Influence of Hairstyle on Women's Professional Image

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ABSTRACT

The purpose of this study was to investigate the effect of hairstyle, hair length, and hair color on women's professional image. The quasi-experimental method by a 2×3×3 (hairstyle × hair length × hair color) factorial design was used. Subjects were 343 women in Seoul, Korea. The bright brown hair was perceived to be less professional than the black and the dark brown. The straight hair was evaluated to be more professional than the wavy hair in the short and the medium length hair, whereas the wavy conveyed a higher professionalism than the straight style in long hair. The shorter the hair was, the more professional the image was. Among 18 stimuli, the short straight hair in black was evaluated to have the highest in professional image, and the long straight hair in bright brown was the lowest. Perceivers in their 40's and 50's evaluated the bright brown hair to be more professional than those in their 10's to 30's did. The present findings provide that hairstyle, hair length, and hair color are significant cues when perceiving women's professional image.

Key words: professional image, hairstyle, hair length, hair color

T. Introduction

When an object person's impression is established by the appearance of oneself in the social life, observers perceive the person's body characteristics such as eyes, nose, lips, feature, hairstyle, and body type as a whole. Therefore, hairstyles can give meaningful influence to impression formation and image evaluations.

Mahannah (1968) studied the influence of hair color and clothing color on personality assessment. The results showed that impressions of yin-yang personality were greatly influenced by the interaction of hair and clothing colors. The brunette in the

red clothing showed strong, determined, and yang personality. Pacer and Meind1(1978) studied the impressions of the length of men's hair, and found out that men with long hair were sensed as more liberal and open-minded than the men with short hair. From the research on the preference of male hairstyle, Peterson and Curran(1976) found out that majority of the female college students generally liked men with shorter hair. This study also showed that women who like men with short hair are more conservative, and those who like men with long hair are more liberal on the ground of the similarity-attraction theory.

Do(1991) examined feature image depends on the various hairstyles by using computer graphic simulation. In this study, the straight hair gave natural

and clean image, the curly hair gave mature image, the short hair gave urban and active image, mid-length hair gave passive and ordinary image, and the long hair gave feminine and delicate image. Kim(1996) found that the most women in their twenties liked straight hair with partial highlighting, and their least preferred style was the short cut hair with complete dye.

Lee and Suh(1998) said that the long straight hair gave neat, lovely, and clean images and the short cut hair showed an intellectual and individual images. From Kim(1999)'s research, women's hairstyle evaluations had significant differences by gender. age, and education level. Gender had influence on maturity and visibility, and age and education on preference and uniqueness. Yoon(2001) stated that the long hairstyle was perceived as favorable and elegant and women in a bob were perceived as sophisticated and individual. The bob and the short hairstyle were evaluated to be more individual than the long hairstyle. In the study of hair colors, Yun(2001) suggested that women with the brown or red hair looked more progressive and splendid image than the black hair.

The previous studies show that hairstyle is one of the meaningful cues that affects person's impression or image perception. However, there are not many systematic studies of image perception related to hairstyle and hair color compare to the studies of clothing, and there are almost no researches on hairstyle variation related to professional image.

In the research of women's professional image, Thurston, Lennon, Clayton(1990) examined the influence of age, body type, fashion, and garment type. This research found that suits convey a stronger professional image than dresses for women of any age or body type; when judged by business and professional men, older women convey a

stronger professional image than younger women when wearing dresses; garments with innovative fashion detail contribute to a weaker professional image than garments with contemporary or classic fashion detail; and thin women convey a stronger professional image than larger women.

As a person's appearance cue such as garment and body type conveyed different level of professional image to perceivers(Thurston, Lennon, Clayton, 1990), hairstyle also may influence judgment of professional image.

The number of professional working women are increasing in recent days. The percentage of female high school students who get into colleges was doubled in the past 15 years. Nearly 10% of the national assembly members and 14.4% of college professors are women (Lee, 2004; Paek, 2003). One quarter of new lawyers and 33% of new medical doctors are women (Lee, 2004; Lee, 2003). Since the rate of professional women increases, it is necessary to examine how various hairstyles have influence on the professional image evaluations.

The purpose of this study was to investigate the effect of hairstyle, hair length, and hair color on women's professional image perception. Also, the difference of preference according to hairstyle and hair color and the difference according to perceivers' ages were investigated. This study will be able to provide information about the hairstyle which will help career women have professionalism.

