Consumer Psychology and Behavior of Women of Different Ages in Online Clothing Consumption

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Abstract: By analyzing the customer's product evaluation (n=1,173) of women's clothing orders on an online shopping platform, this paper studies the preferences of women of different age groups (younger group aged 20-40 years and elder group aged 60-80 years) for different types of clothing purchasing behaviors. The hypothesis considered in our study is for younger group, they are more inclined to buy fashionable and good-looking clothes. For the elderly, they pay more attention to the comfort when measuring a piece of clothing. We test this hypothesis at two levels: We conduct a textual analysis of 1,173 data from LIWC's custom dictionary on the two most obvious characteristics of clothes, the appearance and comfort of clothes. And conduct custom dictionary analysis on the dressing scenes of different groups. Our results show that age is negatively related to the emphasis placed on clothing choices, with the older group placing even more importance on the appearance of clothing than the younger group. It could also be explained that the older group would choose clothes that look prettier rather than those that are comfortable to wear, since they would be involved in more special occasions instead of comfortable clothing for casual scenes. This paper will also discuss the relationship between the purchasing behavior of women of different ages and consumer psychology, aiming to find the change of the consumption pattern of women of specific age groups on the online shopping platform. The study provides meaningful insights on e-commerce, consumer behavior, fashion industry.

Keywords: Fashion industry, E-commerce, Women clothes

1. Introduction

Due to the outbreak of the Covid-19, staying at home are becoming the choice for most of the people, and they tend to shop on the Internet frequently. Online shopping has become mainstream, especially when it comes to women buying clothes. In contrast to the traditional way of offline consumption, online shopping is more convenient and saves a lot of time. The most attractive reason for buying clothes online for consumers is the convenience of service. From the perspective of consumers, efforts,

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time, and costs are considered factors to measure the qualities of services, and these factors play a major role in whether or not consumers are going to spend their money. And the advantages of online shopping will also improve the shopping experience of consumers at all [1]. Since the spread of Covid-19, people's way of life has fundamentally changed, including marketing and consumer behavior. The survey data from 9 countries illustrates more than half of consumers indicated that they frequently shop online [2]. Online purchase rates have also increased significantly when it comes to women buying clothes online. Social media like Instagram, Pinterest, and TikTok provide a more direct channel to imitate other people's outfit ideas. There are always many styling tips and outfits posted by fashion bloggers on social media. Consumer purchasing behavior is greatly influenced by the promotion of social media. For example, a report in 2017 showed that 85% of Instagram users mainly focused on clothing, fashion, and style [3]. There are many bloggers and celebrities who share their daily outfits and take selfies and wear new clothes as self- presentation, by tagging the brands and links of their clothes. This way of online phenomenon has greatly stimulated women's desire for consumption. People are always accidentally attracted to these new clothes when they are using social media, and people's preferences are usually influenced by public figures. Generally speaking, a lot of women will desire to wear more fashionable clothes like famous people, and they have a natural tendency to beauty, and also establish a good appearance impression in front of their peers. Under this influence of consumer psychology, most women will eventually shop online instead of offline shopping, such as directly clicking on the tag of the post to purchase, spendings lot of time browsing on apps that sell clothes online, and recommending the link of the clothes to their friends. According to statistics, the items that women buy the most online are clothing, cosmetics, jewelry and so on [4]. Most interestingly, women are the group with the largest purchasing power and the number of people who buy clothes online. We found that some women will pay different attention to online shopping due to age differences. For example, some women purely care about looking good in clothes, because they are relatively beautiful in appearance and conform to the fashion trend; while some women think that feeling good is the most important quality, so they spend much attention on the material of clothes, including the feeling of wearing them.

According to women's demand for clothes in different age groups, we will conduct research on their consumption behavior, consumption psychology and consumer preference. Consumer psychology and consumer preference are closely related. Consumer psychology is mainly the inner thoughts of consumers when they choose products based on their own psychological needs and preference [5]. And consumer behavior is the action generated after the consumer makes a decision, such as purchase, use, evaluation and so on.

The objective of this research is to explore the online consumption psychology and behavior of female consumers in different ages. The conclusion will provide some marketing strategies and directions for future online marketing, so in response to improving women's online consumption purchasing power and online shopping comfort under the influence of the epidemic, the consumer can still have a good shopping experience.

