



Comparison of gender differences in young people's blog interface preferences and designs

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ARTICLE INFO

Article history:

Received 3 April 2011

Received in revised form 19 January 2012

Accepted 11 April 2012

Available online 24 April 2012

Keywords:

Blog

Interface design

Gender differences

Multidimensional Scaling (MDS) analysis

PREFMAP

ABSTRACT

Besides usability, visual aesthetics also strongly influence whether users will continue to trust and use a website. This study examined blogs to determine whether a correlation exists between the gender and visual preferences of young people toward blog interfaces. Few research on gender differences in visual preferences for blog interfaces have been published. Therefore the goal of this research is to determine the different design features of blog interfaces preferred by males and females. Using two Multidimensional Scaling (MDS) algorithms, ALSCAL and PREFMAP analysis, the perceptual space of user blog interface preferences was plotted to explore the hidden perceptual configuration of users as well as examine gender related ideal points.

The results showed four typical blog interfaces and three dimensions that affected user preference and the spatial distribution of ideal preference point for each user. Last, gender differences in the blog interface preference of young people were discussed and guidelines were recommended for developers. The results are applicable to blog interface customization in digital device displays.

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1. Introduction

Blogs are a relatively new development in Internet communication platforms. They enable exchange between people and accumulation of information, and are easy to search and use [1,2]. Their content is not limited to text, but may contain images and multimedia content [3]. Nowadays it is simple to own one or more blog spaces for free self-expression, and blogging has become a new mode of social interaction.

Past research have shown gender differences in user preferences, behavior and handling of information [12,25,26]. Although these studies indicated gender differences in visual preference, in reality preference is a complex issue encompassing images, color or layouts and personal interests. Nowadays every blog platform offers bloggers a convenient choice of templates. Empirical studies proposing guidelines for designing new templates or customizing templates systems could help blog platforms attract more users. However, few research have analyzed user preference for blog interfaces; furthermore, the limited selection of layout templates offered by blog platforms are of mixed quality. Therefore the research questions in this study are:

1. What are the types of blog interface and what are the differences among their design features?

2. What design factors determine user perception and preference toward a blog interface?
3. Past research indicated gender differences in webpage preference. Therefore this research examined whether there are gender differences in blog preference, and what design features contribute to these differences.

Multidimensional Scaling (MDS) [8] is a useful method for investigating user perception of webpages because it can determine underlying psychological structures and is visible to an observer. Therefore, this study employed the MDS to (1) compare each type of blog interface and determine the critical dimensions affecting user perception of blog interfaces by examining perceptual space distributions and ideal points; (2) determine any gender differences in blog preferences for design features; and (3) recommend design guidelines for platform developers or bloggers.

2. Literature review

2.1. Studies on blog and webpage preferences

The word 'blog' can either refer to the blog website itself, or, as a verb, describe the act of writing blog posts that may comprise any combination of text, photos, and video clips [9]. Increasingly blog service providers are offering blog platforms that enable users to design their own blogs according to their personal preferences, thereby highlighting the importance of web interface design, and

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consequently the study of Human–Computer Interaction (HCI). Early HCI research on webpage design focused mainly on usability. More recently, user experience has gained importance, and increasing number of research have shown that emotional factors and usability are equally important in webpage design [4,5]. Besides attracting users, aesthetic factors are important in influencing whether users will continue to use a website [6]. Schenkman and Jönsson [31] studied the aesthetics and preferences of webpages. Using Multidimensional Scaling (MDS), a similarity perceptual space was obtained where the two axes represent the overview dimension and the mostly illustrations vs. mostly text dimension, respectively (Fig. 1). In addition, the authors used MDPREF for preferential analysis and obtained a preference perceptual space. In Fig. 2, the two axes represent the beauty dimension and the mostly illustrations vs. mostly text dimension, respectively. Pandir and Knight [10] found that among aesthetic preferences for webpages, pleasure and interestingness are relatively subjective aesthetic evaluations while complexity is an objective, non-aesthetic evaluation. Compared with the study by Schenkman and Jönsson [31], Pandir and Knight [10] distinguished between discussion on objective and subjective evaluation. This study further analyzed the relationship between user perceptions (subjective evaluations) and design features (objective evaluation) in blog interfaces.

2.2. Gender difference in Internet use

Past research on gender influence in product choice showed that gender affects consumer behavior [11] in terms of preferences, behaviors and information processing [12–14]. Kotler [15] proposed a black box process of understanding consumer behavior whereby consumers first receive stimulation and eventually come to a buying decision. Since gender is considered a variable that influences information processing, and subsequently affects persuasion and communication style, its importance should not be overlooked. Therefore it is often an important indicator used in marketing to differentiate a target market [16]. Many research have found that gender is a factor in product selection. Generally, males value practical function while females prefer beauty or fashion when choosing a product [17].

Research on gender differences in Internet use found that women contributed most often to personal discussions, and their communication style features attenuated assertions, apologies, and supportive remarks. Thus, they use the Internet mainly to interact with people [18,19]. Men tend to send longer messages, go online to discuss issues, and communicate in a style that features strong assertions, self-promotions and challenges. Thus, men search for a wider range of information than women.

