

Article

A Study on the Preference of Healing Products for Single Office Workers of Various Lifestyles

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Abstract: The world has entered an era of singleness, with even Taiwan moving toward the global trend of singleness. Single people are facing criticism over their social values, as well as the psychological pressure caused by work. As a result, how to relieve this pressure and adjust the negative emotions of single people has become a very important issue. Therefore, related healing products that can relax the bodies and minds of single people and provide psychological comfort and a release function are being developed accordingly. In view of this, the purpose of this study is to determine the preference of single office workers with different lifestyles regarding healing products. The lifestyle characteristics and preferences of single office workers were investigated via a questionnaire survey. Through SPSS statistical software, the preference factors of single office workers of different groups regarding different healing products were analyzed, and the lifestyle characteristics and preferences of each group were subsequently obtained. The results show that the lifestyle of single office workers could be divided into three groups. On the whole, single office workers considered healing products to be interesting and impressive with attractive and charming appearances, as well as offer the function of transforming negative emotions. This study hopes that the design principles obtained can provide an important reference for product designers to design relevant healing products for single office workers.

Keywords: preference; single office worker; lifestyle; healing products

1. Introduction

1.1. Research Background and Motivation

With the prevalence of celibacy, rising divorce rates, sharp declines in fertility rates, aging, and other social phenomena, the vast majority of people paying for things in the future will be considered to be “one person” [1]. According to *The Economics*, singleness has become a global trend. In other words, being single is one of the mainstream lifestyles of modern people, and single office workers will become an important consumer power in the future. Chih-ming Hsu of Taiwan’s Industry Science and Technology Foresight Research Team also mentioned that there are more and more types of single people in Taiwan, and many new life needs will naturally emerge when lifestyles become personalized [2]. Under the high-pressure competition in today’s society, people’s demands turn to goods that can make their life happy and more pleasant. How to help single office workers who want

to manage negative emotions, relieve pressure, change their mood, and properly vent has become a very important discussion topic. Therefore, healing products are consumed by many groups made up of single people who are more willing to spend money to heal their own emotions. In the future, healing products will play a very important role in this market.

Over the last several decades, corporations have increasingly considered the environmental pillar of sustainability. Tools, concepts, and principles such as life cycle assessment, carbon footprint estimation, design for the environment, and product stewardship are becoming ever more commonplace. The third dimension of sustainability, the social dimension, has received less attention relative to the environmental or economic dimension [3]. Social inclusion and cultivating a sense of belonging have been identified as important components of social sustainability [4]. Social exclusion has been defined by Levitas et al. [5] as a complex and multi-dimensional process. It involves the lack or denial of resources, rights, goods, and services, and the inability to participate in the normal relationships and activities that are available to the majority of people in society, whether in economic, social, cultural, or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole. The concept of ‘maintenance social sustainability’ speaks to the traditions, practices, preferences, and places that people would like to see maintained (sustained) or improved. Maintenance social sustainability is concerned with the ways in which social and cultural preferences and characteristics, and the environment, are maintained over time [6]. Healing products as a regulatory tool interrupt the relationship between emotion and projection, relieve stress, and enhance well-being.

From the research viewpoint, Taiwanese researchers also found that the lifestyle of consumers is an indispensable information source for commodity design, and good product design strategies must deeply explore their lifestyles [7]. According to the literature review in Taiwan, there is no study on the preference of single office workers for healing products. Therefore, the goal here is to conduct a study on the lifestyle preference factors of healing products of single office workers according to this trend, in order to provide a reference basis for businesses in the future.

1.2. Research Purpose

This study took the single office workers in modern society as the research subject and analyzed the differences in their various lifestyles and preferences for healing products. Therefore, from the perspective of single office workers, this study explored their preference factors for healing products and established design principles to provide a reference for future product designers in designing healing products, thus serving as a communication bridge between designers and consumers. The purposes of this study are as follows.

- To investigate and analyze the lifestyle characteristics of single office workers through an AIO (activities, interests, opinions) scale.
- To discuss and analyze the preference factors of single office workers for healing products through a Likert scale questionnaire survey.
- To obtain the differences in the preference of single office workers of different groups for healing products through difference analysis, and finally construct design principles for healing products.

1.3. Research Scope and Limitations

This study is based on a survey of 21 to 34-year-old single office workers in western Taiwan who were unmarried at a marriageable age, which is the largest single population with the most spending power.

The products used by single office workers in life are quite extensive, and according to the above-mentioned literature, healing style “products” are more impressive to this group. Whether in shape or function, such products have considerable influence on the body and mind of single office workers. Besides being their favorite commodities [8], they are not too bulky and have a higher contact frequency with the desktop; therefore, the scope of this research is limited to “desktop” healing

products. With the assistance of healing products, negative emotions are transformed. Therefore, the design forms, functional characteristics, and healing effects of healing products are discussed for relevant research and comparative analysis. The “healing products” to be explored in this research hope to obtain “relaxed and happy” feelings by “transforming negative emotions”. The main objective was to discuss the sensory effects of inner intuition; however, since it is difficult to obtain various commodities, and there is a large number of restrictions in the questionnaire survey, it was not possible to produce healing products one by one for the interviewees to experience. Therefore, one-sided A4 color commodity patterns and descriptions were adopted to enable the interviewees to further understand and complete the questionnaire.

2. Literature Review

This part discusses the literature related to the research of single office workers, healing products, lifestyles, and preferences. The purpose is to clarify the concepts and establish the basis for follow-up research by the literature review.

2.1. Single Office Workers

According to Chih-ming Hsu of Taiwan’s Industry Science and Technology Foresight Research Team, among those who are still single at a marriageable age, students and workers outside their hometowns are the main consumer groups in this era of a singleness economy [2]. By collating relevant literature on singles in Taiwan and other regions, we know the issues and directions of past research topics, as shown in Table 1, where the research subjects are mostly single women. According to the analysis of Nielsen Media Research (2011), the proportion of single people aged between 20–34 in the total population is the highest (21.5%) among the four major groups of single economic opportunities. Therefore, this study hopes to construct future design principles by analyzing their preferences in a gender-neutral manner from the single group with the largest population, and focuses on single office workers under high pressure and with extremely high demand for healing products.

Table 1. The singles person related research.

	Related Research in Taiwan	Related Research at Other Regions
Research Topic	<ul style="list-style-type: none"> Career experiences of single persons (e.g., love, stress, unmarried childbirth). Living space (e.g., space planning, accommodation safety). Single consciousness (e.g., views on spouse selection, marriage, and love). 	Apart from Taiwan studies, overseas studies also include cohabitation experience, differences between groups, intimate relations, national welfare, security policies, etc.
Research Subjects	In terms of gender, women are the majority. Most of them are teachers and female students. In terms of age, the focus is mainly on teenagers and single people who have missed the marriageable age.	In the aspect of gender, the comparison between the two genders is the majority, meaning the research subjects are seldom analyzed from the occupational category. In terms of age, single people who are at or have missed the marriageable age was the focus in the early stage. Recently, many studies have focused on the issue of single elderly people.
Research Method	There are many qualitative research methods for in-depth interviews and quantitative research methods for the questionnaire survey in Taiwan’s singleness research.	Apart from Taiwan’s research methods, there are also longitudinal studies for more than 10 years abroad.

(Sources: [2,9,10]).

2.2. Healing Products

The so-called healing refers to addressing the physiological injury condition and the torment brought by pain or disease. The concept of “healing style” derives from Japan, which includes the positive implication of feeling joyful and settled [11]. In Japan, ‘healing style’ has become a key word and a kind of category concept. Any person, thing, or object that helps pacify the modern broken heart can be classified as having a healing style [12].