2. Data Collection

Based on E-commerce, this research uses the Dataset of Women Clothing by sampling 1,173 data from 22,629 original data. In order to maximize the differentiation of age, this study divides the independent variable of female age into 2 groups: younger women and older women. Younger women are 20-40 years old and elder women are 60-80 years old. All of the participants were asked to comment on buying clothes online and found keywords from the comments about dependent variables "look good" and "feel good". The purpose of this is design to analyze if younger women and older women pay different attention to online shopping clothes through the data of the review content and make an intuitive comparison. This research also studies the consumption psychology and behavior

of women through our data analysis. The conclusion will provide some marketing strategies and directions for future online marketing, so in response to improving women's online consumption purchasing power and online shopping comfort under the influence of the epidemic, the consumer can still have a good shopping experience.

The original data on the online shopping platform for women's clothing is close to 20,000. This is a very large and very broad number. The independent variables in the hypothesis set above are divided into two groups (n = 1,173) based on age: the younger group is 20–40 years old, and the elderly group is 60–80 years old. The reason for choosing these two age groups is that these two age groups show the most distinct differences in the choice of clothing categories at the preliminary screening.

Among 1173 data screened according to age, the average age is 29 years old. 554 data points are from the younger group aged 20–40 years. Tops with the largest number of buyers account for 46% of all clothing categories (tops, skirts, bottoms, jackets, intimates). Dresses came a distant second at 29%. 554 data were entered into LIWC after the statistics of the younger group's clothing choices were entered, and dictionary customization was performed to better analyze what influences the younger group's clothing choices. Custom dictionaries include words like fabric, quality, and cozy, which are categorized as "feel good," and words like cool, fashion, and charming, which are categorized as "look good." Keywords such as silky and wool were classified as both "looking good" and "feeling good". Each review by a customer was analyzed by the LIWC custom dictionary with 554 data.

Besides, in the process of data analysis, why is it that both the young group and the elderly group pay great attention to the purchase trend of looking good? We once analyzed the reviews of the elderly group through the LIWC custom dictionary of dressing scenes. Through the LIWC custom dictionary, we take the purpose of wearing and the scene of wearing as the analysis targets. Key words like "party" and "anniversary" are classified as "occasional. "categorize college, hang out, etc. as casual.

3. Result and Discussion

3.1. Results on Customer Reviews by LIWC Custom Dictionary

After analyzing the data of the top two categories most reviewed by young women in a custom dictionary, we find that the average number of occasionally bought scenes by the younger group (0.0565) was 0.023 higher than that of the casual scene (0.0335). This means that when buying clothes online, the younger group usually chooses styles and categories that will be more accurate to the occasional.

For the elderly group, 613 of the 1,173 data were for people aged 60 to 80 who bought women's clothes online. The categories they most often consumed (Dresses) were the opposite of those of the younger group (Tops), since from this, we can find that the elder group and the younger group are completely different in their choice of clothing.

Based on the LIWC dictionary definitions of look good and feel good mentioned above, we analyzed the average data for the elderly group aged 60–80 years old and found that the mean value of look good (3.195) was 0.310 higher than the mean value of feel good (2.885). In other words, the senior group also pays more attention to "looking good", which is not necessarily the primary condition for choosing clothes that are comfortable to wear.

Besides, in the process of data analysis, why is it that both the young group and the elderly group pay great attention to the purchase trend of looking good? We once analyzed the reviews of the elderly group through the LIWC custom dictionary of dressing scenes, and the analysis results illustrated that the mean value of clothes purchased on special occasions was 0.0758, while the mean value of clothes purchased for daily wear was 0.0418. The mean value of clothes purchased for special occasions was 0.034 higher than that for daily wear, which shows that not only did the younger group have more

clothing needs for various occasions, but the elderly group also paid more attention to dressing for special occasions than they did for casual scenes.

3.2. Univariate Analysis

As mentioned above, both groups are more likely to focus on 'look good' than 'feel good'. Here we can discover some consumer psychology. When it comes to individual items, overall, 46% of female from 20-40 group choose tops, while 38% of female from 60-80 group choose dresses, which are the best sellers. So why their clothing choice is different?

3.2.1.20-40 Group's Preference

The article indicates that T-shirts as one of tops are a staple to the modern wardrobe, gaining popularity with every fashion subculture and fashion label [6]. Apparently, the reason why younger generation prefers to purchase tops is not difficult to understand since young people are more likely to chase after fashion. Based on the dataset, we can easily find that 'color', 'design', 'fit', 'size', 'suitable', 'cute' and so on have become high-frequency words in the review, which implies that the variety of top styles satisfies this consumer demand well. As one of the feedback providers put it, 'the shirt is light and breezy for summer.' Therefore, seasonal demand is also taken into account when people are making their clothing choice. When it comes to body images, one of the interviewees who bought Blouses said, 'Really cute piece, but it's huge. I ordered an xxs petite and it was unfortunately extremely wide and not flattering. returning.', which reflects that these clothing did not project their self-image. The results from Relationship between body image and clothing perceptions, revealed that 81% of women chose the skinny figure as the media promoted 'ideal' body type [7]. Reves can be relevant to this consequence, as one of the interviewees put it, 'I was very excited to order this top in red xs. so cute, but it was huge, shapeless...'. Seemingly, slim version is more preferred among females in light of the public aesthetic.