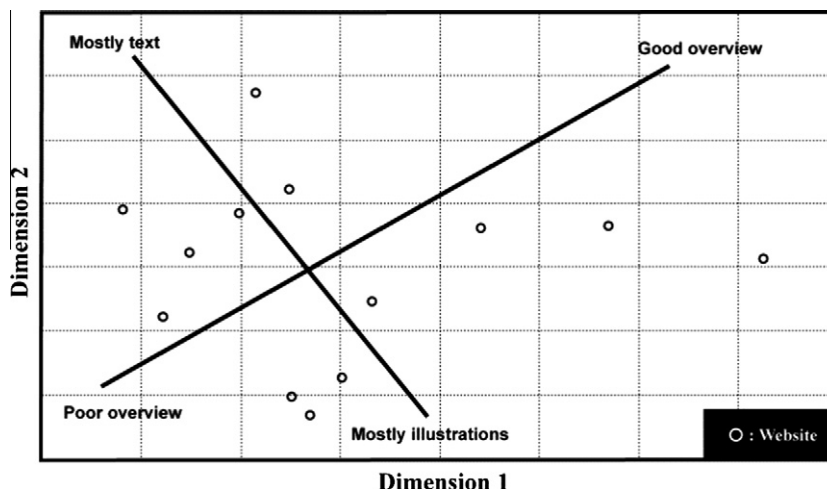


Fig. 1. Similarity perceptual map from ALSCAL [31].

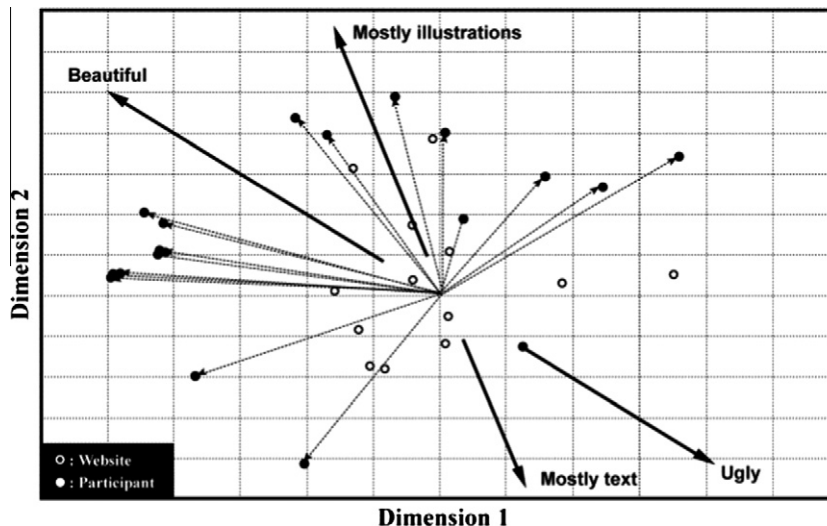


Fig. 2. Preference perceptual map from MDPREF [31].

However other studies [13,20] found that female users tend to value function while male users value entertainment when using on-line shopping websites. This research sought to further analyze gender differences in aesthetic preferences by examining the perceptions of both gender toward the social network, “blog”.

Research on blogs [21,22] indicated gender differences in image used in online spaces. In social terms, this can be seen as the personalizing of space, just as objects or clothing are used to build individual image. Individuals may use personal blogs to broadcast their identity, express individuality, and define their relationship to a group, which makes the selection of personal blog style important [22–25]. Desire for individuality and aesthetics explains why new personalized interface applications are being continuously launched. Although there are many studies on blog, blog interface design remains an under discussed area. In addition, although gender difference is an important factor in many psychology and social science research, few research have been conducted on gender differences in blog interface preferences.

2.3. Multidimensional Scaling analysis

Multidimensional Scaling is a set of statistical techniques that depicts associations between stimuli and subjects. It is a strong representation of associations by illustrating a comprehensive view of the data in a low-dimensional space, thus enabling effective exploration of data similarities and interpretation. Although very helpful in identifying similarities and associations between preference and stimuli, it is only an exploratory technique [7].

In this study, the MDS represented the blogs as points in an Euclidean space where the perceived distances between points reflect similarity (or dissimilarity) between blogs. For practicality, the number of dimensions in the projected space was usually kept as low as possible. The subjective preference data of blogs were then translated into this space to allow easier interpretation [8].

The MDS algorithms, ALSCAL and PREFMAP were used in this study [28]. In the first stage, the ALSCAL was used to produce the perceptual space for a given stimulus. In the second stage, the PREFMAP analyzed the coordinate input of a stimulus configuration in a specified number of dimensions in the perceptual space produced by ALSCAL. The set of preference rankings produced by the subjects were then input into the PREFMAP, which then plotted the results.

3. Method

This research first applied sorting task to 315 blog interfaces followed by cluster analysis to determine the type of blog interfaces, and ALSCAL analysis to avoid similarity perceptual structure. Second, a survey of blog preferences was then conducted. Using the MDS method, the collected data were analyzed to determine gender preference toward blog design in the similarity perceptual structure and the intercorrelations between the two sets of data (Similarity and Preference). A graphical representation (perceptual space) of blog interfaces showing the proximities among the two sets of elements, subjects and selected blog interfaces was also obtained. The subjects were represented as “ideal” points in the MDS space so that the distances from each ideal point to the object points corresponded to the preference scores.

