

Research on the Practice of Positive Experience Design of Campus Cultural and Creative Products: A Case Study of City University of Macau's Series of Cultural and Creative Design

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Abstract: This paper explores the application of the theoretical method of positive design model, uses similar principles and perceptual characteristics, takes the campus cultural and creative product project of City University of Macau as the main research object, extracts the theme adjustment elements through user interviews and design positioning, combines the investigation of users' campus cultural sensibility and functional needs, establishes campus cultural characteristic elements, and manufactures the "cool points" of campus cultural and creative products, which resonates with teachers and students in the school, and designs a series of campus cultural and creative product solutions. Through this method, this paper explores the effective design practices of cultural and creative products of City University of Macao in meeting users' personalized consumption needs and enhancing individuals' subjective well-being, and sorts out the design process, in order to provide new ideas and methods for the design of cultural and creative products on campus.

Keywords: campus cultural and creative design, positive experience, subjective well-being, user experience

1. Introduction

With the improvement of material living standards and the prominence of personalized consumer demand, the popularity of cultural and creative industries has become an inevitable product under the trend of consumer culture. As a major "weapon" for the dissemination and development of school culture, campus cultural and creative products are an effective path for campus cultural dissemination and innovation. At present, the development of cultural and creative products in colleges and universities is mainly based on the development of a complete university cultural and creative brand system developed by several famous overseas universities such as Harvard, Massachusetts, Cambridge and other top universities. However, the overall development level of the cultural and creative industry of domestic universities is uneven, and more still stays at the application of straightforward cultural symbols such as campus buildings, school emblems, and school mottos to an existing product. At the same time, most colleges and universities have stayed in cultural inheritance and innovation and meeting the needs of users and aesthetics, and have failed to provide differentiated positive experiences for consumers first.

With the continuous change of consumption trends, consumers pay more attention to the non-material factors that products can provide, and simple physical experience can no longer meet the growing spiritual and cultural needs, nor can it effectively contribute to providing individual's subjective well-being. Therefore, the theoretical method of exploring the positive design model is applied to the design and development practice of campus cultural and creative products, aiming to explore the personalized needs of users in campus culture and how to improve individual subjective well-being, that is, the purpose of cultural and creative products is to find the cool aspects for effective practice.

2. Overview of the study

The Positive Psychology major is based on the traditional psychological perspective and explores

scientific research on spiritual aspects such as people's well-being and virtues in a positive way [1]. Positive design [2] is based on objective things, aiming to meet the psychological needs of users through meaningful design practices, thereby enhancing the individual's personal subjective well-being. Users can obtain happiness through positive experiences, and happiness also affects positive experiences, and the specific influencing factors can be divided into six types of characteristics [3], such as skills, autonomy, correlation, popularity, stimulation, and safety, which are classified as Table 1. The experience elements involved in it are derived from the intrinsic psychological and behavioral motivation of the user's daily behavior and life.

Table 1: Actively experience the elements of design requirements

Demand	Description
Autonomy	User behavior comes from their own internal drives, not from external pressures or instructions
Skillfulness	Users can easily master a certain skill or ability instead of feeling incompetent.
Correlation	Have regular close encounters with people who care about you, rather than feeling lonely.
Epidemic	Feel that you are cared for, respected, and can influence others, rather than feeling that you are insignificant.
Irritation	Feel like I'm getting a lot of enjoyment and pleasure instead of getting bored.
Safety	Feel safe and in control of your life, not uncertain and dangerous.

2.1 Positive design and subjective well-being

The six types of elements in Table 1 reflect the intrinsic psychological needs of users for positive experience, and the existence of elements helps users experience enthusiasm. For example, in the process of daily fitness, if the user takes fitness in leisure time as an experience every time and enjoys this behavior wholeheartedly, it reflects the "autonomy" of positive experience; if the user uses leisure time to learn fitness related knowledge at home, it reflects the "skill" of positive experience; if the user wants to exercise with his family, which reflects the "relevance" in the positive experience. If the user takes photos after fitness and posts it to the public platform in anticipation of praise, it reflects the "popularity" of the positive experience; if the user tries to challenge different fitness equipment and feels the pleasure in the challenge, it reflects the "stimulation" of the positive experience; if the reason for the user's fitness at home is to solve the inconvenience of going home at night, it reflects the "safety" of the positive experience.