II. Method

1. Hypotheses

To investigate the purpose of this study, the following hypotheses were formulated.

1. The evaluation of women's professionalism will differ according to hairstyle, hair length, and hair color.

- 2. The preference of women's hair will differ according to hairstyle, hair length, and hair color.
- 3. There will be interaction effects in the evaluation of professionalism and preference of women's hair by perceiver's age and object person's hair.
 - ① There will be interaction effects in the evaluation of professionalism by perceiver's age and object person's hair.
 - ② There will be interaction effects in the preference of women's hair by perceiver's age and object person's hair.

2. Instrument

A quasi-experimental method by questionnaire was used. The experimental design was a 2×3×3(hair-style × hair length × hair color) factorial design by 3 independent variables. The hairstyles were straight hair and wavy hair, and the types of the hair length were long, medium, and short hair. The hair colors were black, dark brown, and bright brown.

The stimuli were 18 women's upper body photographs(8×9cm) which were output by computer simulation. The model wore white one-piece dress with round neckline. After taking photographs of a woman in her twenties, her hairstyle, hair length and color were changed into the different ones by using the CAD system. The background of the stimuli was light gray.

The questions of semantic differential scale used for evaluating professional image were collected in the previous research(Thurston, Lennon, Clayton, 1990). Five 7-point bipolar adjectives were used to evaluate professional image and preference. The items of professional image were professional-unprofessional, responsible-irresponsible, potent-impotent, and successful-unsuccessful. Cronbach's a reliability coefficient of the 4 items was .797, and sum of the items was named professionalism. The prefe-

rence evaluation was measured by the item, 'I like-I dislike'. Demographic variable included the age of perceiver.

3. Data Collection and Analysis

Subjects were 343 women living in Seoul. The age groups of the subjects were 17.5% from 18 to 19, 46.6% from 20 to 29, 6.2% from 30 to 39, 21.2% from 40 to 49, and 8.5% from 50 to 55. One subject was made to respond to two different stimuli with hairstyle, hair length, and hair color differently combined. They were assigned to each stimulus through quota sampling of age.

If one subject evaluate all 18 stimuli, subjects evaluate the stimuli by cross-comparing them, and the validity of the evaluation is reduced when 18 pictures are repeatedly evaluated. Therefore, it is best to make one subject evaluate one stimulus for good validity. However, in this research, one subject was made to evaluate two stimuli due to the limitation of experimental research.

When 2 stimuli were put in each set, 9 sets were made from 18 stimuli. About 38 people were allocated in each set, because 343 divided by 9 is about 38. However, 36 to 42 subjects were investigated for one set in reality due to experimental variation.

The data were analyzed by using Cronbach's a reliability coefficient, three-way ANOVA, two-way ANOVA, and Duncan's multiple range test.

III. Results and Discussion

 The Differences of Professionalism According to Hairstyle, Hair Length, and Hair Color

Hypothesis 1 predicted that the evaluation of

women's professionalism would differ according to hairstyle, hair length, and hair color. In order to test hypothesis 1, 3-way analysis of variance was used. The result can be seen in Table 1.

In main effect, hairstyle, hair length, and hair color gave significant influences on the evaluation of professionalism. Therefore, hypothesis 1 was accepted. The straight hair was perceived to be significantly higher in professionalism than the wavy hair. The short hair was evaluated as the highest in professionalism, the medium hair the next, and the long hair the lowest. This showed that as the hair is longer, people are perceived to be less professional. This is also similar to the previous research (Lee & Suh, 1998) that short cut hair was evaluated to be intellectual.

In the differences of hair color, the black and the dark brown hair were evaluated to be more professional than the bright brown, but the bright brown hair was perceived to be low in professionalism. The F-values revealed that hair length had more significant effect on the professional image than the hair color and whether the hair was wavy or not.

Though professionalism had no interaction effect with the 3 independent variables, it had interaction effects with the 2 independent variables. The results can be seen in Fig. 1, and Fig. 2.

The straight hair was perceived to be more professional than the wavy hair in short and medium length(Fig. 1). However, the wavy hair was perceived to be more professional than the straight hair in the case of long hair.