3.1. Analysis of similarity in the blog sample

In the MDS, ALSCAL analysis requires data obtained by either paired comparison or sorting tasks. However, the larger the number of stimuli, the more difficult it is to use paired comparison

for data collection. Many studies using sorting tasks produced high validity [35].

3.1.1. Stimuli

In this research, the experimental stimuli were blog webpages. A wide range of samples were collected from the five most popular blog platforms in Taiwan, namely Wretch, Yahoo! Kimo, PIXNET, Xuite, and Yam blogs [27] (Table 1). Initially, 315 blogs were collected from these major platforms, but to simplify the test for the subjects, the number of blog samples was reduced.

The selection was screened by a panel of eight experts (four interface designers and four experienced bloggers, each with at least 5 years of experience). The experts met in a room to discuss the samples. They rejected samples that were very similar in visual style and included samples that were more different and diverse, resulting in a sample group of 68 blog interfaces.

In the first stage, the purpose was to compare visual similarities among 68 blogs to determine the dimensions (i.e. design features) that affect the perception of subjects. Hence operating the blog interfaces was unnecessary; moreover, it was difficult to simultaneously present 68 blogs on a screen. Each blog was then printed on an A4-sized card to make the comparison and sorting process more convenient for the subjects.

3.1.2. Subjects

The subjects initially comprised 15 males and 15 females between ages 19 and 23, the age group that comprises the heaviest blog users in Taiwan [27]. They were Taiwan college students with normal vision, and who had blogged at least once over the last half months. They were recruited online and monetary reward was offered.

3.1.3. Procedure

The subjects completed a two-part test over a 30-min period. In the first part of the test, the subjects filled out a short demographic questionnaire. To ensure that they understood the task, the subjects practiced sorting the 68 blogs where they required to put at least two cards into a group according to similarity. They were told that there was no right or wrong way of sorting.

3.1.4. Data analysis

Using SPSS statistical software cluster analysis and ALSCAL analysis, the data collected from the 68 blog samples in the first stage of the study were analyzed for perceptual space similarity.

3.2. Preference mapping analysis of the blog sample

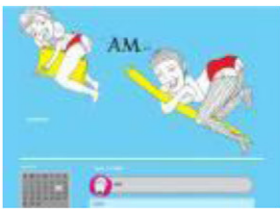
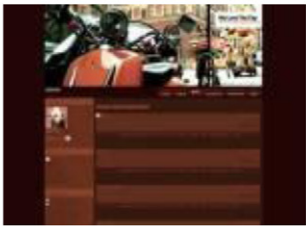
3.2.1. Stimuli

Using cluster analysis (Ward's method), 18 blog samples were obtained from the 68 blogs samples in the previous stage. The content of these 18 selected blogs was identical to avoid distorting the results due to the appearance of different content (see Table 2).

Table 1
Addresses of major blog platforms.

Blog platform name	Address
Wretch	http://www.wretch.cc/
Yahoo! blogs	http://tw.blog.yahoo.com/
PIXNET	http://www.pixnet.net/
Xuite blogs	http://blog.xuite.net/
Yam blogs	http://blog.yam.com/

Table 2
The 18 blog samples.

S1	S2	S3	S4
			
S5	S6	S7	S8
			
S9	S10	S11	S12
			
S13	S14	S15	S16
			
S17	S18		
			

3.2.2. Apparatus

Desktop computers with 17-inch monitors were used to present the blog stimulus in a random order generated by the Adobe Flash software.

3.2.3. Subjects

In the second stage of the study, the subjects comprised 84 subjects (42 males and 42 females between ages 19 and 24). They were Taiwan college students with normal vision, and who had

blogged at least once over the last half months. They were recruited online and monetary reward was offered.

3.2.4. Procedure

The subjects completed a three-part procedure over a 25-min period. In the first part, they filled out a short demographic questionnaire; in the second part, to ensure that they understood the task before actual data collection, the subjects performed a practice trial with blogs which were not part of the actual stimulus set. Last,

for the actual preference rating, the subjects were asked to carefully view and interact with each computer blog display. Using a 9-point Likert scale, where 1 = most disliked and 9 = most liked, the subjects rated their perceptual preference for each blog before going onto the next blog.

3.2.5. Data analysis

Using the PREFMAP program in the MDS software [28], the obtained data were analyzed, producing a perceptual space and an ideal point for blog preferences.

4. Results

4.1. Analysis of similarity in the blog sample

The ALSCAL calculated the proximities among the blog webpages, producing a blog similarity perceptual space from which critical dimensions influencing user perception of blog interfaces could be delineated. The results showed three dimensions solution space, with stress value = 0.13 and RSQ value = 0.82, indicating that the perceptual space was a meaningful interpretation of the input data [29] (Table 3). Figs. 3 and 4 are plots of Dimensions 1 and 2, and Dimensions 1 and 3, respectively. Paired with the cluster analysis (Word method) results of the 68 blogs samples, the blog samples plotted in this perceptual space were appropriately divided into four typical groups according to their coefficient value [36]. Since it was difficult to simultaneously display all 68 blogs, only 18 representative samples were presented in the perceptual space. Figs. 3 and 4 show the final 18 selected blog samples that were

representative of the 4 groups of blogs. The coordinates of the 18 blog samples in the similarity perceptual space were then obtained from ALSCAL (see Table 4).