Healing products mainly achieve inner emotional balance and relieve inner pressure by means of products with healing effects that meet the needs of consumers’ emotional satisfaction by means of simple and exquisite design. Healing products can provide warmth and achieve greater effect by warmth, in order to enhance the emotional-added value of the products and give people another kind of psychological satisfaction [13]. When consumers buy a healing product, they consider more than its equivalent monetary value, meaning that they want to find self-worth by possessing the object.

“Healing style” products refer to those that may release or remove life pressure and have a healing effect through user interaction via listening, watching, playing, or using. The healing products involved in this research are mainly industrial products. The sequence from external to internal is: appearance, effect, and psychology. They are characterized by a warm and lovely appearance. In terms of effect, they may lift up work spirits and alleviate nervousness at work. As for psychology, they may remove loneliness. In the interaction process, they seem to know about the minds of consumers.

The previous field of industrial design emphasized form, practicality, and functionality. However, current industrial design requires emotions, so as to elevate the soul and spirit. Based on this, the design trend of healing style relates to more emotional thinking compared with the previous functionality caused by rational thinking.

The set-up of this healing study design is mainly to close the gap between the ideal self and the real self. The memory fragments of all individuals include feelings of emotion, mood, and affect, which belong to the emotional level of the mind that cannot be calculated or materialized. This research selected and collected hot-selling and highly concerned healing products from Taiwan’s monthly review, international design award, major design websites, and relevant news reports and classified them into four categories according to their functions, which were namely: decorations, stationery, electronics, and daily necessities. Then, the researchers conducted market analysis. Commodities can be defined as healing products if they have a lovely and warm appearance and the effects of stimulating the spirit and balancing emotions.

According to the revised cognitive behavioral perspective of Chen [14], the stress process can be presented in another way: organism—stimulus—feeling—response—effect. Therefore, when faced with stimulation, the concerned parties can change their beliefs or ideas by healing commodities (auxiliary goods) and instead gain positive feelings through the help of healing products from the original irrational emotion or behavior. Healing products intervene in the link between feeling and response, as shown in Figure 1. Therefore, the value of healing-style products does not lie in the product itself; instead, it goes deep to the inner mind through the product design and creates a peaceful and calm feeling from in-depth thoughts, further leading to the value of the “heart” through people’s emotions and feelings. It gives people the imaginative sense of fulfillment through color, shaping, tactile sense, or gustation [14]. The functions of healing products can be divided into three categories: satisfying empty hearts, changing depressed emotions in real time, and combining taste with function [15]. Fang mentioned various products that may have emotional associations with individuals, which cover the following three emotional elements discussed from the perspective of psychology, including unattained youth, warmth, and innocence of childhood; unattained irritation, lovely vent of negative emotions, and unattained loneliness; and the emotional comfort of interpersonal interaction [16].

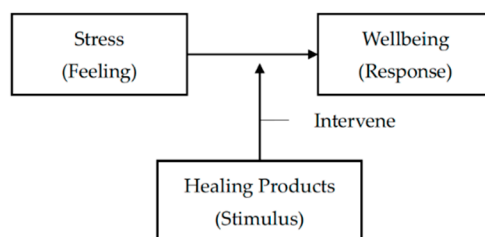


Figure 1. Healing products intervene in the link between feeling and response.

Research related to healing products has indicated that consumers of different groups have different emotional needs and preferences. Regardless of the appearance or function of the commodities, the main purpose of healing products is to make up for the deficiency of inner emotions, create psychological relaxation and happiness, relieve emotional pressure, and further provide physical relaxation and relaxing effects [17]. Considering the inner needs of consumers, we believe that the business opportunities of healing products will continue to expand, and we hope that they can be used as the core reference index in the process of globalization in the future, thus becoming the starting point for the inner needs of people for healing products.

2.3. Lifestyle

The overall picture of consumers' daily lifestyles can be widely understood via "lifestyle studies"; then, consumers can be divided into different groups according to their lifestyle attributes, so that products can be developed and designed for unique markets and consumers that truly meet consumers' life needs [18]. Lazer [18] proposed that lifestyle is a systematic concept that includes the life characteristics of a particular society or a certain group, and the dynamic life mode is enough to display the different characteristics between that society or the group and other societies or groups. People come from different cultures, social classes, and working environments, thus leading to different lifestyles and different connections with products [19]. In other words, people of different lifestyles will have different attitudes toward products, and people may have different lifestyles out of different environments. Experts and scholars hold that from the research of consumers' lifestyles, they may effectively know about the values and attitudes of consumers, analyze the differences of different consumption groups, and further master the real preferences and demands of consumers.

There is no way to measure lifestyle with just operational variables, and thus, the variables of AIO (activities, interests, opinions) are widely used. In extracting lifestyle dimensions, the AIO scale is mostly used as the basis for measuring lifestyle. Plummer [20] proposed four dimensions—activities, interests, opinions, and demographics—which were used as the basis for classifying consumers; each dimension contains nine sub-dimensions, for a total of 36 sub-dimensions.

According to the statistical results of the questionnaire survey of the lifestyle scale, factor analysis was used as a tool to simplify the measurement index of lifestyle variables, and the potential factor characteristics of singleness groups were extracted. Then, cluster analysis was used to divide the samples into several types of lifestyle market groups, and the groups were named according to their factor characteristics after comparing with the influence degree of several factors, as obtained by factor analysis. Considering the differences in their lifestyles, different consumer groups were distinguished to cater to market diversification orientation and achieve the benefit of "market segmentation" [21]. Finally, the use needs and preferences of various groups were further analyzed, compared, and discussed. Therefore, this study referred to the AIO scale structure to measure the lifestyle differences of single office workers and their preferences for healing products. Reynolds and Darden noted that generalized lifestyle research is more advantageous in terms of cost consideration and flexibility of application [22]. This research chose to measure according to generalized lifestyle, in order to understand the different variable factors of single groups through a lifestyle survey and concluded the demand structure of different groups after analysis.

2.4. Preference

Preference, as known in related theories, is an attitude that reflects the degree of preference through the behavior of choice [23,24]. Therefore, this study defines preference as choosing one's own favorite way as much as possible to meet one's needs, as limited by external irresistible factors.

Individual preferences or selection modes can be broadly divided into two categories: revealed preference approach and stated preference approach [25]. The stated preference model was first applied in the marketing domain in 1970. It is mainly used to predict consumer preferences and needs and is also known as conjoint analysis. It is defined as respondents' expression of their preference for certain products or services, as individuals simultaneously face products and services with many different attributes and characteristics. Researchers' decomposition or estimation of their preference structure is helpful for understanding the relative importance perceived by users for each attribute of products or services [16]. Preference measurement can be summarized into five methods, in which the ranking method, comment scale method, and first preference method are the three methods that are commonly used. Through comparing the advantages and disadvantages of the revealed preference approach and stated preference approach, comparing the applicability of the five measurement methods and results, and considering that the purpose of this study is to understand and predict the preferences of single office workers for a number of healing products with different attributes and characteristics, we decided to use the ranking method of narrative preference to show the order of preference, so as to understand the preference degree of the subjects.

Through the above-mentioned relevant documents, we know that most of the research scope of healing products is discussed in a wide range of ways, and there is no research and analysis on the preferences of specific groups. The purpose of the lifestyle survey is to systematically subdivide the characteristics of clusters within a group and understand the needs and preferences according to the characteristics. In the current research literature, there is no research on the preference of the healing products of single office workers. Therefore, this study used the lifestyle of a specific group to explore the relationship with commodity preference, in an effort to understand the preference factors of this group for healing products according to the relationship between the lifestyle of these single office workers and healing products.

3. Research Method

3.1. Research Object



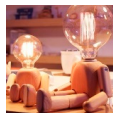



This study is based on primary research, and the targets are unmarried and employed groups of people between 21–34 years old in western Taiwan.