Though the long hair had no differences in the evaluation of professionalism according to the hair color, there were many differences in the case of short hair (Fig. 2). In the case of the black and dark brown, the shorter the hair was, the more

Table 1. Difference of professionalism according to hairstyle, hair length, and hair color

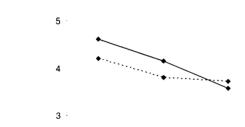
source of variance		professionalism		the items of professional image			
		df	$\frac{\mathrm{df}}{F}$	professional	responsible	potent	successful
			Г	F	F	F	F
ha	irstyle (A)	1	5.85*	.26	57.27**	.09	.01
hair	length (B)	2	33.40**	39.34**	11.30**	20.55**	15.19**
hair	color (C)	2	8.42**	.49	22.45**	7.15**	5.09**
	$A \times B$	2	4.59**	1.51	8.92**	2.93	3.67*
	A×C	2	1.59	.04	4.81**	2.34	.41
	B×C	4	4.06**	2.37	2.62	3.18*	2.81
	$\mathbf{A} \times \mathbf{B} \times \mathbf{C}$		2.24	2.21	1.81	1.59	1.63
	residual						
variables	category	N	M	М	M	M	M
hair	straight	343	4.12	3.88	4.49	4.09	4.01
style	wavy	343	3.91	3.80	3.75	4.09	4.00
hair	short	239	4.41a	4.48a	4.35a	4.45a	4.38a
	medium	227	3.96b	3.74b	4.19a	4.04b	3.87b
length	long	220	3.64c	3.25c	3.80b	3.75c	3.74c
hair	black	229	4.14a	3.79	4.39a	4.28a	4.10a
	dark brown	231	4.12a	3.90	4.30a	4.13a	4.13a
color	bright brown	226	3.78b	3.83	3.65b	3.85b	3.77b

^{*} p<.05, ** p<.01, a-c : Duncan's multiple range test

professional the image was. Therefore, hair length gave influence to the evaluation of professional image when the hair were dark colors, but the bright brown hair was evaluated as low in professional image regardless of the hair length.

Additionally, to examine hypothesis 1 more concretely, 3-way analyses of variance were executed on the 4 items of professional image(Table 1).

The responsible and the successful image had significant interaction effects with the two independent variables, hairstyle and hair length. The results can be seen in Table 1, Fig. 3, and Fig. 4. The medium length straight hair was perceived



2	short	medium	long	
—← straight	4.61	4.14	3.57	
• waw	4.21	3.79	3.71	

Fig. 1. Interaction form by hairstyle and hair length in professionalism

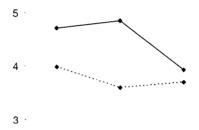


2	short	medium	long
→ black	4.7	4.03	3.63
···+·· dark brown	4.64	4.07	3.61
bright brown	39	376	3.66

Fig. 2. Interaction form by hair color and hair length in professionalism

much more responsible than the medium wavy hair. However, there was little difference in the evaluation of responsible image between straight and wavy hair in the case of the long hair(Fig. 3). In Fig. 4, the straight hair was evaluated more successful than the wavy hair in short length, but the wavy hair was perceived more successful in the long hair.

The responsible image had a significant interaction effect by hairstyle and hair color(F=4.81, p< .05), and the result can be seen in Fig. 5. There was little difference in responsible image between



2 -			
2	short	medium	long
straight	4.7	4.84	3.92
···•·· wavv	3.98	3.58	3.68

Fig. 3. Interaction form by hairstyle and hair length in 'responsible-irresponsible' image

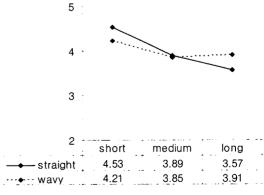
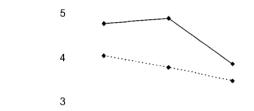


Fig. 4. Interaction form by hairstyle and hair length in 'successful-unsuccessful' image

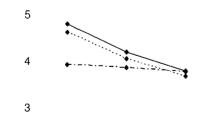
straight and wavy hair in the case of the bright brown hair, and the bright brown hair was evaluated as the least responsible image. However, the straight hair was evaluated more responsible than wavy hair in the black and dark brown.

The potent image had significant interaction effects by hair length and hair color, and the results can be seen in Fig. 6. There were no differences in the evaluation of potent image among the three colors in the long hair. However, the black and thedark brown hair perceived to be more professional than the bright brown in the case of short



2			
۷	black	dark brown	bright brown
	4.75	4.86	3.84
···•··· waw	4 02	3.76	3 47

Fig. 5. Interaction form by hairstyle and hair color in 'responsible-irresponsible' image



2	short	medium	long
→ black	4.79	4.19	3.79
···+·· dark brown	4.62	4.05	3.69
bright brown	3.92	3.86	3.77

Fig. 6. Interaction form by hair color and hair length in 'potent-impotent' image

and medium hair.