4.2. Preference mapping analysis of the blog sample

Table 5 shows the results of the preference survey. Female subjects liked Blog S14 the most ($M = 5.76$; $SD = 2.32$) while male subjects preferred Blog S15 the most ($M = 5.74$; $SD = 1.64$). However, from the ranking average, it was difficult to determine the critical design factor behind the gender preferences. In addition, a comparison of each participant and blog among the three dimensions of perceptual space was needed for more detailed understanding of differences in gender preference and design features of ideal blog interfaces. Therefore, using the PREFMAP analysis to load the preference data of male and female subjects into the similarity space previously plotted by ALSCAL, preference composition and similarity data were simultaneously displayed. The PREFMAP method of calculation was divided into four phases (I–IV) [28]. In phase IV, the 'vector model' used vectors to represent the individual subjects whose ideal point was located at the endpoint of their vector, and where each blog was projected along individual vectors to represent the extent to which it was liked. The closer a stimulus (i.e. a blog) was to the endpoint of a subject's vector, the more that stimulus was liked. The PREFMAP also yielded a vector showing the average result of the subjects, indicating the location of the ideal blog among all the subjects.

Figs. 5 and 6 show the coordinates of the 84 subjects and the 18 blog samples in the three-dimension perceptual space obtained from PREFMAP. Next, T-test was applied to the different samples to compare gender preferences in each dimension. Results show gender differences in the third dimension where $P = 0.075$ while no statistically significant gender difference was found in the other two dimensions (Table 6), thus implying that "text-image ratio" was a critical design feature affecting gender preferences in blog interfaces.

Table 3
Stress values of ALSCAL.

No. of Dimensions	2	3	4
Stress Value	0.25	0.13	0.09
RSQ Value	0.62	0.82	0.89

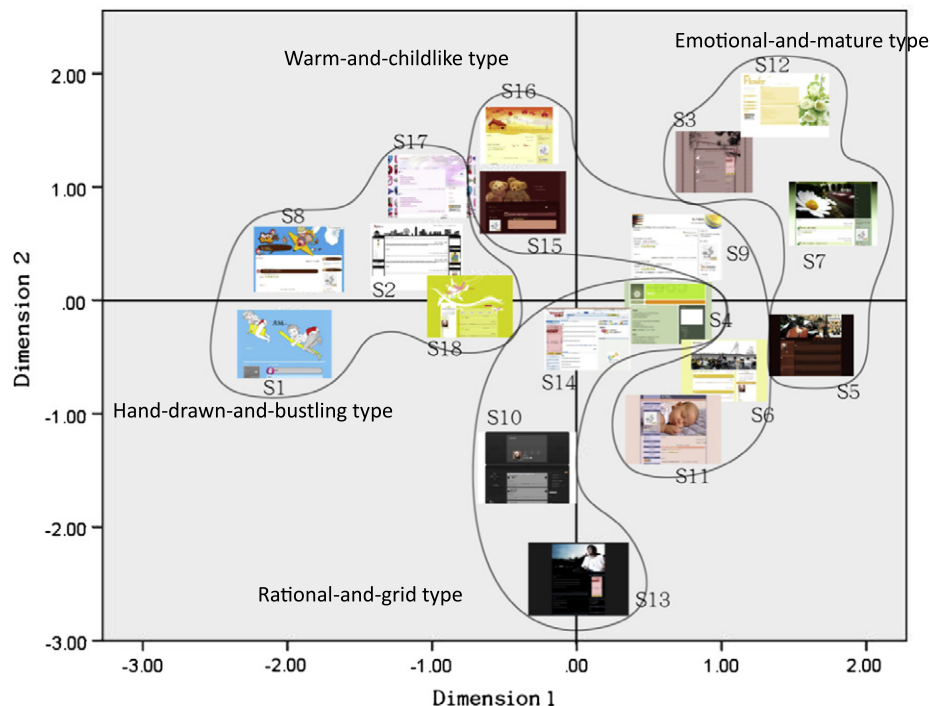


Fig. 3. A similarity perceptual space of Dimensions 1 & 2 of the 18 blog samples, obtained from ALSCAL.