3.2. Sample

The design of healing products is the research scope of this study. The samples of this study were collected and consolidated in large quantities from the "popular" healing products currently on the market, and then they were screened, as shown in Table 2. Commodities with the same shape, presented in a systematic manner, and only with different colors or slight differences were excluded. Screening was conducted according to the definition of the appearance, utility, and psychology of the healing products by Lan [26], along with the definition of psychological factors at the healing emotional level of Fang [16], and those conforming to the two healing characteristics were defined as healing products. Finally, through the predictive questionnaire, 12 pieces of healing products were screened, and the samples of the top six healing products were retained as the samples for the formal questionnaire of this study. According to the classification of product functional attributes, the desktop healing products of this study were divided into six categories: cultivation decoration type, utility convenience type, bionic type, touch vent type, association and pressure relief type, and decoration collection type. The number and arrangement of the picture cards were used as the samples

of the formal questionnaire, so that the subjects could more easily understand and recognize the healing products.

Table 2. Sample of desktop healing products.

Sample Name	No. 1 Herb Fish	No. 2 Knight Penholder	No. 3 Tree Lamp	No. 4 Rubber Toy	No. 5 Leaf Pen	No. 6 Bear Tea Canister
Healing Characteristics	Ease work spirit and relieve loneliness	Ease tense mood in work and relieve loneliness	Lovely appearance, warm feeling, and loneliness relief	Funny appearance and venting tense mood at work	Cute appearance and boosting work spirit	Lovely appearance, warm feeling, and loneliness relief
Functional Attribute	Cultivation decoration type	Association and pressure relief type	Utility and convenience type	Touch vent type	Bionic type	Decoration collection type
Sample Pattern						

3.3. Procedure

According to the goal of establishing the subject direction under the infrastructure, and after collecting relevant research documents, in the first stage, the current situation of the healing products available on the market were understood. The popular desktop healing product categories were discussed according to the current situation and documents, the samples and preference items of six desktop healing products were established, and then, the prediction questionnaire was tested after being revised by experts, which served as a reference for revising the subsequent formal questionnaire.

In the second stage, the formal questionnaire was divided into three parts. The first part was a demographic survey, which investigated the basic personal data of this group. The second part investigated the lifestyle of single office workers. Through the literature of lifestyle scholars, the important dimensions and items of lifestyle were compiled. After the prototype of the scale was completed, the content of the items was checked to determine if it was clear. Then, the reliability and validity of each item were further evaluated as the basis for revising the items, and the formal lifestyle scale was established. Through this scale, the lifestyles of single office workers can be divided into groups, which can be analyzed in accordance with the research results in the second half. The third part sorted out the samples of the questionnaire, as well as the healing effect preference items according to relevant literature and market research, in order to understand the preference and feeling of single office workers for desktop healing products.

The third stage was research and analysis. SPSS statistics software ver. 23 (IBM, Armonk, NY, USA) was used to analyze the survey results. Descriptive statistics were used to understand the distribution of the background data of the subjects. Then, factor analysis was used to classify specific homographs, and cluster analysis was used to further understand the similar types in different clusters of single office workers, conduct inductive analysis, and named the clusters. Finally, single factor variance analysis was used to verify the preference factors for the healing products of different clusters among the single office workers.

3.4. Questionnaire Design

The questionnaire of this study consists of three parts: personal basic information, lifestyle scale, and healing preference. The following are the questions contained in each part, as well as the corresponding categories, measurement scales, and contents of each variable.

1. Part 1 included basic personal information, and there are four factors: gender, education level, place of residence, and whether there are any design-related backgrounds.

2. Part 2 presented the lifestyle scale. The AIO scale of activities, interests, and opinions, as proposed by Plummer [20] for lifestyle dimensions, was adopted as the tool for developing the questionnaire dimensions and contents to design the lifestyle questionnaire items to understand the lifestyle of the respondents. With reference to relevant research by domestic and foreign scholars, the description of dimensions and the features of lifestyles were compiled, the contents of the lifestyle questionnaires were preliminarily drafted, and then, they were screened and adapted to obtain questions suitable for the lifestyles of single office workers. The four sub-dimensions of “hobbies”, “social contact”, “purchase”, and “work” were selected for the activity category, the three sub-dimensions of “recreation”, “popular”, and “media” were selected for the interest category, and the two sub-dimensions of “ego” and “economy” were selected for the opinion category. The questions of the lifestyle questionnaire were designed with these dimensions to develop the lifestyle questionnaire with a total of 22 questions. To understand the degree of support from the respondents for the lifestyle questions, a five-point Likert scaling was used to measure the lifestyle questionnaire.
3. Part 3 inquired about the respondents’ preference for the selection of healing products. First, six samples of healing products were selected from the hot-selling healing products presently available on the market, and the respondents’ perceptions of these products was assessed. Since there is no quantitative research on the topic of healing products in the current relevant research on healing products, meaning that most of the studies are qualitative, there is no questionnaire of this type to provide reference for this study. Therefore, the content of this study refers to the psychological effect, appearance, and function of the healing literature theory to formulate the questionnaire items at this stage. The subjects’ first intuition and subjective impression were used to answer the questions. Likert scaling was adopted as the scale. There were six samples, with 15 questions for each sample. Finally, the samples were sorted according to the degree of preference.

3.5. Measure

The research questionnaires were distributed in the forms of network questionnaires and physical questionnaires for data collection. As there were so many respondents for this study, and they were distributed in various areas in the north, central, and south of Taiwan, the network questionnaires were sent as electronic documents to eligible respondents through network mailboxes, communication software, etc. to speed up questionnaire recovery. In order to understand the preference of this group for healing products, and for the sake of caution, the questionnaire survey was given to respondents who were single office workers in western Taiwan. It was expected that a total of 230 questionnaires would be distributed.

4. Process and Result

Based on the research purpose and research framework, and according to the documents of the first phase of this research, this study carried out the formulation and revision of the follow-up formal questionnaire in order to integrate the correlation between the lifestyle of single office workers and their preference for healing products. The study finally summarized the preference factors of single office workers in each cluster for healing products for the reference of future design in related domains.

4.1. Descriptive Analysis of Demographic Variables

During the period from 5 November 2018 to 17 November 2018, 245 questionnaires were sent out. After deducting 16 invalid questionnaires, 229 valid questionnaires were collected. The Cronbach’s alpha value of the questionnaire was 0.932 [27].

This study includes the subjects’ four personal data items: gender, education level, residence, and design-related background. Detailed analysis of the data and descriptions are as follows in Table 3.

Table 3. Demographic variables.

Categories	Items	Times	Percentage
Gender	Female	158	69%
	Male	71	34.4%
Education	Senior high schools (occupations)	7	3.1%
	Universities	148	64.6%
	Masters	72	31.4%
	Doctors	2	0.9%
Residence	The northern city	73	31.9%
	The northern suburbs	36	15.7%
	The central city	60	26.2%
	The central suburbs	33	14.4%
	The southern city	15	6.6%
	The southern suburbs	12	5.2%
Design Background	With design background	118	51.5%
	Without design background	119	48.5%

4.2. Analysis of Lifestyle Types of Single Office Workers

The purpose of the pre-test before the investigation was to test the reliability standard of the questionnaire. As the pre-test lifestyle dimensions were not reliable enough, and similar topics could not reach the vocabulary of different words, the original 38 questions were revised and reduced to 22 lifestyle questions for the formal questionnaire according to expert advice. The survey contents were divided into A: activities (10 items), I: interests (six items), and O: opinions (six items). The lifestyle variables assumed in this study included gender, education level, place of residence, design-related background, and AIO lifestyle, and whether or not they affect the preference and difference of single office workers for healing products, and thus whether or not they affect design.

