

Exploring Consumer Perceptions of the Pink Tax: A Study on Gender, Age, and Income

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Abstract:

The “pink tax” refers to the phenomenon in which products and services marketed toward women are priced higher than comparable products and service targeted at men. Although the concept was first introduced in the 1930s, it has only recently begun to receive significant attention. Compared to other forms of gender inequality, the pink tax is less visible and has consequently been relatively overlooked in discussions on gender disparities. This study investigates current consumer perceptions and attitudes toward the pink tax in China. A gender and consumption questionnaire was distributed, yielding 139 valid responses. Data analysis reveals that public awareness and recognition of the pink tax remain relatively low. Personal background factors, including gender, age, and income, significantly influence awareness and attitudes of the pink tax. Male respondents demonstrate lower awareness and are more likely to support gender-based pricing mechanisms. Older respondents, while less familiar with the concept of the pink tax, exhibit a higher ability to identify products with a pink tax premium compared to younger individuals. Additionally, respondents with lower incomes tend to have more knowledge of the pink tax and express a stronger desire for regulatory interventions, such as legislation, to address the issue. The findings of this study contribute to raising public awareness of gender-based price discrimination and offer new perspectives for promoting gender equality, ultimately forming a more equitable consumer marketplace.

Keywords: pink tax; consumer perception; gender inequality; gender-based pricing

1. Introduction

The pink tax refers to the phenomenon in which women often pay more than men for similar goods and services, while there is no significant differences in product quality or function. This form of gender-based price discrimination is common across various industries, including personal care products, clothing, toys, food and beverages, and healthcare, etc. Moreover, the pink tax is not confined to a specific region but exists on a global scale. It is not merely an economic issue; rather, it reflects deeper social, cultural, and structural economic inequalities. Although women have made progress in labor market participation and social status, the fundamental causes of gender inequality still exist. Within the consumer area, women are frequently regarded as “special” consumers—not based on actual purchasing power or needs, but due to gender-based pricing strategies.

The historical roots of the pink tax can be traced to the evolution of gender roles and market pricing structures. The term was introduced in the United States as early as the 1930s during discussions on excise tax regulations. It refers to the systematic overpricing of goods and services marketed toward women. In 1991, a study by economist and legal scholar Ian Ayres revealed that white women paid 40% more than white men for the same new car (Ayres, 1991). This finding brought the issue of gender-based pricing discrimination into public field. Beyond the automotive industry, the pink tax has been widely observed in sectors such as dry cleaning, haircuts, and other service-based industries (Liu, 2020). The issue remains prevalent today. A 2015 report by the New York City Department of Consumer Affairs analyzed 794 products across five industries, 35 categories, and 91 brands, concluding that on average, women’s products were 7% more expensive than men’s. Notably, for personal care products, the price difference reached 13% (Liu, 2020; Mennin, 2015).

The pink tax is a global issue. A 2019 survey conducted by Chile’s National Consumer Service examined products with similar features but different prices and found that 21.9% exhibited gender-based pricing differences. 83.3% of these products were priced higher for female consumers (Sernac, 2019). In France, a government official questioned, “Is pink a luxury color?”—reflecting European people also concern over the issue. Similar cases have also emerged in China. In April 2024, five students filed a lawsuit against L’Oréal, arguing that the price disparity between the male and female versions of the same facial cleanser was excessive and constituted a pink tax. The case was settled, with L’Oréal refunding the price difference (Munchkin, 2023).

The issue of income inequality between woman and men still remains. As of 2022, women in the United States earned only 82% of what men earned—an only 2% increase from 80% in 2002 (Kochhar, 2023). This persistent gender pay gap exacerbates the financial burden imposed by the pink tax. While women earn less on average, they continue to face higher costs in consumer markets. The pink tax not only reinforces gender inequality on an ideological level but also creates tangible economic disadvantages, particularly in the context of wage disparities. As a form of gender-based discrimination, the pink tax is often obscured by factors such as consumer behavior, product differentiation, and marketing strategies, making it less visible and more easily overlooked than other forms of inequality. Despite increasing global awareness, little research has been conducted on the pink tax in China. This study aims to analyze Chinese consumers’ awareness and attitudes toward the pink tax. The findings could enhance public understanding of gender-based pricing discrimination and offer new perspectives and policy recommendations to promote gender equality, contributing to a more just and equitable consumer environment.

2. Method

2.1 Participants

Questionnaires were distributed to Chinese consumers via an online platform. 139 valid responses were collected. The sample consisted of 36 male and 103 female participants. The mean age of participants was 26.79 years and the standard deviation was 13.54.

2.2 Research method

Questionnaire research is a widely used method for data collection, involving the design and distribution of questionnaires to gather insights from a target population. In this study, a questionnaire on gender and consumption was developed and distributed to assess public perceptions and awareness toward the pink tax. The collected data will be analyzed using SPSS and Excel to derive the study’s findings.

2.3 Questionnaire structure

A Gender and Consumption Questionnaire was designed to gather information on participants’ personal background, awareness of the pink tax, attitudes toward the pink tax, potential interventions, and other related factors. The questionnaire comprised 13 questions, including single-choice, multiple-choice, and five-point Likert scale questions.