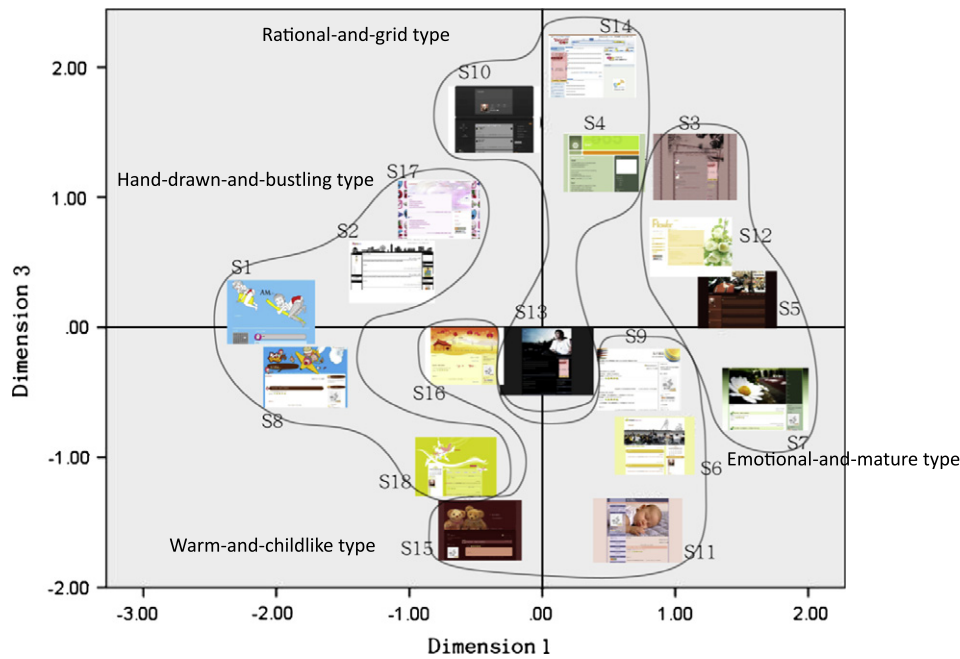


Fig. 4. A similarity perceptual space of Dimensions 1 & 3 of the 18 blog sample, obtained from ALSCAL.

Table 4

Coordinates of the 18 blog samples in a similarity perceptual space obtained from ALSCAL.

Blog samples	Coordinates		
	Dimension 1	Dimension 2	Dimension 3
S1	-2.079	-0.382	-0.027
S2	-1.180	0.365	0.357
S3	0.932	1.114	1.114
S4	0.553	-0.214	1.160
S5	1.377	-0.445	0.052
S6	0.876	-0.641	-0.927
S7	1.758	0.577	-0.550
S8	-1.860	0.153	-0.385
S9	0.633	0.261	-0.417
S10	-0.225	-1.469	1.433
S11	0.691	-1.042	-1.496
S12	1.294	1.558	0.239
S13	0.001	-2.401	-0.242
S14	0.095	-0.331	1.888
S15	-0.599	0.903	-1.406
S16	-0.570	1.255	-0.217
S17	-0.922	0.776	0.619
S18	-0.775	-0.036	-1.195

5. Discussion

5.1. Analysis of similarity in the blog

5.1.1. Labelling the dimensions

The perceptual space obtained from the ALSCAL analysis reveals distribution trends in the visual features of the sample blogs. Fig. 3

shows the spatial distribution of the blogs with respect to Dimensions 1 and 2. Moving from left to right along the axis, the image designs used in the blog samples moved from hand-drawn to increasingly realistic styles. Thus it was reasonable to interpret the Dimension 1 axis as relating to “image type.”

In the distribution trends along the Dimension 2 axis, the images and page layout of the blogs nearer the top were more dynamic in feeling while those closer to the bottom of the axis featured simpler and larger images and geometric page layout. Moreover, the blogs near the top featured warm colors, which became progressively cooler further down the axis until the blogs near the bottom featured a cool palette. Thus the Dimension 2 axis was interpreted as relating to “layout style.”

In Fig. 4, the Dimension 1 against Dimension 3 plot shows that the relative proportion of text and images shifted from ‘mostly text’ to ‘mostly images’ as it moved downward along the Dimension 3 axis. Thus the Dimension 3 axis was interpreted as relating to “text-image ratio.”

In summary, the 3 axes represented “image type”, “layout style”, and “text-image ratio.” This perceptual structure can enable basic understanding of how people perceive the relationships among blog interfaces through design features as well as facilitate discussion of user preference in the next stage.

5.1.2. Main types of blog

Cluster analysis shows four current typical blog interfaces. Designers can develop templates from these basic prototypes, or develop novel blog patterns based on the perceptual space.

Table 5

Means and standard deviations (SD) of male and female participants’ preference in 18 blogs.

Sex		Blog																	
		S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18
Male	M	4.98	5.17	5.52	4.71	5.62	4.19	4.90	5.10	4.57	5.07	4.90	5.12	4.98	5.76	5.00	5.14	4.52	4.83
	SD	2.35	2.06	1.74	2.14	1.89	1.95	1.90	2.02	1.98	2.09	2.00	1.78	1.99	2.32	1.87	1.97	2.33	1.71
Female	M	4.90	5.21	5.48	5.17	5.24	4.83	5.19	4.83	4.31	5.14	5.33	5.12	5.26	4.64	5.74	4.95	4.88	4.93
	SD	2.21	1.65	1.80	1.77	1.62	1.56	1.80	1.75	1.93	1.89	1.80	1.82	1.43	1.96	1.64	1.55	1.94	1.76