4.2.1. Reliability and Validity of Single Office Workers and Factor Analysis

Before factor analysis, the applicability of the lifestyle scale for factor analysis was determined, and the KMO (Kaiser–Meyer–Olkin) sampling suitability test and Bartlett’s Test were carried out. The measured KMO value of the lifestyle scale was 0.814, indicating that the KMO value was good and suitable for subsequent factor analysis. The significance of Bartlett’s spherical test was 0.000 and was suitable for factor analysis [28].

According to factor analysis after suitability verification, the data were analyzed by principal component analysis (PCA) to collect items to form the factors. When the eigenvalue was greater than one, six factor dimensions were extracted from the analysis results, and the eigenvalues of these six factor dimensions after rotation axis were respectively 2.829, 2.540, 2.108, 1.776, 1.636, and 1.617, which are all greater than one. Moreover, the explanatory variances of the six factors dimensions were 13.473%, 12.096%, 10.040%, 9.456%, 7.790%, and 7.698%, respectively. The total explanatory variance was 60.553%. A value greater than 60% indicated that the construction validity of the six factors extracted was good, as shown in Table 4.

Table 4. The total variance of the explained.

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	2.829	13.473	13.47
2	2.540	12.096	25.569
3	2.108	10.040	35.609
4	1.776	9.456	45.065
5	1.636	7.790	52.855
6	1.617	7.698	60.553

Through principal component analysis and varimax (maximum variation method) as the rotation axis of values, the number of variables can be reduced to facilitate determination and interpretation, as shown in Table 5. The analysis result was to extract factors with eigenvalues greater than one and to condense the 22 lifestyle items into six factors, thus contributing to the high correlation between each dimension and its variables. Finally, the reliability of each factor dimension was tested by reliability analysis. After testing, the reliability of each classification dimension was obtained. The Cronbach's α value of each factor dimension was 0.719, 0.810, 0.758, 0.813, 0.701, and 0.725, respectively, which had certain reliability, as shown in Table 5.

Table 5. Table of factor loadings of lifestyle.

Factor	Name	Contents	Factors Loadings	α
Factor 1	Active Social Contact and Attempts	A4. I often meet and chat with my friends.	0.777	0.719
		A3. I usually do some outdoor activities.	0.730	
		A5. I am active during social activities.	0.726	
		O20. I like to try some new things.	0.549	
		A9. I always try to look for new ways to solve problems at work.	0.456	
Factor 2	Taste and Aesthetic Life	A1. I like to decorate my home.	0.812	0.810
		A2. I like to pay attention to things with beauty.	0.703	
		O18. I am a person who values quality of life.	0.578	
		A10. I like to do creative work.	0.482	
		I16. I often pay attention to magazines related to design.	0.473	
Factor 3	Confident, Sensitive, and Fashionable	A7. When I shop, I value the design of the item over the price.	0.457	0.758
		I14. I have a unique set of ideas about fashion.	0.790	
		I13. I am sensitive to popular information.	0.590	
Factor 4	Self-Motivation and Impulsiveness	O19. I have always been decisive in doing things.	0.546	0.813
		O17. I often impulsively buy goods that will make me feel better.	0.745	
		A8. I often buy more things than I originally expected to buy.	0.733	
Factor 5	Careful and Strict Budget	I11. I often go shopping.	0.629	0.701
		O22. I will plan a monthly spending budget.	0.768	
Factor 6	Practical, Scientific, and Leisure	A6. I will shop around before buying something.	0.535	0.752
		I15. I often search for information through the Internet.	0.720	
		O21. Economic stability is important to me.	0.669	
		I12. It is my main entertainment to go online or watch TV.	0.653	

According to Tables 5 and 6, factors were obtained from the principal component analysis after rotation axis. The six factors are described below and named according to the meaning of various items. Factor 1 includes five items named "Active Social Contact and Attempts"; Factor 2 contains six questions named "Taste and Aesthetic Life"; Factor 3 contains three questions named "Confident, Sensitive, and Fashionable"; Factor 4 contains three questions named "Self-Motivation and Impulsiveness"; Factor 5 includes two questions named "Careful and Strict Budget"; Factor 6 contains three questions named "Practical, Scientific, and Leisure".

4.2.2. Cluster Analysis of Single Office Workers Lifestyle

Cluster analysis is a multivariable analysis program. Its purpose is to divide things into several clusters according to their characteristics, so that things in the same cluster have a high degree of homogeneity, while things in different clusters have a high degree of heterogeneity.

In this paper, "K-Means cluster analysis" was mainly used for clustering [29], and 229 samples were taken as the total sample for cluster analysis. After the analysis of lifestyle factors, three types of

lifestyle clusters were separated. From Table 6, it can be seen that the cluster scores of the three groups among the six lifestyle factors were analyzed by ANOVA to explore whether there were differences between each group and their lifestyle factors, and the significance can be seen from the analysis results.

Table 6. The analysis table of the single office worker lifestyle cluster.

Factors	Cluster 1	Cluster 2	Cluster 3	F Value	p Value	< α	Scheffe
Active Social Contact and Attempts	0.10424	−0.02833	−0.09095	0.764	0.467		
Taste for Aesthetic Life	−0.40905	−0.24270	0.74614	37.867	0.000	*	C3 > C2 C3 > C1
Confident, Sensitive, and Fashionable	0.29744	−0.42015	0.11374	11.918	0.000	*	C1 > C2
Self-Motivation and Impulsiveness	0.05915	0.28457	−0.38231	8.962	0.000	*	C2 > C3
Careful and Strict Budget	−0.58480	0.90585	−0.31138	85.207	0.000	*	C2 > C3 C2 > C1
Practical, Scientific, and Leisure	−0.70310	0.15681	0.65114	52.270	0.000	*	C3 > C1
Number	82	77	70				
Percentage	35.80%	33.63%	30.57%				
Cluster Name	Confident, Fashionable, and Trendy Group	Impulsive and Rational Group	Enjoying Science and Technology Group				

Note: * attains significance level; p value < 0.05 refers to in conformity with significance.

One-way ANOVA was used to investigate whether there are differences between various groups and their lifestyle factors. From the analysis results, it can be seen that among the factors of “Active Social Contact and Attempts”, the p value was 0.467, which is not less than 0.05 and did not reach a significant level, indicating that there was no significant difference; thus, this factor was deleted from the cluster. The other five factors had significant differences in the average coefficient.

The higher the positive coefficient, the greater the importance that was attached to the factor. The higher the negative coefficient, the less the importance that was attached to this factor. The factors were summarized into three groups according to the significant characteristics of the lifestyle factors. This paper names three clusters, as shown in Table 6.

After learning the characteristics of relevant clusters according to lifestyle analysis, we refer to the demographic variable analysis to understand the detailed characteristics of each group. We can see the distribution of population variables in different clusters, which facilitates future reference for the design of healing products. The factors of each clusters include gender, education level, place of residence, and design-related background. The analysis results are summarized and explained in detail below.

Cluster 1: Confident, Fashionable, and Trendy Group

This group’s sensitivity to fashion is incomparable to other groups, and they are at the forefront of detecting the latest fashions. In addition to paying close attention to fashion information, they have their own set of thoughts regarding fashion trends, and are very confident in their opinions; therefore, they are always very decisive in handling matters. On the whole, they are a fashionable and trendy group. There are 26 males and 56 females in this group, totaling 82 and accounting for 35.8% of the total group. They are the group with the largest number of people among the three groups. Most of them have a university-level education and a small number have only a high school (vocational school) education. Most of them live in the central and northern urban regions, and most do not have design-related backgrounds.

Cluster 2: Impulsive and Rational Group

This group is more rigorous and rational than other groups and regularly plans their budget for each month; therefore, when shopping, they will collect relevant information to understand the value and reasonable price of goods before making a decision. However, when feeling depressed, they will occasionally impulse-buy goods that make them feel better. While they usually follow a budget, they will occasionally indulge themselves; therefore, they are an impulsive but rational group. This group consists of 18 males and 59 females, with women accounting for the majority. The majority of them graduated from university with a small proportion of them holding a master's degree, and they mainly live in the central and northern regions of Taiwan, with the northern urban areas accounting for the majority. Almost half of the total number of people in this group have design backgrounds.