The Differences of Preference of Women's Hair According to Hairstyle, Hair Length, and Hair Color

Hypothesis 2 predicted that the preference of women's hair would differ according to hairstyle. hair length, and hair color. The result of preference can be seen in table 2. There were no significant differences in preference according to the hairstyle and the hair length, but there was a significant difference in the hair color. Therefore, hypothesis 2 was partially conformed. The means revealed that the black hair was preferred the most, the dark brown was preferred the next, and the bright brown was the least. As the black is the natural hair color of Koreans, people had favor in the familiar color. This result supports the similarity theory in interpersonal attraction. Even though the short hair had most professional image, women did not preferred the style the most. This shows that the evaluation of professional image does not coincide with that of preference.

The evaluation of preference had two significant interaction effects with the hairstyle / the hair length, and the hairstyle / the hair color(Fig. 7, and 8).

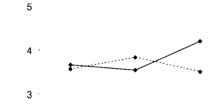
In the Fig. 7, the wavy style of medium hair was more liked than the straight style of medium hair, but the straight style of long hair was much more liked than the wavy style of long hair. This can be thought that women have incline toward straight long hair as it gives clean(Lee & Suh, 1998) and young image. Medium length straight hair has a social norm following image and this is thought not to be preferable to women.

In the Fig. 8, the straight style of dark brown hair was more liked than the wavy style of dark

source of variance	df	preference F	dependent variables	category	N	М
hairstyle (A) hair length (B)	1 2	1.67 1.51	hairstyle	straight wavy	343 343	3.80 3.64
hair color (C) A×B A×C B×C	2 2 2 4	11.43** 6.45** 3.78*	hair length	short medium long	239 227 220	3.62 3.69 3.85
A×B×C residual	4 668	.58 3.17*	hair color	black dark brown bright brown	229 231 226	4.05a 3.71b 3.38c

Table 2. Difference of preference according to hairstyle, hair length, and hair color

^{*} p<.05, ** p<.01, a-c : Duncan's multiple range test



2 · ·	short	medium	long
straight	3.66	3.54	4.2
···•··· wavy	3.57	3.83	3.5

Fig. 7. Interaction form by hairstyle and hair length in preference

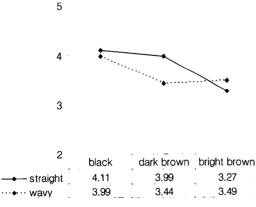


Fig. 8. Interaction form by hairstyle and hair color in preference

brown, but the wavy style of bright brown was more liked than the straight style of bright brown.

The preference had significant interaction effects by the three variables. The results can be seen in Fig. 9. In the case of the long wavy hair, there was no difference in preference according to hair colors. However, the preference of the medium wavy hair was influenced by the hair color. That was, the black of the medium wavy hair was liked much more than brown of the same hair. The bright brown hair was liked less than the dark brown and the black in short straight hair. In the case of the medium length straight hair, the dark brown was liked more than the black and the bright brown. It can be inferred that as the women of medium length straight hair looks like high school student, it will have positive effect with a color change from the original black hair color.

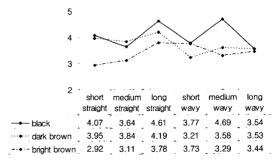


Fig. 9. Interaction form by hairstyle, hair length, and hair color in preference

The Interaction Effects in Professionalism and Preference by Perceiver's Age and Object Person's Hair

Hypothesis 3 predicted that there would be interaction effects in the evaluation of professionalism and preference of women's hair by perceiver's age and object person's hair. Two-way analyses of variance were computed to test hypothesis 3.

There were no significant interaction effects in professionalism and preference by age and the hairstyle, by age and the hair length, and no interaction effects in preference by age and the hair color, but there was a significant interaction effect in the evaluation of professionalism by age and the hair color. The result can be seen in Table 3 and Fig. 10.