As mentioned in introduction, consumer behavior and psychology are greatly influenced social media. Slim version seems to be popularized by the celebrities and bloggers in various of social media platform these days.

3.2.2.60-80 Group's Preference

The article offers a brief history of dress and explains why it still remains nowadays, arguing that dress is a term that often invokes the idea of a formal, pre-defined outfit [8]. It's something that individuals usually wear on special occasions, for instance, weddings and funerals, or for work. Like the provider said, 'The dress flowed like a dream. I will be wearing it for my anniversary celebration with pearls and victorian earrings.', dresses today have become a practice for women to show off their beauty and elegance on day occasions which corresponding with the description as 'funeral', 'wedding', 'party', dinner', 'gorgeous', 'chic' and so on in the review. Thus, it is easily can be seen that occasion means much to the senior.

According to the above research, several changes in the body shape and size take place during menopause and after and that the physical changes can be much apparent and sometimes drastic. Talking about the changing hormone levels that accompany menopause, one of the interviewees said "Around 50 is when your body starts changing, your waist becomes bigger than it has been and it doesn't matter if you exercise or not, it just changes". Hence, the tendency of choosing dress might be correlated to the body shape for covering waists and crotches.

To conclude, clothes can be used to either accentuate or conceal certain body features for women. Since choosing the right clothes can be a practice to satisfied women themselves, clothing preferences for women are therefore the product of how they feel about their body size and image, as well as societal influence including media projections of what is acceptable.

3.2.3. 'Occasional' or 'Casual'

According to the data result, it can be discovered that elderly people focus more on 'occasional' than young people. But the interesting thing is that 'casual' (0.0355) is much lower than 'occasional' (0.0565). Don't young generation prefer casual clothes? With further analysis we know that the average age of 20-40 group is 29.9, so it can be well explained. People in this age group called office workers are at a stage in which they need to dress well in diverse workplaces. The reason for this trend is that both young women and older women hope to break through some restrictions brought by society, such as stereotypes and prejudices, by choosing their dressing style and taste [9]. According to [7], about 81.3% of the women in the study chose their clothes for the occasion. Choosing clothes that look good in them provides them with psychological satisfaction in the process of choosing clothes, women try different styles of good-looking clothes to realize the process of pleasing themselves instead of clinging to the comfort of dressing.

3.3. Bivariate Analysis

Interestingly, both age groups focus more on 'look good'. According to [10], older women are more satisfied with their appearance and body. So, this also proves that it is not the prerogative of young women to pursue clothes that look better rather than clothes that feel better. Just as the saying goes,' Clothes makes women'. But why?

As more options are available when doing online shopping distinguished from single offline stores. Hence, to a certain degree, women are inclined to distracted by a series of ads and many kinds of model pictures online, because the design and color leave a stronger impression without touching fabrics while choosing clothes, even there are some feedbacks on the pages. It seems to be a reasonable reason that both groups focus more on 'look good'. Inevitably, marketing tools used by E-commerce platforms may affect the consumer behavior and psychology. This process can be defined as online perception, by which consumers make sense of their own environment online.

4. Conclusion

The purpose of the current study was to expand on a neglected subject and to investigate the different concerns of different age groups of women in buying clothes online. For the purpose of deep analysis and extracting women's consumption behavior differences among different age groups, the study divided women into two main age groups, which are 20-40 years old and 60-80 years old. The study first utilized the LIWC dictionary to generate an analysis of younger women's concerns toward online clothes by analyzing the key terms such as fabric, fashion, and cozy in the comment section to categorize their concerns into "look good" or "feel good." The same method was applied to discover an elderly woman's concerns. Based on the "look good" and "feel good" models, the study found that younger women had a 0.318 higher preference for looking good, while elderly women had a 0.310 higher preference for looking good. To generate more comprehensive results to better predict and study female clothing consumption behavior and psychology, the study utilizes LIWC to analyze the scene of wearing. The data illustrates that both younger women and elderly women pay more attention on special occasions than on casual scenes. Additionally, this study investigates that the size of the clothing label does not match the actual wearing experiences of some women, thus the women clothing shop should adjust the accuracy of size to improve its shopping experiences. Overall, the entire study concludes that all ages of women tend to put emphasis on their "beauty work."

