stable environment, and political system requirements. Softening the zero-pandemic policy for economic growth is the strategy that some western countries. Although many countries are lifting restrictions and trying to coexist with the virus, China has largely closed its international borders and shut down entire cities, keeping everyone but essential travel out. This approach really protects people and enables economic development, but it comes at a high cost. It disrupted manufacturing, hindered the global flow of goods from smartphones to iron ore, and increased inflation in the United States and European countries. Reduced consumer spending has reduced China's import demand. Millions of lives have been needlessly destroyed and a blow to the world's second-largest economy has global implications.

To view from macro-economics and micro-economics in detecting the behavior change of high school students. On the macro level, our economy now exists inflation. The dramatic inflation is caused by demand-pull, since the tense situation of epidemic causes people to need more products, such as epidemic prevention supplies, foods, water, and some daily use products. The increase in the number of infectors, and the sudden notification of segregation made people feel nervous and worried. As a result, the need for daily used products increased tremendously, because these things can reduce people's anxiety levels. What's more, there is also cost push inflation, due to the epidemic, manufacturing industries and small businesses were forced to halt production which

caused a huge amount of loss. Even large-scaled companies meet with job cuts and losses unprecedentedly. COVID-19 absolutely brought lots of damage to production and operations all over the world. The supply of goods and products reduced, and the price level raised rapidly. As the overall price level increased, the consumer price index (CPI) increased based on the unvaried consumption basket. The GDP of Beijing, China dropped due to the decrease in investment, trade, and consumption. The economic instability now occurs.

2. Methodology

Using the survey approach and aimed to collect the data from 78 high school student, and investigate their consuming behavior and psychology changes during COVID-19. the questions contained: Consumer behavior on how to shop, Eating habit and entertainment. The survey was conducted from June 5 to 8, 2022. There were a total of 78 valid questionnaires.

3. Results and Discussion

3.1 Questionnaire and the Analysis of Behavior Change during the COVID-19

3.1.1 Consumer Behavior on How to Shop

21.79% of people went to small stores to shop before the epidemic, but after the epidemic, only 8.97% of people will go to small stores to shop; Comparing the people who went to the supermarket to shop, it fell from the original 32.05% to 15.38%, and the proportion of online shopping increased after the epidemic, from the original 17.95% to 30.77% .

3.1.2 Eating Habit

Before the epidemic, the weekday dinner pattern was mostly eating out, but before the epidemic it was 47.44%, and after the epidemic it became 3.85%. The second most common dining mode is school dining, which was 30.77% before the epidemic and 5.13% after the epidemic. From the comparison of the above data, we can see that the epidemic has caused high school students to reduce the frequency of eating out. In addition, the epidemic has also promoted the development of food delivery platforms. After the epidemic, 37.18% of people will choose delivery platforms.

3.1.3 Entertainment

The proportion of cram classes in the leisure and entertainment places that high school students go to on vacation has dropped significantly. And the proportion of people staying at home has changed from 21.79% to 61.54%. There is a significant decrease in the number of people stepping out of the house and outdoors, and in contrast, the number of students staying at home has increased.

3.2 Data Results

According to the results of the above literature analysis and questionnaire survey, the COVID-19 epidemic has affected high school students consumption behavior, learning mode and life style of high school students, and the results are as follows: The impact of the epidemic on the consumption behavior of high school students: (1) The proportion of shopping outside the home has decreased, and the proportion of online shopping has increased; (2) The proportion of diners at home on weekdays has gradually increased; (3) Students are no longer tutoring outside. They have more time stay at home.

From the result of the survey above, because of the impact of the epidemic, many economic activities have been forced to stop. People are at home, life and production are also at home, which also makes the scale of the Otaku economy quickly reach the peak. According to the data of the Head Leopard Research Institute, from 2019 to 2024, the compound annual growth rate of the market involved in the Otaku economy will reach 17.7%, and it is expected that by 2024, the total size of the home economy market will exceed 3 trillion yuan. According to the "Otaku economy" a

further extension of this process, a new business model based on the Internet, which is online shopping and online social networking, transforming traditional consumption patterns into online experiences.

In short, the Otaku economy is a new business model that opens up a future prospective for businesses. With the development of China's Internet industry, the home economy has become a force to be reckoned with. The home economy has changed people's lifestyles and consumption habits, and has had a profound impact on all walks of life.

3.3 Further Analysis on the Relationship of Consumer Behavior and Online Marketing

Through GREE under the influence of the epidemic, we analyzed how it carried out online marketing. The epidemic has forced enterprises to accelerate their digital transformation, and Gree relies on the smart retail system solutions established by the Internet of Things, data, artificial intelligence and other technologies to increase open output and help traditional retail enterprises achieve digital transformation. Online power which in the live telecast with goods and WeChat Mini Program platform both brought significant increments to Gree quantity of sales. The data shows that only in the southern China of Gree Carrefour, the monthly online sales in August reached more than 26 million yuan, an increase of 12% month-on-month. Gree Electric Appliances has established an offline sales network covering the whole country, providing services for consumers through 27 sales companies and more than 30,000 stores. Gree Dong Pearl Store has been transformed and upgraded into a comprehensive online retail e-commerce platform, selling household appliances, food and beverages, beauty and personal care, boutique clothing, online tourism and other large categories of high-quality goods.