Subjective well-being is a psychological experience with positive guidance. Experience and product are more interdependent, experience is the meaningful and positive feelings embodied by individuals in the process of interacting with products. Therefore, designers should aim to improve subjective well-being and transfer the main design resources to the experience process. This design approach provides users with the opportunity to engage with meaningful design experiences. This experience can also meet the user's continuous mental needs, and the role of product design is to visualize these experience needs. [4]

The design process of positive design consists of two parts: the first part is to comprehensively observe the user, gather information, including the use of related products, user behavior, and the meaning behind it, so as to discover the behavior of the user experience, and design one or more new experiences based on a list of psychological needs; the second part is to study how to visualize positive experiences in order to create or shape this experience. The design process of subjective well-being design is shown in Figure 1.

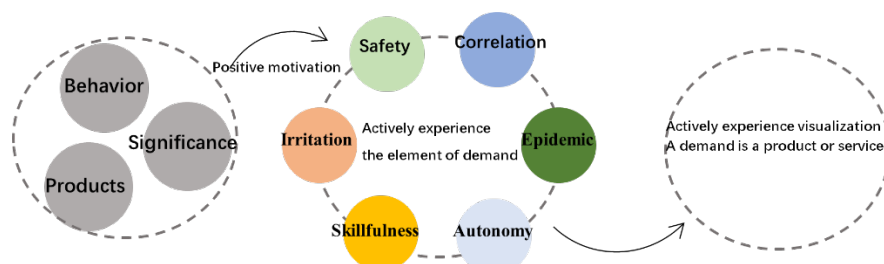


Figure 1: Subjective happiness design process

Since positive design can enhance users' subjective well-being, and positive experience elements can

provide direction for positive design practice, it is necessary to conduct step research in the subsequent design of campus cultural and creative products [5]. The first step is to investigate user information analysis; the fourth step is to propose a variety of strategies to improve subjective well-being; and the fifth step is to design practice. In this way, it can provide a theoretical basis for the subsequent design of campus cultural and creative products.

3. Design practice of cultural and creative products on City University of Macau campus

3.1 Design tasks

The design task was to design cultural and creative products that conform to the individuality of the school with City University (hereinafter collectively referred to as CityU) as the carrier, which is in line with the "humanistic attributes", including the good memories of teachers and students on campus and the cultural connotation of the campus, so as to establish a good campus brand image for City University of Macau.

3.2 User Experience Research Process

This research process includes three parts: user demand extraction, design concept visualization, and design evaluation. Among them, user demand extraction includes classic user selection, psychological needs and design opportunity points; design concept visualization includes design and concept exploration, visual design; design evaluation includes designer evaluation, user evaluation, etc.

3.2.1 Research process

(1) Research object, method and objective

In this study, the two keywords of "City University of Macau" and "Campus Souvenirs" were discussed as follows, and the concept of "cool points" in campus cultural and creative products was discussed, as shown in Table 2.

Table 2: Definition of the designer's internal speech classes

ID	Ago	First impression of City University	Understanding of souvenirs
Designer 1	23	Advanced, stretch, lively	An object with a story
Designer 2	24	Small, depressing, brightly colored	Local characteristics, special people gift

A total of 7 students and staff of City University of Macau were recruited as the interviewees, including 4 students (2 male, 2 female) and 3 teachers (1 male, 2 female), aged 19-40, with different educational levels and professional backgrounds (5 graduate students and 2 undergraduates, involving environmental design, graphic design, education, English, engineering management and other majors). The user's description of the experience often includes things like context, personal motivation, or emotional description. The semi-structured interview of the interviewees one by one aims to find common memories of CityU's life, study and work through the details described by the interviewees, and provide basic information for the establishment of typical characters. Therefore, the objectives of this research include three questions: first, to find the moments of happiness and satisfaction in CityU, which can be memories brought about by scenes or stories; second, the reasons for CityU's first impression and current transformation, to reveal the underlying experiential motivations behind the behavior of the objects, deepen the understanding of user experience needs, and provide more inspiration and ideas for the initial stage of design; third, to explore the subjects' cognition and demand feedback on campus cultural products to guide the visualization process of product concepts.

(2) Interview stage

The formal interview will take place in a familiar environment and will be recorded throughout the process and will last 10-30 minutes. Interviewees are asked to answer open-ended questions, including personal information, life plans, and events of special significance on campus. Impression of CityU as a whole and evaluation of existing cultural and creative culture, etc.