The personal background section included four questions

on age, gender, occupation, and income. The awareness of the pink tax was assessed through two five-point scale questions: one measuring familiarity with the concept of the pink tax and another evaluating the ability to identify products subject to the pink tax. The attitude toward the pink tax was measured through three key aspects: agreement with gender-based pricing mechanisms (five-point scale); willingness to pay for pink tax products (five-point scale); perception of the pink tax as a form of gender discrimination (single-choice question). Additionally, the questionnaire included questions on the perceived causes of the pink tax, effective interventions, and attitude for legislation to eliminate the pink tax. To further explore consumer attitudes, the questionnaire also featured a single-choice question assessing how much time participants were willing to spend checking tips to avoid the pink tax.

2.4 Data analysis

The researcher collected, organized, and analyzed the questionnaires, assessing the reliability and validity of the self-reported data through reliability and validity tests. Descriptive statistics were used to examine overall public attitudes toward the pink tax. Additionally, independent

samples t-tests and one-way analysis of variance (ANOVA) were conducted to evaluate the effects of factors such as gender, age, and income level on public perceptions and attitudes toward the pink tax.

3. Result

3.1 Awareness of the pink tax

There is a general lack of awareness about the pink tax among the participants. 48% of respondents had never heard of the pink tax before this survey. 69.8% of them had never noticed whether a gender-based price premium was applied to products in their past consumption.

3.2 The effect of gender

Before this survey, only 32% of male participants had heard of the pink tax compared to 58% of women. An independent samples t-test revealed a statistically significant difference, indicating that men are significantly less aware of the pink tax than women. Additionally, men are more likely to support the gender-based pricing strategy compared to women.

Table 1: Effect of gender on pink tax perception

| | Sex | N | M | SD | t | p |
|-------------------------------|--------|-----|------|------|------|------|
| Awareness of the pink tax | Male | 36 | 1.67 | 0.48 | 2.51 | 0.01 |
| | Female | 103 | 1.43 | 0.50 | | |
| Gender-based pricing strategy | Male | 36 | 2.17 | 1.40 | 1.60 | 0.05 |
| | Female | 103 | 1.83 | 0.93 | | |

3.3 The effect of age

A one-way ANOVA suggested that fewer older consumers were familiar with the concept of the pink tax, but their ability to recognize gender-based pricing increased with age. Regardless of the awareness of the term, older indi-

viduals were more likely to have consciously identified whether products carried a gender premium in their past consumption experiences. This awareness was significantly higher among participants over 30 years old compared to those under 30.

Table 2: Effect of age on pink tax perception

| | Age | N | M | SD | F | p |
|---------------------------|----------|----|------|------|-------|------|
| Awareness of the pink tax | Under 18 | 71 | 1.24 | 0.43 | 16.27 | 0.01 |
| | 18 - 30 | 11 | 1.64 | 0.51 | | |
| | 30- 45 | 35 | 1.77 | 0.43 | | |
| | Above 45 | 22 | 1.77 | 0.43 | | |
| Pink tax identification | Under 18 | 71 | 1.58 | 0.50 | 5.60 | 0.01 |
| | 18 - 30 | 11 | 1.55 | 0.52 | | |
| | 30- 45 | 35 | 1.91 | 0.28 | | |
| | Above 45 | 22 | 1.82 | 0.40 | | |

3.4 The effect of income

A one-way ANOVA showed that individuals with relatively low incomes were significantly more aware of the pink tax than those with higher incomes. Moreover, low-income participants were more likely to support addressing

the pink tax through legislation and other coercive measures. A pairwise t-test further confirmed that this difference was statistically significant, indicating that economic status influences both awareness and attitudes toward potential interventions for the pink tax.

Table 3: Effect of income on pink tax perceptions

| | Income level / ten thousand Yuan | N | M | SD | F | p |
|---------------------------|----------------------------------|----|------|------|------|------|
| Awareness of the pink tax | Under 0.5 | 74 | 1.34 | 0.48 | 6.00 | 0.01 |
| | 0.5 - 1 | 19 | 1.58 | 0.51 | | |
| | 1 - 2 | 22 | 1.77 | 0.43 | | |
| | Above 2 | 24 | 1.62 | 0.50 | | |
| Legislation measures | Under 0.5 | 74 | 3.66 | 1.20 | 1.84 | 0.14 |
| | 0.5 - 1 | 19 | 3.74 | 1.20 | | |
| | 1 - 2 | 22 | 3.73 | 1.42 | | |
| | Above 2 | 24 | 3.00 | 1.62 | | |

3.5 Others

In response to the question, “How long are you willing to spend on checking the tips to avoid the pink tax?” 53.95% of respondents indicated they were willing to spend 10 minutes, while 22.30% were willing to spend 10-30 minutes. After comprehensive calculation, the average time the public is willing to spend on checking tips to avoid the pink tax is approximately 15 minutes. Furthermore, about 80% of respondents believe that the most effective ways to eliminate the pink tax include enhancing consumer awareness, strengthening government regulation, and increasing media publicity, rather than relying on the self-awareness of merchants. Additionally, 75% of respondents supported legislation as a solution to the pink tax.