By the end of 2021, Gree achieved operating income of 187.869 billion yuan, and the revenue of Gree Electric Appliances in 2021 increased by 11.69% year-on-year. Year-on-year increase of 11.69%; Achieved a net profit attributable to the mother of 23.064 billion yuan, an increase of 4.01% year-on-year; Basic earnings per share were RMB4.04. Home appliance sales return to pre-epidemic levels In 2021, China's online channel retail sales accounted for 52.9% of the overall home appliance market, accounting for more than 50% for two consecutive years.

In addition to improving the online order delivery service to home, Suning also relies on the advantages of all-scenario retail layout, increases online operations, expands various “cloud models”, and continues to increase investment and construction in Guangdong's “new infrastructure”, with a total investment of 5 billion yuan Suning South China E-commerce Headquarters and Suning South China Green Cold Chain Headquarters Project to start construction.

Under the influence of the epidemic model, both people and businesses have been affected to a certain extent. In other words, people's home life is the driver of the Otaku economy, and the transformation of business sales models. However, with the transformation of consumption patterns and lifestyles, the Otaku economy has made people face more challenges and opportunities again.

3.4 The Fields and Industries That Have Changed during COVID-19

COVID-19 influenced many fields and industries, some of them are in positive way and some are negative. According to the survey, the vast majority of respondents reported an impact on product availability (84%) and shortages (72%). Also, a growing number of consumers are shopping more frequently online, with a 62% increase (34% vs. 21%). Similarly, the number of consumers shopping less frequently in-store showed a 63% increase (49% vs. 30%). According to the consuming pattern, there are three field of products that has increased their sales.

3.4.1 Medical Products

The first one is the sales in medical products rapidly growing. The bulk purchase of related medical products, such as protective masks and gloves, and some health products, including vitamins, is the most direct change in consumption under the epidemic. Sales of sanitary and medical masks rose more than 300 per cent over the period compared with usual, according to Nielsen. SINOVAC BIOTECH CO., LTD. Operating profit was \$-8,839,000.00 in first quarter report of 2020, \$-9,039,000.00 in the middle report, \$18,251,000.00 in the third quarter and total

\$215,644,000.00 in the final report of 2020. The total operating profit of 2021 \$17,553,257,000.00, increased \$17,535,006,000.00

3.4.2 Shelf-Stable Goods

The second category of products is the shelf-stable goods on supermarket shelves, including shelf-stable Milk, Long Life Milk and other dairy products, fruit snacks, energy drinks, freeze-dried vegetables, etc. Sales of products such as shelf-stable milk and milk substitutes, especially oat milk, rose by at least 300 per cent. The increase in sales of this product is mainly due to the quarantine program. Most opted to stock up on shelf-proof food to ensure food supplies during quarantine. Uni-President Food Company sales instant noodles and drinks, and since the isolate policy, the sales of it increased a lot. The company achieved operating revenue of 22.761 billion yuan, up 3.4% from last year; Net profit was \$1.625 billion, up 19% from last year

3.4.3 E-Commerce Products

China's economy and social progress were impeded during the outbreak of corona virus, especially in the electricity market. Social consumption dropped by 16.2% due to the epidemic. Services such as tourism, accommodation, and entertainment were severely hit. IN addition, the consumption of housing, cars and furniture also fell sharply. MeiTuan gross revenue was \$652.27 billion in 2018 and \$975.29 billion in 2019, increased by 49.52% compared last year; \$1,147.95 billion in 2020, increased by 17.7% compared last year; \$1,791.2 billion in 2021, increased by 56.04% compared last year.

The relevant departments of the state have introduced a series of policies to reduce the cost of enterprises, ease the pressure on enterprises' production and operation, and encourage enterprises to resume work and production in an orderly manner. Electricity consumption in the country's power systems has been kept at a low level, and the total amount of electricity consumed has dropped significantly.

Several studies on e-commerce, shopping behavior and COVID-19 have focused on the experiences of a few countries. Online grocery shopping was observed to have grown by 65% during the pandemic in the United States, and telecommuting also increased significantly (Shamshiripour et al., 2020). With the spread of COVID-19, consumers are less willing to shop at brick-and-mortar grocery stores (Grashuis et al. 2020). In Italy, people who buy food online have switched from supermarket shopping to online shopping.

