# Research on Online Education Products Designed for Chinese Young Women's Interest Development

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Abstract. Among Chinese netizens, young women account for a relatively high percentage and become active users. As living standard improves, their focus have changed from the basic needs of life to the improvement of the quality of life and happiness, especially spending a lot of time on interest developing. Some Internet giants and many online educational institutions have paid attention to it, and released a number of online education products for young women to develop interests. In this research, we defined "Young women" in China and "Interest Developing" according to available data. We performed a detailed analysis in the group of "young women", including their demographic characteristics, living styles, needs on interest developing, and specific learning processes. Then we took Baidu's product for young women as an example, in comparison with other products on the Chinese market, to explore the design concepts, design style and operational activities of online interest-developing products. Finally, we summarized the strengths and weakness of existing products, and see what this industry is really achieving or how it's trending. This research hopes to help design interest-developing products for Chinese young women, and even.

**Keywords:** Online education · Interest development · Chinese young women · Product design · Baidu Nuomi

## 1 Introduction

In China's Internet report, among Chinese netizens, young women account for a relatively high percentage and become active users (The age structure of internet users in China as shown in graph 1). More than 73% of the female have an undergraduate degree, with good educational background [1]. Young women are 18–35 years old women with characteristics of intellectual, spiritual independent and freedom. The women's lifetime is as follows: childhood, primary and middle school period, College student, taking up an occupation, being a wife and being a mother, children independence and the retirement life in the later years. While young women may be at the stage of college student, employment, or being a wife (Blackbody as shown in graph 2). They have a deep love for life and family, so in addition to work and study, approximately 80% young women spend a lot of time on doing things they love and experiencing life [2]. Many young women choose to develop interest based on their hobbies. Interest refers to the individual's tendency of the attitude, emotions and idea to a particular thing, activity. Interest developing is the process of forming interest. Any interest developing experiences emotional satisfaction in obtaining knowledge of it and participating in related activities. Interest development is crucial to improving of the quality of life, experiencing the beauty of life and living a more colorful life. But time become a sore point for young women to develop interest because of works and study taking up too much time (Figs. 1 and 2).

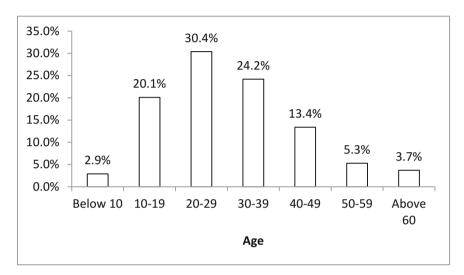


Fig. 1. The age structure of internet users in China

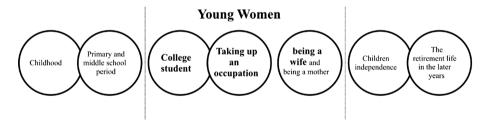


Fig. 2. Graph 2 the women's lifetime

Fortunately, this is a society with internet, human can get what they want on the Internet at any time any place because of development of online education. In China, according to the way of the resources operation of platforms, online education's product forms mainly include B2B2C platform, B2C service, assessment tools and online Internet schools [3]. Apart from the pure online form, the combination of online and offline gradually become a new trend, such as O2O pattern, and Nuomi education

of Baidu is a notable example. It is undeniable that K-12 students' course learning content and vocational training of adult in online education are enormous. But some Internet giants and many online educational institutions have paid attention to young women and their need, and released a number of online education products for young women to develop interests.

### 2 Young Women's Interest Developing

#### 2.1 The Characteristics of Young Women's Interest Developing

Women in different stages have different roles, and interest points and the process of interest developing change correspondingly. For young women, first of all, they can do whatever they want to do and learn anything. Before, because of the restriction of money and decision-making ability, parents often make a decision for them, which is possibly inconsistent with their interest points. Secondly, the realistic utility of young women's interest development is weak, and what they want is to experience a variety of activities to make their life more exciting. Thirdly, young women also want to make friends by developing interest and get a better interpersonal relationship. It is a wonderful life that your friends have common interests with you. Fourthly, many young women still hope to develop interest to their own strong point and highlight, and eventually it is beneficial to their work and other areas of life. Last but not least, because the computer and network are essential for young women and their time is relatively not so easy, many young women will choose online or the combination of on-line and off-line to learn.

#### 2.2 The Interest of Young Women

Based on our previous research as well as the existing data, we divide species of interest into seven: literature and art, entertainment, life skills, life emotion, health, maternal-baby and parent-offspring, financial investment (as shown in Table 1). Literature and art has been popular with all ages, especially the instruments. Recently years, Chinese Classics, based on various schools of thought in the Pre-Qin and the essence of culture of Chinese different historical periods, is certainly growing in popularity. The main group of the entertainment activities is young people. Life skills make life more refinement, enrichment and simpleness, which attract the attention of adults. Life emotion, maternal-baby and parent-offspring are the focus of people who have a family or lover. Human wouldn't lose concern on health at any time and fitness is a new trend in the 21th century. The types of sports are various and 55.4% of women choose running [4]. From 2012, with the gradual implementation of a series of national financial policies, it opens up a broader development space for the investment banking market. Financial investment is sought after by young and middle-aged people.