This study can provide fashion retailers with useful insight into the market strategy adjustment of online shopping. The number of elder consumers has dramatically increase in the recent years. The large movement toward the elderly group creates a brand-new opportunity for e-commerce to improve their business strategy. The younger generation has dominated the e-commerce market for a long period of time, but with the increasing popularity of mobile phones, the elderly nowadays can bring a change in the e-commerce market. The emergence of online shopping leads older women to continue their clothing consumption in a more convenient and cost-effective way. In fact, elder women have absolute finical abilities than younger women consumers to purchase clothes that they desired. The future online fashion market can be subtly shifted to elderly women. As this study discussed previously, elderly women also value the appearance of clothes, and designers can amplify this feature to expand this potential market. In addition, the advertising industry can appropriately increase the number of elderly female models and customize push pages with elderly feminine characteristics to promote greater profits from online shopping.

This study presents several compelling insights. However, there are limitations that need to be addressed. For the data collection phase, the dataset only provides 1173 samples of female customers and fails to indicate many influential factors, such as background information. Therefore, the sample size and information were not as diverse as imagined. The dataset didn't include the specific online shopping application; rather, it only marked all purchased clothes as being from e-commerce, which may limit the research target. Additionally, the research method lacks a specific classification to categorize women's buying preferences and tastes. The existing two broad age groups are not detailed enough to generalize women of all ages. Also, the three comparative data analyses are inadequate to represent all aspects of female clothing; brand, color, and purchase intention should be included to generate a comprehensive understanding of this topic. The comments section may contain consumers' personal biases on purchased clothes, which will affect the overall data accuracy. Aside from the LIWC dictionary, the study failed to provide other analysis methodologies.

The study should contain a large number of female customer samples to cover a broad region, or collect the samples from a specific country to generate a case study. Influential factors related to economics should be considered, such as income and occupations, to create a more rounded perspective. Future research can explore the possible influence of fast fashion or brand loyalty on this topic to discover other reasons behind the different consumption concerns. Advertisements may be an interesting factor when women are browsing the online page of a specific clothing store, and the push page invariably plays a crucial role in women's consumption decisions. Future research could try to discover the impact of more age-specific recommendation pages on women's clothing consumption.

References

- [1] Saha, S. K., Duarte, P., Silva, S. C., & amp; Zhuang, G. The role of online experience in the relationship between s ervice convenience and future purchase intentions, UCP,2022, DOI: https://ciencia.ucp.pt/en/publications/the-rol e-of-online-experience-in-the-relation ship-between-service
- [2] Al-Hattami, H. M. Determinants of intention to continue usage of online shopping under a pandemic: Covid-19. T aylor & amp; Francis.2021, DOI: https://www.tandfonline.com/doi/full/10.1080/23311975.2021.1936368
- [3] Sornapudi, S. D., & amp; Srivastava, M. Instagram influence on clothing purchases. 2021, DOI: https://www.resea rchgate.net/publication/350654326_Instagram_Influence_on_C lothing_Purchases_-An_Eye-opener
- [4] Sebastianelli, R., Tamimi, N., & Rajan, M. Perceived quality of online shopping: Does gender make a difference? Taylor & Francis. 2008, DOI: https://www.tandfonline.com/doi/full/10.1080/15332860802507164?casa_token=4 q3zE7tnFbQAAAAA%3AwH80fg4TFWDw-
- [5] Hu, Z. Innovative Research on the integration of traditional Han clothing accessories into women's clothing brand design from the perspective of consumer psychology. Psychiatria Danubina, 2022. DOI: https://hrcak.srce.hr/cla nak/401261

- [6] Tractionbeauty. Why do women wear dresses? the history of women's clothing, 2022 https://www.tractionbeauty. com/why-do-women-wear-dresses-the-history-of-wo mens-clothing/
- [7] Reddy, D. S. Relationship between body image and clothing perceptions : Among women aged 1855 years in the U K: Semantic scholar. Relationship between body image and clothing perceptions : Among women aged 1855 years in the UK / Semantic Scholar, 2013.
- [8] GnarlyClothing. Why we love T-shirts, 2021. DOI: https://gnarly.clothing/blogs/post/why-we-love-t-shirts
- [9] Guy, A. & Banim, M. Personal Collections: Women's clothing use and identity, Journal of Gender Studies, 2000, 9: 3, 313-327, DOI: 10.1080/713678000
- Borland, H. & Akram, S., "Age is no barrier to wanting to look good: women on body image, age and advertising ", Qualitative Market Research, 2007, Vol. 10 No. 3, pp. 310-333. DOI: https://doi.org/10.1108/13522750710754 335