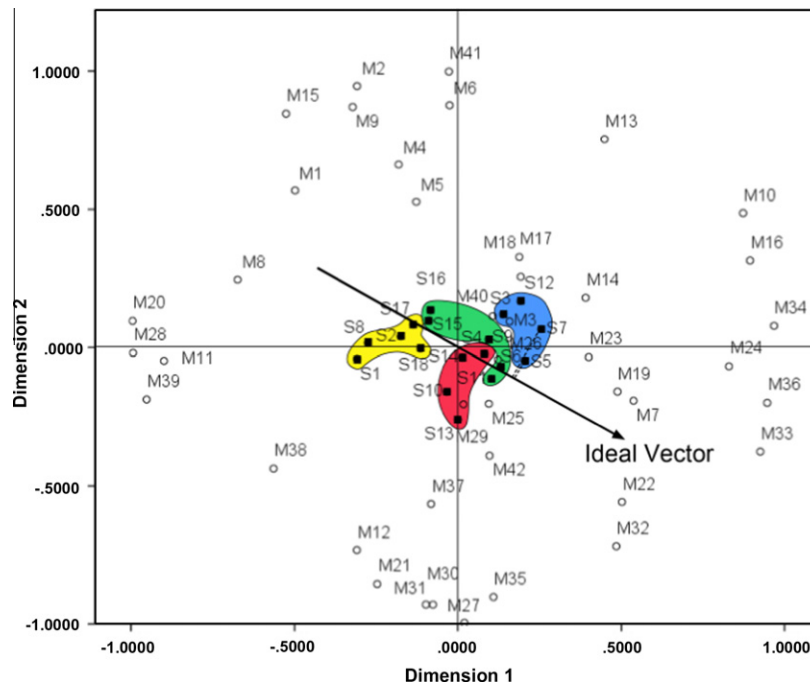


Fig. 5a. A PREFMAP plot of axis 1 against axis 2 for male blog preferences (M: Male participants; S: Blog samples).

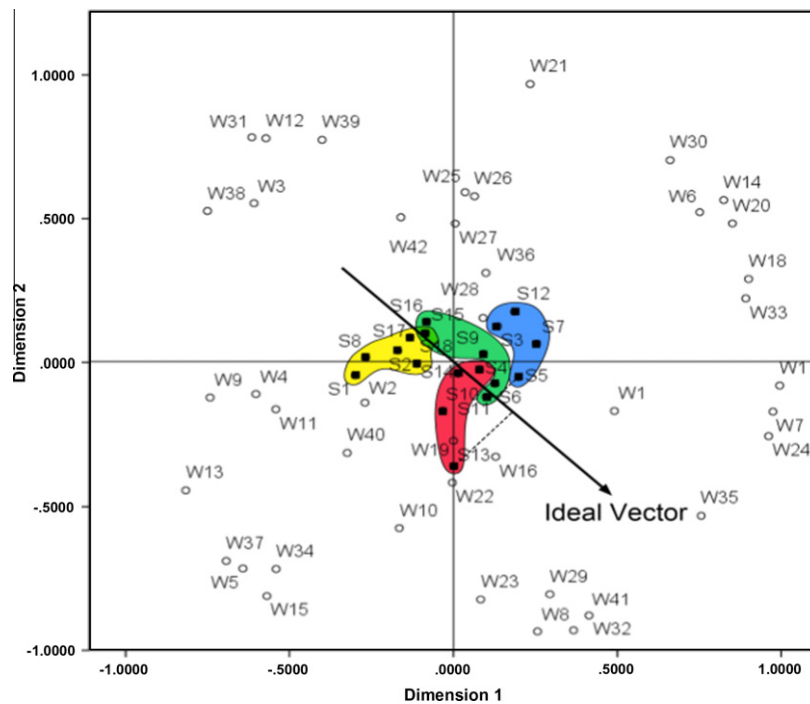


Fig. 5b. A PREFMAP plot of axis 1 against axis 2 for female blog preferences (W: Female participants; S: Blog samples).

The first group from the samples included blogs S4, S10, S13 and S14, and is characterized by simple lines, a cool palette, and an absence of complex images. Thus this group was labeled “rational-and-grid type”. The second group, labeled “warm-and-child-like type,” included blogs S6, S9, S11, S15, and S16, and featured lively images, a warm palette, images of people and animals, and a human touch. The third group, labeled “emotional-and-mature type,” included blogs S3, S5, S7, and S12, and featured strong colors, were static, and showed realistic pictures. The final group,

labeled “hand-drawn-and-bustling type,” included blogs S1, S2, S8, S17 and S18, and featured modern, designer and youthful impression.

5.2. Preference mapping analysis of the blog – Gender difference in blog interface designs

Figs. 5 and 6 show the results of the PREFMAP algorithms for gender preference in the 18 blog samples and the ideal vector that

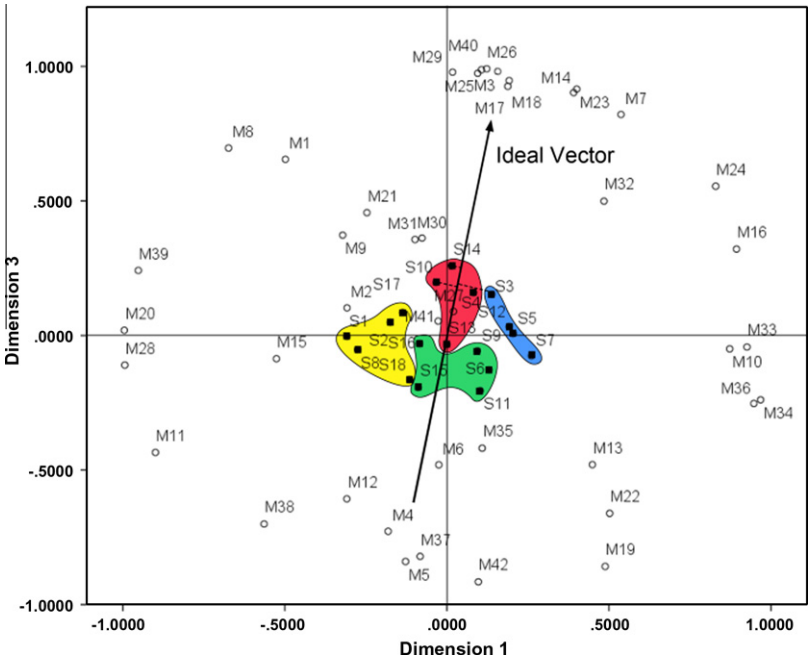


Fig. 6a. A PREFMAP plot of axis 1 against axis 3 for male blog preferences (M: Male participants; S: Blog samples).