Cluster 3: Enjoying Science and Technology Group

This group has very high tastes in life, meaning that they emphasize a high-quality aesthetic lifestyle and are very particular about the details of life. This group has the psychology of paying more attention to the design of goods than the price. As ordinary leisure activities are more focused on static science and technological entertainment, this group is quite dependent on network science and technology; therefore, this group has a taste for science and technological life and knows how to enjoy it. There are 27 males and 43 females in this group. Compared with other groups, the proportion of men in this group is higher. They mainly have an educational level of undergraduate or master's degree with a few doctorates. They mainly live in central urban areas and have design-related backgrounds.

4.3. Investigation and Analysis of Single Office Workers' Preference for Healing Products

In the third part of this questionnaire, the topic was "Healing Preference". First, six samples of the best-selling healing products available on the market were selected, and the subjects were asked how they felt about the products. As there is no quantitative research on the topic of healing products in current research, meaning that most of the studies have been qualitative, there is no questionnaire of this type for reference by this study. Therefore, the content of this article refers to the psychological effect, appearance, and function in the healing style literature theory to draw up the questionnaire items at this stage. The subjects' first intuition and subjective impression were used to answer the questions. The study adopted the Likert scale, and the questionnaire consisted of six samples, each containing 15 questions. Finally, the samples were sorted according to their preferences. The analysis values and descriptions of the items are below.

4.3.1. Analysis of the Preferences of Single Office Workers for Healing Products

(1) Descriptive Statistics of Sample Preferences of Single Office Workers

A total of 229 subjects in this paper ranked their preference degree for six healing products, and the ranking of the descriptive statistics are shown in Table 7.

Table 7. The times and percentage analysis of preference on the healing style samples.

Items	L1	L2	L3	L4	L5	L6
Sample 1	70 30.6%	39 17.0%	33 14.4%	40 17.5%	25 10.9%	27 11.8%
Sample 2	16 7.0%	18 7.9%	34 14.8%	34 14.8%	55 24.0%	71 31.0%
Sample 3	53 23.1%	64 27.9%	42 18.3%	42 18.3%	16 7.0%	11 4.8%
Sample 4	36 15.7%	17 7.4%	33 14.4%	23 10.0%	48 21.0%	69 30.1%
Sample 5	26 11.4%	36 15.7%	36 15.7%	46 20.1%	52 22.7%	35 15.3%
Sample 6	28 12.2%	55 24.0%	51 22.3%	44 19.2%	33 14.4%	16 7.0%
Sum	229 100%					
Preference Sequence	Sample 1	Sample 3	Sample 6	Sample 5	Sample 2	Sample 4

Note: L1 is the first favorite, and so on to L6.

(2) Statistical Analysis of Healing Preference Average Value

This section mainly used six samples of healing products to answer the 15 items regarding healing preferences. Through the Likert scale, the subjects were asked to check the degree of importance that they attached to the samples, in order to understand their preference for healing products.

Judging from the average value, “being fun” in the six samples was valued by the subjects, indicating that all six samples had interesting components. Meanwhile, the average value of “lonelier in heart” in the six samples was the lowest, which indicates that all six samples have certain healing components. In most samples, “impressive”, “charming”, and “changing negative emotions” were also valued by the subjects; thus, it can be inferred that these six pieces of healing products must possess the necessary feeling of healing, meaning they are all interesting and impressive, as well as having lovely and charming appearances and the function of transforming negative emotions.

4.3.2. Factor Analysis of Healing Preference for Single Office Workers

(1) Six Samples’ Healing Degree Factor Analysis and Reliability Verification

The reliability of the questionnaire regarding the degree of healing preference of all the samples in this study was greater than 0.7 and the total reliability was 0.955, indicating reliability in the scales of this study.

In this part, the questionnaire survey was used to determine the degree to which the subjects attached greater importance to the healing products. Principal component analysis was used to extract the common factors in this stage of analysis. The KMO value of the healing degree of the six samples was 0.858, and the significance of Bartlett’s test was 0.000, thus conforming to the conditions of factor analysis.

After verification, the common factors were extracted through principal component analysis in factor analysis. The value after the rotation axis was selected as the total variance, and eigenvalues summing up greater than one were taken as the screening criterion. The total explanatory variance was 65.817%, and the lowest eigenvalue was 1.617, thus meeting the screening criteria that the eigenvalue exceeds one. Finally, this study extracted a total of 12 component factors.

Based on the factor load significance criterion, as proposed by Hair et al. (1998), the acceptable range of a factor load was within 0.4. According to this criterion, the items of the next six samples were taken for the axis rotation, and the component matrix within each factor was obtained. Table 8 shows the ranking according to factor load.

Table 8. Table of factor loadings of the healing product.

Factor	Name	Number	Contents	Factors Loadings
Factor 1	Relieving Pressure, Fun, and Refreshing	S6_9	This product has the effect of relieving pressure.	0.841
		S6_11	This product impresses me.	0.830
		S6_6	This product gives me a feeling of relaxation.	0.766
		S6_2	This product is very interesting.	0.763
		S6_10	This product inspires my work spirit.	0.761
		S6_15	Using this product makes me more energetic.	0.760
		S6_12	This product is cute and charming.	0.754
		S6_8	This product gives me a feeling of companionship.	0.731
		S6_13	This product has a warm color that makes me feel warm.	0.726
		S6_1	This product can convert my negative emotions.	0.698
		S6_4	This product can fill my empty mind.	0.689
		S6_14	This product has a soft texture that makes me feel comfortable.	0.524
		S6_7	This product makes me recall the feeling of childhood.	0.499
Factor 2	Conversion, Venting, and Relaxation	S4_1	This product can convert my negative emotions.	0.876
		S4_6	This product makes me feel relaxed.	0.854
		S4_9	This product has the effect of relieving pressure.	0.842
		S4_15	Using this product makes me more energetic.	0.840
		S4_10	This product inspires my work spirit.	0.791
		S4_14	This product has a soft texture that makes me feel comfortable.	0.788
		S4_12	This product is cute and charming.	0.760
		S4_2	This product is very interesting.	0.736
		S4_4	This product can fill my empty mind.	0.689
		S4_8	This product gives me a feeling of companionship.	0.624
		S4_3	This product can only let me escape from the pain temporarily.	0.614
		S4_11	This product impresses me.	0.610
Factor 3	Vigorous and Energetic	S5_15	Using this product makes me more energetic.	0.835
		S5_10	This product inspires my work spirit.	0.800
		S5_9	This product has the effect of relieving pressure.	0.772
		S5_1	This product can convert my negative emotions.	0.761
		S5_11	This product impresses me.	0.751
		S5_6	This product makes me feel relaxed.	0.729
		S5_12	This product is cute and charming.	0.722
		S5_2	This product is very interesting.	0.701
		S5_14	This product has a soft texture that makes me feel comfortable.	0.633
		S5_4	This product can fill my empty mind.	0.630
		S5_8	This product gives me a feeling of companionship.	0.613
		S5_13	This product has a warm color that makes me feel warm.	0.602
Factor 4	Relaxing and Filling Up Vitality	S2_9	This product has the effect of relieving pressure.	0.840
		S2_15	Using this product makes me more energetic.	0.801
		S2_6	This product gives me a feeling of relaxation.	0.798
		S2_10	This product inspires my work spirit.	0.783
		S2_1	This product can convert my negative emotions.	0.779
		S2_8	This product gives me a feeling of companionship..	0.712
		S2_2	This product is very interesting.	0.701
		S2_11	This product impresses me.	0.690
		S2_4	This product can fill my empty mind.	0.677
		S2_12	This product is cute and charming.	0.636
		S2_7	This product makes me recall the feeling of childhood.	0.493
Factor 5	Charming Impression	S3_11	This product impresses me.	0.725
		S3_12	This product is cute and charming.	0.722
		S3_9	This product has the effect of relieving pressure.	0.703
		S3_15	Using this product makes me more energetic.	0.700
		S3_6	This product gives me a feeling of relaxation.	0.693
		S3_1	This product can convert my negative emotions.	0.675
		S3_10	This product inspires my work spirit.	0.675
		S3_4	This product can fill my empty mind.	0.665
		S3_8	This product gives me a feeling of companionship.	0.656
		S3_2	This product is very interesting.	0.627
		S3_13	This product has a warm color that makes me feel warm.	0.574
		S3_7	This product makes me recall the feeling of childhood.	0.513
Factor 6	Fun to Accompany and Relieve Boredom	S1_1	This product can convert my negative emotions.	0.791
		S1_6	This product gives me a feeling of relaxation.	0.760
		S1_9	This product has the effect of relieving pressure.	0.752
		S1_15	Using this product makes me more energetic.	0.736
		S1_2	This product is very interesting.	0.721
		S1_10	This product inspires my work spirit.	0.700
		S1_8	This product gives me a feeling of companionship.	0.607
		S1_12	This product is cute and charming.	0.602
		S1_11	This product impresses me.	0.592
		S1_4	This product can fill my empty mind.	0.577
		S1_13	This product has a warm color that makes me feel warm.	0.545
		S1_14	This product has a soft texture that makes me feel comfortable.	0.523