4. Discussion

4.1 Awareness of the pink tax

The consumers’ awareness of the pink tax is relatively low. Nearly 50% of respondents had never heard of it before this survey. Additionally, nearly 70% of the participants had never consciously identified products with a gender-based price premium. This percentage is even higher than that of those who have heard of the concept. It suggests that even some consumers are aware of the existence of pink tax, it’s still difficult to consciously identify it during consumption.

One possible reason for this is the pink tax remains a relatively new concept in China, leading to a general lack of basic understanding. On a broader social level, there

is also insufficient public attention to issues of gender equality and consumption fairness. This tendency is further reflected in responses to the question “How long are you willing to spend checking the tips to avoid the pink tax?”. Even after gaining some initial knowledge through the survey, many participants still viewed the pink tax as a minor issue and were unwilling to spend much time on it. It indicates a lack of concern and engagement with the topic.

4.2 The effect of gender

The analysis of the questionnaire revealed that men were less aware of the pink tax. At the same time, they showed a more supportive attitude toward the gender-based pricing mechanism. Since the pink tax primarily affects female consumers, male consumers are less directly impacted. As they are not the main targets of gender-based price discrimination, they may not perceive its direct effects, leading to relatively low awareness and concern about the issue.

4.3 The effect of age

The analysis found that although older participants had limited knowledge of the pink tax, they demonstrated a stronger ability to recognize it in practice. The potential reason is that older individuals have less access to the Internet and social media compared to younger generations (Wang, 2018). Younger people are more proficient in online browsing. They can acquire information about social issues like the pink tax more quickly, resulting in a higher level of awareness. However, despite their limited awareness with the concept, older individuals exhibited

a greater ability to identify products with pink tax. This may be attributed to their extensive life experience and stronger discernment skills. Older consumers tend to prioritize practicality and cost-effectiveness, often relying on traditional methods such as comparing prices and product quality to detect and avoid price discrimination.

4.4 The effect of income

The data analysis also showed that individuals with lower incomes were more aware of the pink tax and were more supportive of addressing it through legislative measures. Lower-income groups tend to be more sensitive to price fluctuations in their daily expenses due to their limited financial resources. They are more focused on managing their budgets effectively. As a result, they are more likely to notice and be affected by price differences. Eliminating the pink tax through legislation could contribute to a fairer consumer environment, which would also help alleviate the financial burden on lower-income individuals. In contrast, higher-income groups have bigger purchasing power and a higher tolerance for additional costs. As the pink tax has a relatively smaller direct economic impact on them, their concern and awareness regarding the issue tends to be lower.

4.5 Solution of the pink tax

The public generally believes that eliminating the pink tax requires the joint efforts of consumers, the government, and the media, rather than relying on merchants or brand owners to take proactive actions. This perspective is also reflected in responses to the question on legislative solutions to the pink tax. Around 80% of respondents support legal intervention to ensure a fairer consumer environment. The 2024 L'Oréal face wash pink tax case further highlights the limitations of the current legal framework. In this case, despite presenting clear evidence, the five law students were unsuccessful in their first two appeals. This is due to the fact that current China's legal system lacks explicit provisions addressing the pink tax, making it difficult to regulate the issue effectively at the legal level. Thus, the public strongly advocates for legislation that explicitly prohibits gender-based price discrimination. Such legal measures would not only provide a stronger foundation for consumers to safeguard their rights but also impose stricter regulatory constraints on businesses, encouraging fairer and more reasonable pricing practices.

5. Conclusion

This study aims to explore public perceptions of the pink tax by collecting data through questionnaires. Additionally, the study explores the influence of factors such as

gender, age, and income on perceptions of the pink tax. The data analysis suggests that public awareness and understanding of the pink tax remain relatively low. The findings indicate that male participants were generally less aware of the pink tax and more supportive of gender-based pricing mechanisms. Older participants, although less familiar with the concept of the pink tax, demonstrated a higher ability to recognize it. Meanwhile, lower-income participants exhibited greater awareness of the pink tax and were more supportive of legislative measures to address it. The pink tax is not only a pricing disparity in market behavior; it also serves as a symbol of deeply rooted gender inequality. Therefore, reducing and eliminating the pink tax is not only about ensuring fair pricing and building a just consumer environment, but also about improving social and gender equality. This study aims to provide new perspectives for creating a fairer consumer landscape and promoting gender equality. However, this study has some limitations that future research could address. The questionnaire data primarily came from southern areas such as Jiangsu, Shanghai, Zhejiang, and Guangdong. The limited geographic scope may affect the results. Future studies could expand the sample to include a broader range of regions across China, allowing for more comprehensive and generalizable results. Apart from age, gender, and income level, consumers' sensitivity to and perceptions of the pink tax may also be influenced by the type of products or services. Future research could explore how different product and service categories impact consumer awareness and attitudes toward the pink tax.

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