For the above-mentioned information, it is not difficult to find that young women have wide-ranged interests and their interest are mainly distributed in literature and art,

Literature and art	Entertainment	Life skills	Life emotion	Health	Maternal-baby and parent-offspring	Financial investment
China studies	Travel	Gastronomy	Love and marriage	Fitness	Pregnancy	Finance
Literature	Constellation	Roasting	Parent-child communication	Health care	Early education	Fund
Painting	Tarot	Mixed drink/coffee	Family relationships	Ball games	Child care	Stock
Photography	Magic cube	Fashion beauty		Yoga	Parent education	Futures
Calligraphy	Animation	Home decoration		Martial arts	Developmental psychology	Insurance
Chess	Online game	Handwork DIY				Heavy metal
Music	Automobile	Pet				
Dance		Green plants	-			
Robot/ programming		Life tips				
		Social etiquette				

Table 1. The classification of interest

entertainment, health and life skills. Some new words to describe young women, such as "artistic female youth", "secondary yuan girl", "life Daren" and so on, also reflect it.

#### 2.3 The Process of Young Women's Interest Developing

Taking into account our previous studies and other related materials, the process of young women's interest development is as follows: finding potential interest, experiencing an interest activity and enhancing individuals' capability. (as shown in graph 3). Next, we take the guitar as an example to specify the process. Firstly, young women can find potential interest in some circumstances, for example, when they look a movie that leading man like play guitar; Wechat subscription or Big V Weibo push an article that depicts guitar as very interesting; some people in online interest community make friends because of liking guitar; or their friend become to learn guitar. These can attract their attention on guitar and want to further know it. Based on the knowledge of guitar, young women hope to find some way to experience it. At the very beginning, they will find some experience guitar, they will confirm if they really like it and are ready to spend more time and money on it. Further systematic study is important to enhance individuals' capability of play guitar. In the last two stages, people need to make a purchasing decision. Before making decision, young women will go through the two

stages of preliminary screening and quality identification. On the stage of preliminary screening, based on the feature of interest itself and their time and other information, young women choose study way (online, offline or the combination of online and offline) and screen several alternative learning institute. When identifying quality, they appraise learning organization on account of course duration, instructor, score and related factors about institution. Of course, many young women may just arrive at second path, and they just want to experience an interest activity and touch more thing. Experiencing an interest activity itself is an exciting thing for young women (Fig. 3).

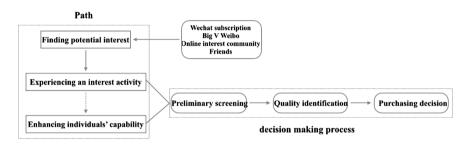


Fig. 3. The process of young women's interest developing

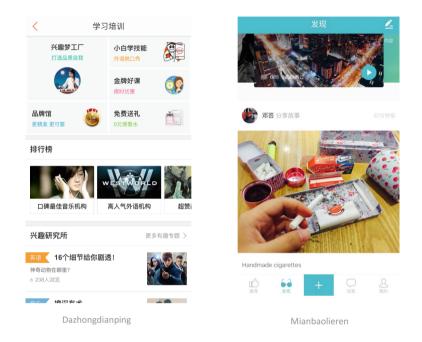
#### 2.4 Product Analysis- Baidu Nuomi as Example

As mentioned before, some Internet giants and many online educational institutions have paid attention to the trend of interest development. We take Baidu Nuomi for case study to see how to design products for these young women.

Baidu Nuomi is an online platform providing offline local life service, including food, movies, entertainment, beauty and so on. What users do on Nuomi, especially on the mobile side (APP for IOS & Android), is about more relaxing life issues. Further more, the main and active users of Nuomi are young women aged 18 to 35, who are spending a lot of time on interest development. Considering these features, the new "Learning Channel" of Baidu Nuomi APP (hereinafter referred to as Nuomi Learning) is improving its product to meet the users' needs.

#### 2.5 Product Concept

From the very beginning, what to show on the home page is based on what users want to see. When a young woman opens Nuomi Learning, she is probably trying to find some interesting courses, but doesn't know which fits herself. Therefore, the target of home page is to help users to find out their existing or potential interests. To show the interesting factors of a course on home page is not so easy. Some other products concerning interest development are also making efforts to it. For example, Dazhongdianping shows interest developing courses by thematic activities [5]. Mianbaolieren highlights the joy of course by entertaining decoration [6].



Above may be some of good patterns to arouse users' interests. For Nuomi Learning, we believe that there could be something more to do. First, we confirmed by research as discussed before that users would like to seek out their interest on home page. So we plan to show contents of good quality instead of group-buying courses. It is to say, we are not going to be an online shop that pushes customers to decide what to buy and buy it immediately. Instead, we are going to act as a guide that gives our users some tips and recommendations for a particular area of interest development. Next, we need to consider how to be a good guide. As young women wandering around home page of Nuomi Learning, they are probably green hands and need someone experienced to show them around. Thus, a talent or expert, or what we call "Da Ren", in some area by your side may be a good idea. This Da Ren tells you more information about what the area is, what you could get from it, who may be suitable for it, or how you get started. For example, there may be some articles discussing the effect of doing yoga, or strategy of learning to play an instrument. Further more, a better guide could be talking to you as a human being. AI (Artificial Intelligence) may be a solution to it. We are trying to put methods of AI into practice on Nuomi learning.