Table 8. Cont.

Factor	Name	Number	Contents	Factors Loadings
Factor 7	Alone and Lonely	S6_5	This product makes me feel more lonely.	0.815
		S5_5	This product makes me feel more lonely.	0.715
		S3_5	This product makes me feel more lonely.	0.708
		S2_5	This product makes me feel more lonely.	0.670
		S4_5	This product makes me feel more lonely.	0.663
		S1_5	This product makes me feel more lonely.	0.596
Factor 8	Immersion in Comfort and Warmth	S2_14	This product has a soft texture that makes me feel comfortable.	0.680
		S2_13	This product has a warm color that makes me feel warm.	0.665
		S4_13	This product has a warm color that makes me feel warm.	0.609
		S3_14	This product has a soft texture that makes me feel comfortable.	0.683
Factor 9	Innocent Childhood Memories	S5_7	This product makes me recall the feeling of childhood.	0.566
		S4_7	This product makes me recall the feeling of childhood.	0.555
		S1_7	This product makes me recall the feeling of childhood.	0.545
Factor 10	Short Escape from Reality	S3_3	This product can only let me escape from the pain temporarily.	0.721
		S1_3	This product can only let me escape from the pain temporarily.	0.579
		S6_3	This product can only let me escape from the pain temporarily.	0.545
		S5_3	This product can only let me escape from the pain temporarily.	0.518
		S2_3	This product can only let me escape from the pain temporarily.	0.550

According to Table 8, there are 10 factors that can be obtained from principal component analysis after the axis rotation. According to the meanings of the included items, the factors were named as “relieving pressure, fun, and refreshing”, “conversion, venting, and relaxation”, “vigorous and energetic”, “relaxing and filling up vitality”, “charming impression”, “fun to accompany and relieve boredom”, “alone and lonely”, “immersion in comfort and warmth”, “innocent childhood memories”, and “short escape from reality”.

(2) Analysis of the Relationship between Six Healing Product Samples and 10 Factors

From the above factor analysis results from Table 8, it is known that 90 items of the six samples were rotated into 10 factors. Each factor was named according to the factor load of each item. The sample attributes and factor relationships of the six healing products are shown as below.

- Sample 1: The “Herb & Fish” item belongs to the cultivation and decoration type of desktop healing products, and has the factors of “fun to accompany and relieve boredom” and “short escape from reality”, as well as some factors of “innocent childhood memories”, which indicate that it not only can create a desktop healing ecosystem, but also make people feel interested, relieve their boredom, and feel accompanied. Moreover, when people face negative emotions, it is helpful to escape from unhappy emotions for a short time and bring them back to childhood innocence to achieve healing effects.
- Sample 2: The “Knight Penholder” belongs to desktop healing products that are known for their ability to relieve pressure and has the factors of “relaxing and filling up vitality” and “immersion in comfort and warmth”. This indicates that although the Knight Penholder does not have strong functionality, the gesture of putting the pen in both hands gives people a feeling of relaxation, which can supplement vitality at work, make them immersed in a comfortable atmosphere, and make them feel warm.
- Sample 3: The “Tree Lamp” is a utility convenience type of a desktop healing product. It has the factors of “charming impression”, “short escape from reality”, and “immersion in comfort and warmth”; however, it also brings the negative factor of “alone and lonely”. This indicates that the Tree lamp is fascinating and impressive and can temporarily let people escape from the pressure of reality. Moreover, people enjoy the atmosphere created by the humanoid wood texture and its slight light, which allows people to immerse themselves in it and feel a little comfort and warmth under heavy pressure. However, it also induces the feeling of having to face loneliness alone.
- Sample 4: The “Rubber Toy” belongs to the touch/vent type of desktop healing products, which has the factors of “conversion, venting, and relaxation”, “innocent childhood memories”, and “immersion in comfort and warmth”. This indicates that the Rubber Toy has the function of transforming negative emotions, relieving unpleasant emotions through hand-squeeze venting,

and reminding people of their childhood memories of playing with toys. Therefore, people are immersed in a comfortable atmosphere and enjoy the pleasure of venting.

- Sample 5: The “Leaf Pen” belongs to the bionic type of desktop healing products, which has the factors of “vigorous and energetic”, “innocent childhood memories”, and “alone and lonely”. This indicates that the Leaf Pen can inspire people’s working spirit through its bionic appearance and functional use, making people feel energetic. It also reminds people that when they were young, they liked concrete toys, and so they can remember the pure pleasures and memories of childhood; however, it also reminds people of the reality of loneliness.
- Sample 6: The “Bear Tea Canister” belongs to the decoration collection type of desktop healing products, which has the factors of “relieving pressure, fun, and refreshing”, “alone and lonely”, and “short escape from reality”. This indicates that the appearance and usage of the Bear Tea Canister give people a feeling of relieving pressure and being refreshing. While the tea making method makes people playful, it also easily gives them a feeling of loneliness by making tea alone without any company; thus, it only helps people escape from reality for a short time and enjoy a short break.

(3) Analysis of Demographic Variables of Single Office Workers on the Preference Factors of Healing Products

- The opinions of single office workers of different genders were analyzed regarding their preference for healing products. Table 9 shows that there were significant differences in the genders’ opinions and preferences regarding the factors of “relaxing and filling up vitality” and “immersion in comfort and warmth” for the healing products investigated in this paper. The negative values in “relaxing and filling up vitality” indicate that females do not care much for this factor, while males’ positive values indicate that they prefer it. Regarding “immersion in comfort and warmth”, females showed positive values, indicating their preference, while males showed negative values, indicating less preference or attention. Therefore, males are more likely than females to prefer supplementing vitality and relaxing, which means that we can learn more about male users’ needs by inspiring their spirits and helping them relax. As females pay greater attention to the comfortable and warm atmosphere, we should start from the construction of warm atmospheres. The other factors have no significant difference.
- The views of single office workers with different educational levels were also analyzed regarding their preference for healing products. Table 10 shows that the factor of “fun to accompany and relieve boredom” of healing products was significantly different in the opinions of subjects with different education levels, while the remaining factors were not different. The factor of “fun to accompany and relieve boredom” showed a positive value for the educational level of high school, master, and doctor degrees; whereby the value of high school degree holders was higher than both doctor and master degree holders, indicating that they pay more attention to and value fun companionship to relieve boredom, while the educational level of university showed negative values, indicating that they pay less attention to the factor of fun companionship to relieve boredom.
- The views of single office workers with different places of residence were also analyzed regarding their preference for healing products. There was no significant difference in the opinions of single office workers that had different places of residence regarding their preference for healing products, indicating that there is no obvious difference in preference or emphasis on the healing products in relation to different places of residence.
- The views and preferences of single office workers for healing products were also analyzed regarding whether they design-related background or not. Table 11 shows there were significant differences between the “vigorous and energetic” and “alone and lonely” categories in the opinions of single office workers regarding their preference for healing products that corresponded with whether they had a design-related background or not, while the remaining factors were not

different. Among them, the subjects who do not have a design background showed a positive value for the “vigorous and energetic” factor, indicating that there was more concern and importance attached to it; while those with a design background paid less attention to it. Those subjects without a design background showed a positive value of “alone and lonely”, indicating that there is more concern and value attached to this factor; while the negative value of those with a design background indicates that they are not very concerned about the factor of “alone and lonely” in their product preference.