JingDong is one of the greatest online shopping platform in China, Jd had been in the red until 2018, Posting a net profit loss of 12 million yuan in 2017 and 2.801 billion yuan in 2018. In 2019, net profit reached 11.890 billion yuan. This means that jd.com, which was founded in 1998, has finally made its first annual profit at the age of 22. Jd.com's gross margin was 14.63% in 2019, roughly comparable to the 14.28% in 2018. The net interest rate was 2.06%, which was positive for the first time. In 2018, the net interest rate was -0.61%. Jingdong's gross margin did not change much in 2019, but its net margin increased by 2.67 percentage points. Preliminary judgment shows that the main driving factor for achieving its first profit in 2019 is that the cost control is well done.

3.5 The Changes of Resident's Psychology

The epidemic also influences the consumer's psychology, the main psychological state of the population is boredom, followed by anxiety, stability and tension. In order to eliminate these negative emotions, carry out the tourism recovery policy is a nice choice. To accelerate the recovery of the tourism industry in the face of COVID-19, it is crucial to get the support of residents. However, residents' negative sentiments and perceptions of the government's COVID-19 response policies may influence their attitudes towards government support. This study aims to explore the mechanism by which the Quality of Government (QoG) ultimately affects residents' support for Government policies to accelerate tourism recovery.

Macau's main survey was conducted in April 2020. The number of pandemic cases doubled between March 21 and 31 (from 18 to 43), and the government discouraged residents from going out to party, although the situation stabilized in early April. Therefore, online survey is a suitable

method. Questionnaires were sent to local forums and local social media contacts via the online survey platform Sojump.com.

3.6 To View from Microeconomic and Macroeconomic

To view high school students' consumer behavior from micro level. The price elasticity of demand is an index to indicate the sensitivity of quantity demanded to price. During the outbreak of corona virus, epidemic prevention supplies became the inelastic goods, since people all need them and there are few substitutes within the short period of time. However, as the price of prevention supplies increased, the quantity demanded will not change a lot. According to our survey, the spending on epidemic prevention goods have become the major of people's consumption and it is obvious. In contrast, there are some goods and services become less sealable during this special period. Moreover, income elasticity of demand (YED) is the sensitivity of demand to income. As income increase, if the quantity demanded also increase, it is defined as normal good, the so-called "worth goods". If YED is smaller than 1, it becomes necessity. As we know that epidemic prevention supplies are necessity.

In terms of students' psychology due to the outbreak pandemic, there have been many panic buying events in the world, which not only involve the panic buying of anti-epidemic and living supplies such as facemasks, disinfectant water, grain and oil, but also the hoarding of supplies that are not related to epidemic prevention.

The e-commerce developed quickly during COVID-19, and online shopping became a big trend instead of consumption in-store. people always adapt the pattern of online shopping because it is more convenient, people do not need to go certain locations by communication medias with extreme weather. More and more online store gradually be applied, even some objects that could not be hold before always find new and qualification way to sold their goods, the suitable example is fresh food that only have offline stores, the pressure of rent, labor always force them to find new way to keep it. There are also some discount in online stores, because stores want to attract more people to by their goods. The transportation speeds are as same as before, people who wants to buy it can see the comments from people who had buy it, they can also get immediate feedback by make discussion with the seller online. The questionnaire showed the way or app even websites that Beijing high school students frequently use are Taobao, Jingdong and Meituan, or the official websites of brands.

There is a cycle for society, everyone working target is purchase goods to satisfy their lives quality, they use the money they earned from others to buy the goods they need, so their money give to others. The cycle always related to the knowledge of economic: the relationship between goods price and salary. There is a macroeconomic knowledge called wage-price spiral that explain the causal relationship between rising wages and rising prices or inflation. The wage-price spiral shows that rising wages increase disposable income, which increases demand for goods and causes prices to rise. Rising prices increase the demand for higher wages, which leads to higher production costs and further upward price pressure. And it also related to one micro knowledge, people have higher salary would buy luxuries, poor people always buy interiors.

4. Conclusion

In conclusion, the need for medical products, shelf-stable goods, entertainment and e-commerce have been facilitated. What's more, the consumer trend is shifting from offline shopping to online shopping which avoid some close connection between people and serve as a convenience way for people to purchase whatever they want.

Meanwhile, our study exists insufficiencies, to deal with them, we also provide promotions for our further research. Since we use questionnaires as the tool to get the information of high school students' consumer behavior. We only deliver the questionnaires to our friends and classmates which is a kind of convenient sampling method. So, it may not cover all the high school students in Beijing and lack of representative. To improve it, further study will use simple random sample or systematic samples to make the data much more representative and precise. In addition, the sample

size is not big enough to make the conclusion accurately. We get 80 samples or so. In the future research, we will enlarge the sample space by sending the questionnaires to the internet or do some interviews to get more data. What's more, we want to use the block design to further distinguish the differences of consumer behaviors in male and female. To avoid the influence of confounding variables, later study will demonstrate stratified samples to improve the accuracy of our study.

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