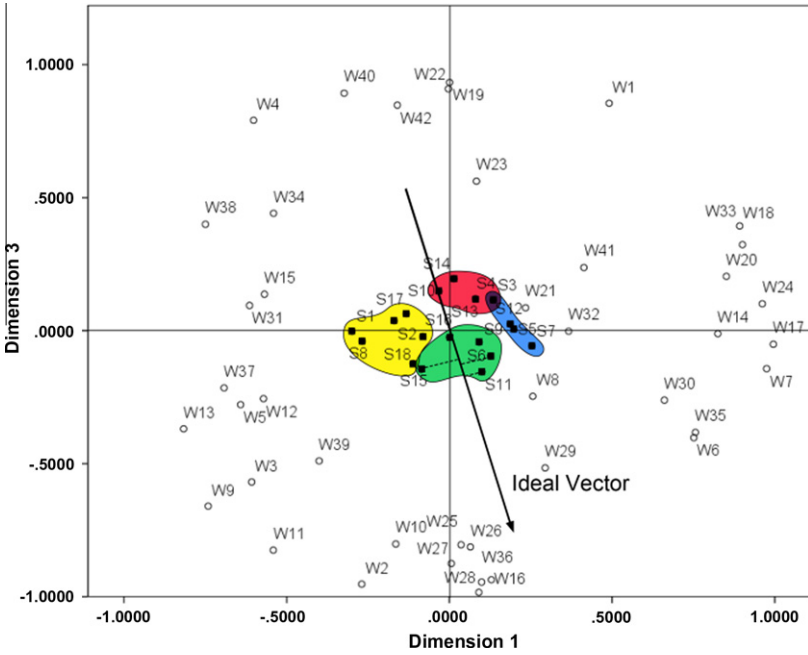


Fig. 6b. A PREFMAP plot of axis 1 against axis 4 for female blog preferences (W: Female participants; S: Blog samples).

Table 6
T-test for male and female participants' preference in each dimension.

Source	Variables	<i>t</i>	<i>df</i>	Significant (two-tailed)
Gender	Dimension 1: Image type	−0.046	82	0.963
	Dimension 2: Layout style	0.223	82	0.824
	Dimension 3: Text-image ratio	1.803	82	0.075

represented the most popular location of the blog interface. Fig. 5 plots axis 1 against axis 2 for the two genders. The ideal vector

for males (Fig. 5a) and females (Fig. 5b) were both located in the fourth quadrant, namely the realistic image end of the image type axis and the larger image end of the layout style axis, indicating that the interface designs of the ideal blog for both sexes would be relatively realistic in character and feature photographs of people and pictures of real objects. However there was no clear difference in gender preferences for Dimension 1 “image type” and Dimension 2 “layout style” (Table 6). Based on the four blog types, it is obvious that the “hand-drawn-and-bustling type” was disliked by both genders; however, there was no clear difference among the other three blog types (see Figs. 5a and 5b). Using eye-tracking

equipment to explore web-browsing behavior, Nielson [30] also discovered that both gender found realistic images more attractive, and concluded that illustrations attracted more user attention only when used in information graphics or diagrams.

However, the axis 1 against axis 3 plot in Fig. 6 shows obvious differences between male and female ideal vector positions along axis 3 (text-image ratio); the female ideal vector fell in the fourth quadrant while the male ideal vector fell in the first quadrant. Hence it can be surmised that males and females had different preferences in axis 3. The fact that the male ideal vector lay on the “more text” side of the axis indicates that the males preferred blogs that have a higher proportion of text in the layout, and that the female ideal vector lay on the “more images” side indicates that the females preferred blogs with a higher proportion of images or pictures. Based on the four blog types, it is obvious that the males preferred “rational-and-grid type” while the females preferred “emotional-and-mature type” or “warm-and-childlike type” (see Figs. 6a and 6b).

Schenkman and Jönsson [31] used MDS analysis to investigate visual preferences in webpages. Using MDPREF to conduct a preferential analysis, they also found that in a webpage design, text-image ratio is an important factor for users. However few studies have analyzed why text-image ratio is an important factor in gender blog preferences. Many research [17,32] have found gender differences in Internet use where generally, males value practical function while females value emotional or visual expression. Other research [22,32] have also found that more females than males use emoticons to emphasize emotions in textual communication. Based on these studies, this research concluded that for females, a layout adorned with a higher proportion of images made it more aesthetically attractive and more emotionally expressive, thus satisfying an important need for self-expression; for males a greater proportion of text satisfied their primary purpose for using blogs, that is, to seek information. As such, “text-image ratio” is a critical design feature for blog users.