Table 9. Table of variance analysis of gender in the healing product preference.

Factor	Male	Female	Levene's Test		< α
	71	157	F Value	p Value	
Relieving Pressure, Fun, and Refreshing	−0.249	0.112	1.251	0.265	
Conversion, Venting, and Relaxation	0.031	−0.014	1.093	0.297	
Vigorous and Energetic	0.091	−0.041	1.044	0.308	
Relaxing and Filling Up Vitality	0.442	−0.200	4.629	0.033	*
Charming Impression	−0.108	0.049	0.149	0.700	
Fun to Accompany and Relieve Boredom	0.086	−0.039	0.237	0.627	
Alone and Lonely	0.180	−0.081	0.931	0.336	
Immersion in Comfort and Warmth	−0.059	0.027	6.398	0.012	*
Innocent Childhood Memories	0.011	−0.005	3.652	0.057	
Short Escape from Reality	−0.178	0.080	1.590	0.209	

Note: * attains significance level; p value < 0.05 refers to in conformity with significance.

Table 10. Table of variance analysis of different education levels in the healing product preference.

Factor	High School	University	Master	Doctor	Levene's Test		< α
	7	147	72	2	F Value	p Value	
Relieving Pressure, Fun, and Refreshing	−0.412	0.038	−0.062	0.892	1.090	0.354	
Conversion, Venting, and Relaxation	0.372	−0.029	0.013	0.390	0.467	0.705	
Vigorous and Energetic	0.002	−0.059	0.115	0.213	0.518	0.671	
Relaxing and Filling Up Vitality	0.240	−0.007	0.002	−0.427	0.256	0.857	
Charming Impression	0.052	0.018	−0.031	−0.364	0.131	0.942	
Fun to Accompany and Relieve Boredom	1.007	−0.057	0.000	0.640	2.868	0.037	*
Alone and Lonely	−0.105	0.061	−0.121	0.281	0.610	0.609	
Immersion in Comfort and Warmth	−0.070	0.106	−0.224	0.519	1.966	0.120	
Innocent Childhood Memories	−0.258	0.136	−0.249	−0.113	2.606	0.053	
Short Escape from Reality	−0.605	0.024	0.030	−0.754	1.289	0.279	

Note: * attains significance level; p value < 0.05 refers to in conformity with significance.

Table 11. Variance analysis of the testee with design-related background or not in the healing product preference.

Factor	Yes	No	Levene's Test		< α
	117	111	F Value	p Value	
Relieving Pressure, Fun, and Refreshing	−0.055	0.058	0.346	0.557	
Conversion, Venting, and Relaxation	0.135	−0.143	0.019	0.890	
Vigorous and Energetic	−0.030	0.032	6.047	0.015	*
Relaxing and Filling Up Vitality	0.105	−0.110	0.000	0.986	
Charming Impression	0.058	−0.061	0.758	0.385	
Fun to Accompany and Relieve Boredom	−0.141	0.149	0.440	0.508	
Alone and Lonely	−0.079	0.083	3.875	0.048	*
Immersion in Comfort and Warmth	−0.117	0.123	2.844	0.093	
Innocent Childhood Memories	0.056	−0.059	0.083	0.774	

Note: * attains significance level; p value < 0.05 refers to in conformity with significance.

4.4. Analysis of the Difference of the Healing Product Preference on Single Office Workers' Various Lifestyles

In this section, one-way ANOVA determined whether there was a significant difference in the degree of attention paid to each cluster according to the preference factors of healing products in this study, as well as further discussion regarding which group had a relatively significantly higher or lower attention to significant factors. Then, this study deduces the preference factors of each cluster. As shown in Table 12, different groups of single officer workers had significant differences in the factor of “alone and lonely” for the healing products. According to the coefficient judgment, the coefficient of Cluster 2 for the impulsive rational group was positive, indicating that they care more. Group 1, the confident and fashionable group, and Group 3, the Group Enjoying Science and Technology Taste, both had a negative value, which indicates little preference. Thus, it can be inferred that Group 2 had a higher feeling of loneliness than the other two groups, while Group 3 had the lowest feeling of loneliness.

Table 12. Analysis of the preference variation of different lifestyles for the healing factors of the healing products.

Preference Factor	Cluster 1 Confident, Fashionable, and Trendy Group	Cluster 2 Impulsive and Rational Group	Cluster 3 Group Enjoying Science and Technology	Levene's Test		< α
	82	77	69	F Value	p Value	
Relieving Pressure, Fun, and Refreshing	−0.164	0.119	0.062	1.789	0.169	
Conversion, Venting, and Relaxation	−0.046	0.017	0.036	0.139	0.870	
Vigorous and Energetic	0.017	0.085	−0.115	0.748	0.475	
Relaxing and Filling Up Vitality	−0.017	−0.065	0.093	0.468	0.627	
Charming Impression	0.099	−0.077	−0.032	0.661	0.518	
Fun to Accompany and Relieve Boredom	−0.179	0.171	0.021	2.487	0.085	
Alone and Lonely	−0.005	0.222	−0.242	4.026	0.019	*
Immersion in Comfort and Warmth	0.145	−0.074	−0.090	1.355	0.260	
Innocent Childhood Memories	0.116	0.040	−0.183	1.784	0.170	
Short Escape from Reality	−0.108	0.007	0.120	0.976	0.379	

Note: * attains significance level; p value < 0.05 refers to in conformity with significance.

One-way ANOVA was used to determine whether there were significant differences in the preference of lifestyle groups for the samples of healing products and to determine the average number of preference samples of each group for the samples of healing products, as shown in Table 13, for subsequent analysis and explanation.

Table 13. Analysis of the mean and difference of sample preference among single office workers with different lifestyles.



	Cluster 1 Confident, Fashionable, and Trendy Group	Cluster 2 Impulsive and Rational Group	Cluster 3 Group Enjoying Science and Technology	F Value	p Value
Sample 1	3.33(5)	3.52(3)	3.39(3)	2.487	0.085
Sample 2	3.02(6)	3.00(6)	3.05(6)	0.468	0.627
Sample 3	3.65(1)	3.65(2)	3.61(1)	0.661	0.518
Sample 4	3.36(3)	3.41(5)	3.38(4)	0.139	0.870
Sample 5	3.35(4)	3.43(4)	3.29(5)	0.748	0.475
Sample 6	3.51(2)	3.69(1)	3.60(2)	1.789	0.169

Note: The number in brackets is the average number of samples for each ethnic group.

The *p* value of each group was not less than 0.05, which did not reach a significant level, indicating that the six samples showed no significant difference in group preferences.