(Part of ) New Conceptual Design of Nuomi Learning

As we can see on the new conceptual design of Nuomi Learning home page, there is no longer showing course name and price simply. Instead, there are articles of experiences or recommendations. In fact, here we find the 3 most important factors affecting users when seeking their new interest. That is, a particular sort of interest development, the quality of it and the distance between the user and the location where she can take courses. To recommend a particular sort of interest development that the user may be interested in, we push the articles to her based on what she had chosen. Then we try to show the quality of the relevant courses not only by comments to a particular course, but also by articles of experiences or recommendations at a higher level. Users care about the distance a lot, because they are not just wandering around an online platform like Nuomi Learning. They want to find something to learn offline in an actual place and take courses to improve themselves actually. Within 3 km may be a suitable distance. So the "Da Ren" showing on one users' home page must be nearby her, not far more than 3 km. Also, in the upper right corner of the article we push to her, there shows the exact distance. All in all, it is a try for our new conceptual design of Nuomi Learning home page. We try to make interest development easier and more interesting from the beginning, to meet the growing needs of China young women.

#### 2.6 User Experience Design

After information design, here comes user experience design, particularly at the level of surface. Before getting started on visual design, the overall design style should be defined. It depends on the preference of our target user, young women. Obviously, "young" and "feminine" becomes the key words of our design style. Besides, the young women who pay attention to interest development care a lot their living quality, so as the high quality of product experience. Therefore, the DNA of visual design style of Nuomi Learning could be concluded as "young", "feminine" and "high-quality".

Defining the overall design style, the new design plan of Nuomi Learning changes in two aspects. On the one hand, it accords with "complexion reduction", a new trend in mobile design. This trend starts when iOS6 upgraded to iOS7, replacing skeuomorphism with flat design. It means no need any more to imitate the real items when designing mobile products. As design style is just a tool to achieve the ultimate goal of being easy to use, flat design would be a better choice. It leads users to pay more attention to the content and function of the product itself, instead of how exquisite it is from the appearance. Complexion reduction means more simplified interface color, larger and more prominent characters in bold, easier and universal icon. As users getting more and more familiar with the product, it could be modified gradually to simplification. Then the interface becomes anonymous, and users focus on functional experience. The characteristics of a product are reflected by the content itself, not the interfacial design.

Young women, the target users of Nuomi Learning, are active users of most mobile APPs. So their using habits and aesthetic standard of APPs are finally shaped by the trend of complexion reduction. They are used to, and also love, the clean and simple design. That is what we could do when designing for the new edition of Nuomi Learning. For example, in the previous edition, we used card type design. The problem is that the whole page is divided into different parts and looks a bit complex. This kind of design is not easy for user to find the information he wants. So we broke through the cards and made the structure simple. Also, we leave more blank, keeping elements away from others. It means putting the key point on the Golden Section and leaving blank on other sections, so that users will not be distracted from the main information.

On the other hand, we try to design delicate edition for privileged (VIP) business users, despite the new trend of Flat Design. The merchants that provide offline interest development courses hope to attract more customers from online users, and Material Design meets the users' needs of quality. For example, pink is the dominant hue of Nuomi as women prefer feminine and warm color. But in this privileged edition, we use black as the interface color. Black tells the feeling of the high quality of a product. Also, users love gold when talking in high level. So we highlight the important information in the effect of gold plating. In this way, the interface looks more valuable. As we found out that young women cares a lot the high quality of product experience especially when concerning interest development, this privileged edition is totally custom-built for them.



(Part of ) Privileged Edition of Nuomi Learning

# **3** Summary and Prospect

To conclude, first of all, young women's interest developing is to experience life, grow up and make friends, and their choices depend on themselves and choosing online or the combination of on-line and off-line to learn. Second, they have wide-ranged interests and their interest are mainly distributed in literature and art, entertainment, health and life skills. Third, the process of young women's interest development is as follows: finding potential interest, experiencing an interest activity and enhancing individuals' capability. Before making decision, young women will go through the two stages of preliminary screening and quality identification. Last but not least, we take Baidu Nuomi for case study to see how to design products for these young women from product concept and user experience design.

Based on the important role of women in the economic growth, a new word is created as "she economy". In the contribution of mobile terminal to Internet traffic, female users become huge groups and they get wide attention from Internet giants and many online institutions. There are more and more products designed only for meeting women's need in many fields in China, such as meiyou, meilishuo, weimi and so on. Some suggestions were given to design products only for young women in this article, for example the DNA of visual design style of Nuomi Learning could be concluded as "young", "feminine" and "high-quality", and the recommendations of "Da Ren" to help young women find what they want. We hope that the paper can help design interest-developing products and other products for Chinese young women, and even all other potential groups of users in some way. Of course, we also have many deficiencies and will learn more knowledge for improving our products.

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