(3) Data analysis

After the interview, all recordings are transcribed and grounded theory is referenced [6] et al. analyzed

the data. First, the basic information points in the interviewee's statement are extracted. Secondly, the extracted basic information points are analyzed and associated to distinguish the commonality and contingency between the basic information points.

The interviewee's personal statement produces basic information points, and then extracts the keyword collation table 3 and classifies the keyword table according to the tangible and intangible categories, and on this basis, it is better to analyze behavior, product, meaning and specific group of people, find the extracted content of appearances or images on CityU's cultural and creative memory points, better analyze the emotional needs and ideas of the research subjects, and provide favorable conceptual element inspiration as design practice design.

Table 3: Respondents intangible and tangible keywords

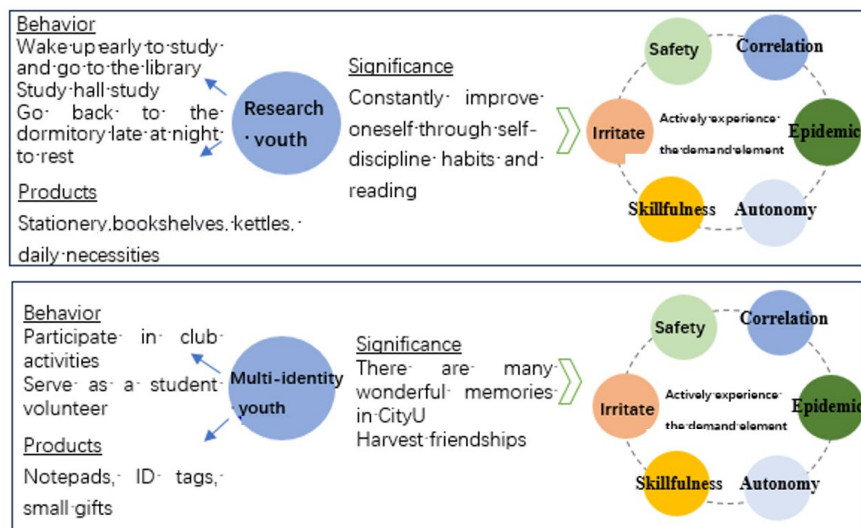
Tangible	Invisible
Wang Kuancheng Building, Sunset, CityU people recall the scene together, the library is full, the death slope, interesting students, the moment of sitting, cultural festivals, regulations, sunsets, elevators	Sense of ceremony, CityU sense of honor, cultural heritage, romance, sense of identity, refinement, regurgitation, youthful colorful, rush by

(4) Research results

This section of the study is mainly to provide reference for the selection of typical users, and to provide inspiration and guidance for design time. Refer to Alden and Gaudreau's study on the classification of people based on perfectionism, and the study on the classification of college students based on perfectionism [7]. According to data analysis, typical target users of campus cultural creative products with students and teachers as interviewees can be divided into: scientific research youth, Multi-identity youth and practical youth, as shown in Figure 2.

3.2.2 Extraction of user psychological needs and design opportunity points

The positive experience generated by realizing the user's behavioral needs can improve the user's subjective well-being, and the satisfaction of the meaning behind the behavior often corresponds to the satisfaction of one or more behaviors. Therefore, the connection between practice and happiness is described from the behavioral associations involved in the above typical users. Based on the description of typical character canvases, the author excavates the motivation of character experience behavior from three aspects: user behavior, product use, and the meaning behind it, and matches the corresponding psychological needs. Figure 2.



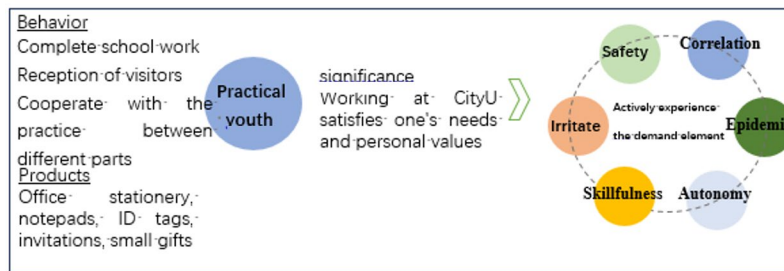


Figure 2: Matching of psychological needs of characters

3.2.3 Design concept visualization

(1) Theme element extraction

CityU College stands for color extraction. The color of the eight most representative humanities and social sciences on the CityU campus is proposed and the color value table of CMYK is shown in Figure 3 to be used as a color reference for these cultural and creative products, so as to better reflect the fit of CityU-themed cultural and creative products, and stimulate the feelings and resonance of students in all colleges when using the products.