5.3. Suggestions for design

In Figs. 5 and 6, each blog point could be projected onto the ideal vector to indicate the relative blog preference of the average participant. In other words, the projection of the 18 blogs points onto this line was indicative of the order of preference. The design features of the blogs on the PREFMAP plot (also shown in miniature in Figs. 3 and 4) illustrate the ideal male and female blogs. As discussed above, the location of the male and female ideal vectors in Fig. 5 revealed the fact that both sexes preferred realistic blog images over hand-drawn images or illustrations. On the female ideal vector, the order of blog preference was blogs S13, S11, S5 and S6 (Fig. 5b) while on the male ideal vector, the order was blogs S5 and S13 (Fig. 5a).

In Fig. 6, the order of blog preference on the male ideal vector was S14, S10, S3 and S4 (Fig. 6a). Blogs S10 and S14 used novelty and humor to create interest. This finding is supported by many empirical research that showed entertainment as a key factor in a successful blog and showed the important effect of entertainment on attitude [33]. For the female ideal vector, the order of blog preference was blogs S11, S12, S15 and S18 (Fig. 6b). The common characteristics of these blogs included the use of warm colors¹ and pictures that may be defined as having traditional feminine appeal, or what Miller and Arnold [21] called “fluffy feminine.”

Compared to past webpage research which did not discuss the types of images, this research found that image types were

important to the perception of blogs. It is safe to assume that when choosing blog layouts, users of both genders were attracted to images of people and objects, and what these images might mean to them. Blog platform designers need to be strongly aware of what images attract young people, particularly females, and incorporate realistic images that are stereotypically appealing or with which they can identify while at the same time allowing much room for personalized choices and expression of individual style. When developing blogs for males, designers should strive to tap into the users’ inner motivations such as entertainment, interest and curiosity, and create interesting, fresh and enjoyable blogs [33]. In terms of layout, designers must provide templates and/or enough flexibility of control over the layout to satisfy both the males’ tendency to emphasize text over images and the females’ desire for large photorealistic images and close palette control.

This study used statistical analysis to objectively examine blog interface preferences, specifically gender differences in blog preference, a subject that has yet to be dealt with by other studies. Results showed convincing proof of gender similarities and differences for visual preference in blogs, and designers were recommended to take into account these differences when designing blog interface. In addition, MDS analysis technique allowed the results of a complex statistical analysis to be visualized, enabling designers with no statistical background to better comprehend and position visual interface style according to different users or bloggers.

6. Conclusions and recommendations

The development of blogs has been rapid; individuals can use blogs to absorb new information, market themselves, express their personal style, and form communities of exchange. However, past research on Internet interfaces have focused on ordinary websites such as those of companies, governments and schools, and relatively few studies examined visual preferences in blog interfaces.

Blog designs must be more versatile to suit personal preferences compared to past website interfaces. The wave of personalized Web 2.0 blogs has highlighted the need for customized interfaces. Although customized blogs have increased, the lack of a general means to control quality and type has led to the irregularity of blog interfaces. Unsuitable design features or unnecessary visual confusion lead to blog failure to effectively communicate its contents to target readers.

In this research, blog interfaces, including various design features, were chosen as stimuli. Subjects were asked to sort these interfaces according to visual similarities and differences. Then through cluster analysis, four typical blog interfaces were delineated. Next, using MDS ALSCAL analysis, a three-dimensional space representing user perceptual experience of blog interfaces was identified, and the three critical dimensions influencing blog design were “image type,” “layout style,” and “text-image ratio.” These results explained which factors in the blog design captured the attention of blog readers, and it was suggested that blog designers manipulate these factors (namely design features).

In addition, gender differences in blog interface preference among young people were discussed. Using PREFMAP, the groups of preferred ideal points in blog interfaces were analyzed. Results show no gender preference for image type and layout style. However, a clear gender difference in the distribution of ideal blogs was found for the text-image ratio; males preferred blogs with a greater proportion of text than images while females preferred blogs whose layouts featured more images than text. A possible reason for that gender difference could be that males tend to emphasize function while females tend to emphasize aesthetic expression, thereby also reflecting difference in their purpose for using or reading blogs [12,18,22].

¹ For interpretation of color in Figs. 3–6, the reader is referred to the web version of this article.

Previous studies [13,20] have shown that males use the Internet primarily for entertainment and leisure while females mainly focus on its utility, such as for educational purposes. However, from the perspective of social networking (blog), this study found that males mainly used blogs for information purposes while females were more interested in aesthetic issues and how bloggers express themselves [19]. The results highlight the importance of gender differences in blog preferences and blog interface designs.

There are several limitations in this study. This study was limited to young subjects in Taiwan because they were more likely than other age groups to create or use blogs [34], and also because the study required them to spend a lot of time browsing the blogs and answering the survey. Future studies could similarly examine the preferences of different age groups and cultures. Furthermore, future research could empirically examine how elements of visual interface arouse different emotions in users, and develop a system of customized-templates that allow users to select different blog styles.

Acknowledgements

The author would like to thank Dr. Ming-Chuen Chuang and reviewers for their invaluable recommendations. This study was supported in a research Grant (NSC 99-2410-H-009-055-MY2) from the National Science Council, Taiwan.

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