Through the observations of the average value of the six samples from each group, we know that Cluster 1 and Cluster 3 had the same preference for the samples, with the main preference being Sample 3 and Sample 6; Cluster 2 mainly preferred Sample 6 and Sample 3, and only differed in order via a comparison with the former two groups. Therefore, we can infer that Sample 3 and Sample 6 are the samples that all the groups preferred. Sample 4 ranked in third place for Cluster 1, which is different from Sample 1 of Cluster 2 and Cluster 3, while some groups in Sample 6 did not have any special preference for it. Table 13 shows the preference average of each group and the sample preference analysis after sample difference analysis. According to the healing preference factor analysis shown in Table 14, the degree of sample preference of each cluster can be obtained. Then, the preference factors of each cluster, as well as the sample characteristics of this group preference, can be realized.

Table 14. Sample of preferences for each ethnic group.

	Cluster 1 Confident, Fashionable, and Trendy Group	Cluster 2 Impulsive and Rational Group	Cluster 3 Group Enjoying Science and Technology
Common Preference Sample	<div>   </div>		
	Sample 3	Sample 6	
Factors of Common Preference Sample	Charming, impressive, sultry, and refreshing		
Preference Sample	Sample 5	Sample 1	Sample 4
Preference Factor	Vigorous and Energetic	Fun to Accompany and Relieve Boredom	Conversion, Venting, and Relaxation

5. Discussion

5.1. Discussion of Key Findings and Contribution

The main purpose of this study was to explore the preference factors of single office workers with different lifestyles for healing products; therefore, a questionnaire was constructed through a literature review and expert discussion. The results of the lifestyle characteristics and preference factors for the healing products of different single office workers were obtained through this questionnaire survey, and their differences were compared.

Understanding the definitions and characteristics of single office workers and discussing their lifestyles and preferences for healing products through a literature review made up the theoretical basis of this study. From the definition of lifestyle, as well as the related factors and preferences for healing products, this paper evaluated the contents of a three-level discussion, the theoretical definition, and the research design of healing products by various scholars. Then, it established the preference dimensions of healing products, and corrected them via discussions with experts.

In terms of the various categories of the single office worker, our findings reveal a significant difference in group segments.

- There are significant differences between different genders for the factors of “relaxing and filling up vitality” and “immersion in comfort and warmth”. Men preferred the condition of supplementing vitality and relieving pressure and relaxation more than women. Therefore, more efforts can be made to stimulate the spirit and help the body and mind to relax, in order to deeply understand the needs of male users. Women paid more attention to the comfortable and warm atmosphere; therefore, efforts should be made to create a warm atmosphere.
- There are significant differences between different education levels for the factor of “fun to accompany and relieve boredom”. The subjects with a high-school education level considered this factor most important, followed by master’s degree and doctor’s degree, while subjects with a university-level education paid less attention to the factor of fun to accompany and relieve boredom.
- There was no significant difference between different places of residence in the factor of healing preference, indicating that there is no significant difference in the preference or emphasis of healing products for single office workers living in different areas.
- There was a significant difference in “vigorous and energetic” and “alone and lonely” between subjects with and without a design background. Those subjects without a design-related background valued both “vigorous and energetic” and “alone and lonely”, while those with a design-related background valued neither of these two factors.

Our findings contribute to the debate surrounding identifying different segments of users and usages by providing an understanding of healing factors and preferences for various healing product attributes.

5.2. Design and Social Implications

Our findings reveal a situation regarding how researchers in the field of designing healing products deal with preference. By recognizing that the intervention that healing products provide affects feeling, the study has substantive product design implications. Aspects of “social care and work life”, such as equal rights, care, and provision, are only related to product design success as far as these aspects coincide with an established sustainability strategy. Many of these definitions concur that social sustainability is a quality of a human system based on a series of values or essential ethical principles (e.g., fairness, trust, equity, justice, cooperation, and engagement) that foster lasting conditions for human well-being, particularly for the most vulnerable individuals or groups [30].

The discussion of the characteristics and different healing preference factors for the samples of healing products of different single office workers is as follows.

- Cluster 1, the “Confident, Fashionable, and Trendy Group”, is regarded by others as a fashionable group that is at the top of fashion. Its sensitivity to fashion is incomparable to other groups, it always detects the latest fashion knowledge at the front line, and it emphasizes individual dressing styles. In addition to paying close attention to fashion information, they have their own set of thoughts on fashion trends and are very confident in their own opinions; thus, they have always been very decisive in handling matters. There are 26 males and 56 females, for a total of 82, accounting for 35.8% of the total group. It is the group with the largest number among the three groups; most have a university education, they mainly live in northern and central urban areas, and most do not have design-related backgrounds. The Confident, Fashionable, and Trendy Group prefers Sample 5, the “Leaf Pen”, due to its bionic type of desktop healing with the factors of “vigorous and energetic”, “innocent childhood memories”, and “alone and lonely”. This indicates that the Leaf Pen can stimulate people’s working spirit by imitating the appearance of natural grass with unexpected functional use and can add a little green to the environment. As the color is mainly green, it gives a sense of neutrality and harmony. When people hold it in their hand to write, the elastic silicone material of the grass will shake with any movement, symbolizing the image of the grass standing in nature and making people feel energetic.
- Cluster 2, the “Impulsive and Rational Group”, is more rigorous and rational than the other groups and regularly plans their budget each month. The people in this group meticulously plan the use of money; therefore, when shopping, these people will collect relevant information from all parties to understand the value and reasonable price of goods before making a decision. However, when feeling depressed, they will occasionally impulsively buy goods that make them feel better; therefore, while they usually plan how to spend their money, they occasionally indulge themselves and act a bit impulsively in their rationality. There are 18 males and 59 females in this group; the majority are women, the majority are university graduates, and a small number of them hold master’s degrees. They mainly live in the central and northern regions of Taiwan, and the majority are in the northern urban areas. It did not matter whether they had a design background or not (almost 50% each). The Impulsive and Rational Group preferred Sample 1 “Herb & Fish”, which belongs to the cultivation and decoration type of desktop healing products and has the factors of “fun to accompany and relieve boredom” and “short escape from reality”. This means that besides creating a desktop healing product, the Herb & Fish item has a rounded geometric shape combined with biological cultivation and plant cultivation, making people feel interested and relieving boredom. Moreover, with the main color of white, simple color matching, and the embellishment of nature creatures, when it is placed on a table, it gives people the feeling of being accompanied. When people face negative emotions, it is helpful for them to escape unhappy emotions temporarily and remember childhood innocence so as to achieve the effect of relieving pressure.
- Cluster 3, the “Group Enjoying Science and Technology Taste”, is a group with extremely high lifestyle taste, meaning that its members emphasize a high-quality aesthetic lifestyle. Compared with other groups, they are very particular about the details of life and have the psychology of paying more attention to the design of goods than the price. Its members’ ordinary leisure focus is on static science and technological entertainment; thus, they are quite dependent on network technology. Therefore, the people that make up this group have science and technology lifestyles and know how to enjoy life. There are 27 males and 43 females in this group; thus, the majority are female. Compared with other groups, the proportion of males is also higher. They are mainly undergraduates or graduates, and a few have doctorates. They mainly live in the central urban areas and have design-related backgrounds. The Group Enjoying Science and Technology Taste prefers Sample 4 “Rubber Toy”, which belongs to the touch/vent type of desktop healing products and has the factors of “conversion, venting, and relaxation” and “immersion in comfort and warmth”. This indicates that the Rubber Toy has the function of transforming negative emotions, as this spherical model combines various facial expressions and elastic silicone materials that

can relieve unpleasant emotions through hand-squeeze venting. At the same time, it can help stiffened hands exercise and make people laugh to see the various expressions on the face when it is squeezed. Besides relieving inner pressure, it can also remind people of their childhood memories of playing with toys, and people can immerse themselves in a comfortable atmosphere and enjoy the pleasure of venting.

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