C:15 M:80 Y:60 K:0	C:45 M:6 Y:8 K:0
C:80 M:60 Y:15 K:0	C:70 M:70 Y:10 K:0
C:20 M:55 Y:30 K:0	C:40 M:45 Y:80 K:0
C:45 M:90 Y:85 K:10	C:10 M:50 Y:75 K:0

Note: Leads to the official website of City University of Macau (<https://cityu.edu.mo/zh/>).

Figure 3: Representative colors of various colleges of City University of Macau

CityU element symbol extraction. In the process of interviewing and researching with the interviewees, the concrete pictures and elements of the masses who feel deeply about CityU were summarized, namely the tallest building when passing by, the deadly slope, the best view of Macao, the stairs to dissuade others, the sunset after class, the map illustration, and the eight views of Macao, which are also beautiful scenery that cannot be seen in other places. This is the extraction of symbolic elements of CityU's cultural and creative product design, as shown in Figure 4.

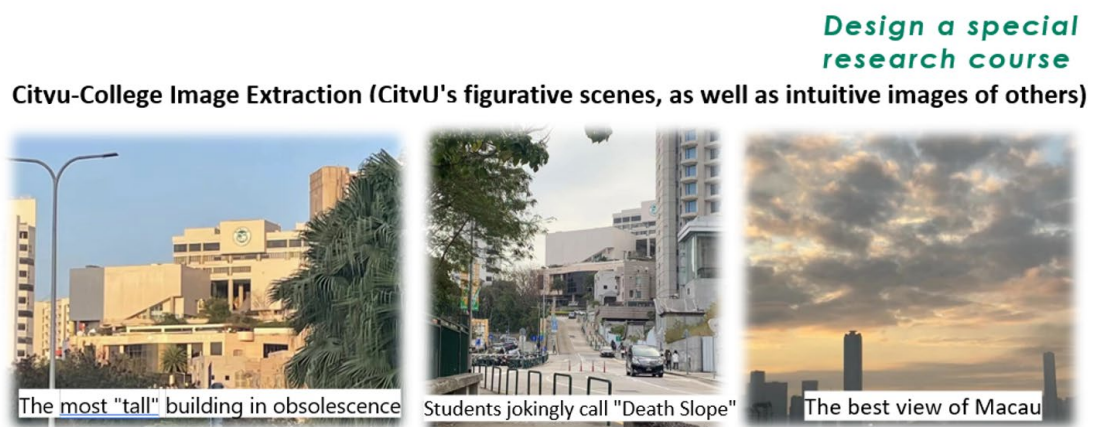


Figure 4: Cityu-college image extraction

3.2.4 Conceptual Optimization and Modeling

(1) CityU & Everyday Gadgets: "Feel Free" card holders

This design aims to improve the ID sleeve and add different functional combinations from the graphic intention to optimize the design of CityU's exclusive ID card holder. Based on the CityU map, the main card holder and additional card holder products were designed, and in form, four card holder types were extracted by using the geometric pattern of the map, which respectively carried the functions of card issuance, emergency change, and pen holder placement, to solve the indispensable document needs in Macao, as well as the attribute design in identity. The design of cultural and creative products is considered from the perspective of "safety", "relevance" and "autonomy", which better meets the daily gadgets of CityU. The renderings are shown in Figure 5.

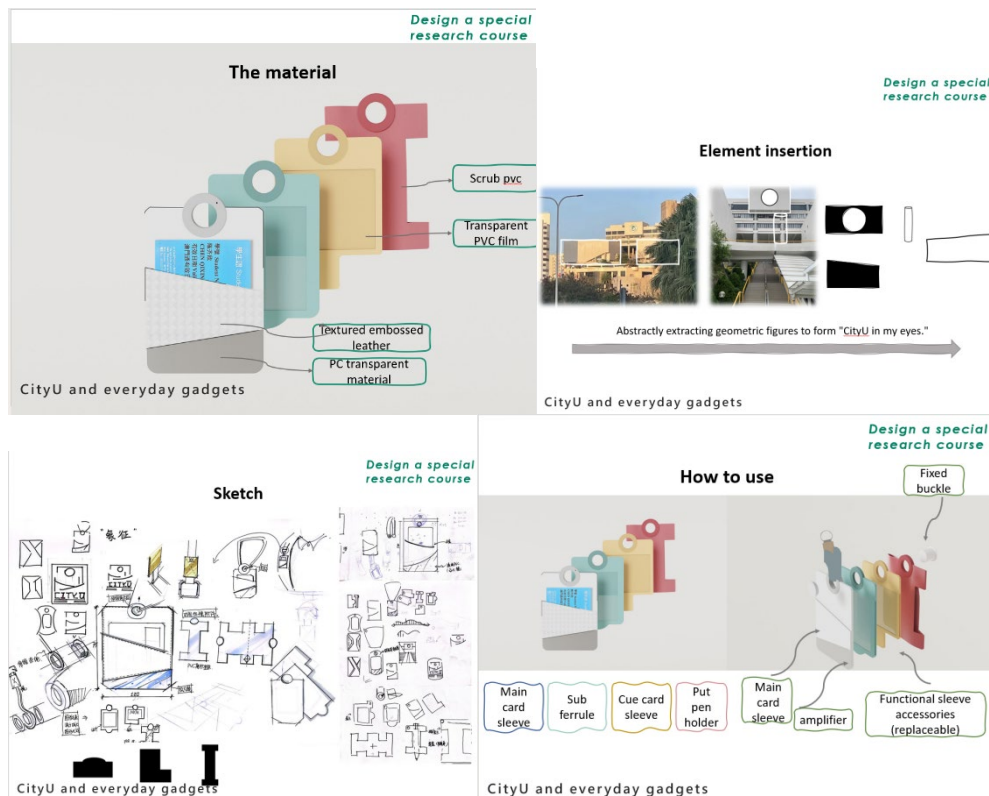


Figure 5: CityU- card holders design renderings

(2) CityU & Everyday Gadgets: Flat bookstand

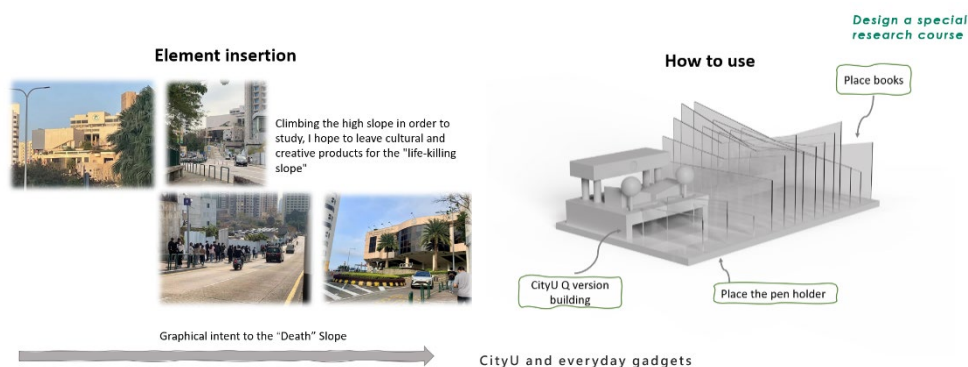


Figure 6: CityU- Flat bookstand design renderings

The extraction of the elements of the "long life oblique" unique memory of the city university students, the slope is set as a book standing board, and when the book is not placed, it is tortuous, which means that the city university students sweat every day to study on the mountain, comparing each piece of book standing board to every step of the hard work in the learning process, step by step the accumulation of books to fill, and then achieve cityu education us to reach the hillside of knowledge. The design

renderings are shown in Figure 6. In the left part, the Q version of CityU lectures is designed, as the end point of the goal is also the intention of the spiritual fortress, which means the goal of learning and daily walking, and the name of the book stand product is a wish, hoping that CityU students can step on the high slope of "books" and reach the top of their own learning mountain.

4. Conclusion

From the perspective of design practice, this study conducts design research on campus cultural and creative industries based on positive experience, including user demand extraction, design concept visualization, and product prototyping, and designs corresponding product prototypes for different user needs. However, further research and feedback are needed for product evaluation and optimization.

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