Table 3. Difference of professionalism and preference according to age and hair color

source of	variance	df	professionalism F	preference F
age	(A)	1	8.13**	28.74**
hair col	or (B)	2	3.44*	8.42**
A×	A×B		3.45*	.47
resid	residual			
variable	category	N	M	M
	18-39	482	3.94	3.52
age	40-59	204	4.19	4.19

^{*} p<.05, ** p<.01

In the Fig. 10, perceivers in their 40's and 50's evaluated the bright brown hair to be more professional than those in their 10's to 30's did. Since housewives in their 40's and 50's do not usually have their hair dyed, they can be thought to perceive women with different hair color from them to be more professional. Hypothesis 3-① was accepted partially, but hypothesis 3-② was rejected.

In main effect, perceiver's age gave significant influences in the evaluations of professionalism and

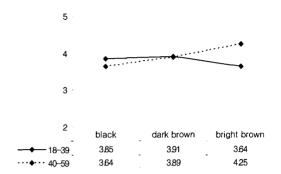


Fig. 10. Interaction form by perceiver's age and hair color in professionalism

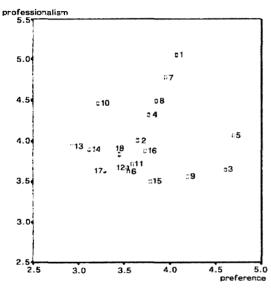
preference. Perceivers in their 40's and 50's evaluated the object person's hair to be more professional, and preferred the hair more than those in their 10's to 30's did. Therefore, the older the perceiver's age was, the more positive the evaluation was.

4. The Positions of the Stimuli by the Professionalism and Preference

The locations of stimuli by 2 axis were investigated to see the evaluation of 18 stimuli by professionalism and preference in two dimension. Fig. 11 is the result of positioning preference on X-axis and professionalism on Y-axis.

The short straight hair in black was evaluated as the highest in professionalism, and the short straight hair in dark brown was evaluated as the next highest. The long straight hair in bright brown was evaluated as the lowest in professionalism. Since it takes less time to take care of short straight hair in black, this can be the reason that the hairstyle in black was suitable for the busy working women.

The midium wavy hair in black was preferred the most, with the long straight hair in black evaluated as the second most, and the short straight hair in bright brown was preferred the least. The midium wavy hair in bright brown was evaluated to be the lowest in both of the professionalism and preference. This reconfirms the result of previous research(Kim, 1996) that the short cut hair with completely dyed hair color was the least preferred style. Actually the most middle aged women and young women choose to have the black medium length wavy hair and the black long straight hair and that is why the preference level was high.



- short straight in black medium straight in black
- long straight hair in black
- 4. short wavy hair in black
- medium wavy hair in black
 long wavy hair in black

- 7. short straight hair in dark brown medium straight hair in dark brown
 long straight hair in dark brown
- 10. short wavy hair in dark brown
- medium wavy hair in dark brown
- 12. long wavy hair in dark brown short straight hair in bright brown
- 14. medium straight hair in bright brown
- long straight hair in bright brown 16. short wavy hair in bright brown
- medium wavy hair in bright brown
- 18. long wavy hair in bright brown

Fig. 11. The locations of 18 stimuli by professionalism and preference

IV. Conclusion

The objectives of this study were to investigate the effect of hairstyle, hair length, and hair color on women's professional image and preference evaluation. Subjects were 343 women in Seoul, Korea.

Hairstyle, hair length, and hair color gave a significant influence on perception of professionalism. The short hair was evaluated the highest in professionalism, and the long hair was the lowest.

The straight hair conveyed a stronger professionalism than the wavy hair. The bright brown hair was perceived to be less professional than the black and the dark brown.

There were significant interaction effects in professionalism by the hairstyle and the hair length, and by the hair length and the hair color. The straight hair conveyed a stronger professionalism than the wavy hair in short and medium length, whereas the wavy hair was perceived to be more professional than the straight hair in the case of long hair. The black and the dark brown hair conveyed a stronger professionalism than the bright brown in the case of short and medium length, but there were no differences of level depending on color in the long hair.

There was a significant difference in preference according to the hair colors. The black hair was preferred the most, the dark brown was evaluated next best, and the bright brown was the least. The wavy style of medium length hair was more liked than the straight style of medium length, but the straight style of long hair was much more liked than the wavy style of long hair. The bright brown hair was liked less than the dark brown and black in short straight hair.

Perceivers in their 40's and 50's evaluated the object person's hair to be more professional, and preferred the hair more than those in their 10's to 30's did. Perceivers in their 40's and 50's evaluated the bright brown hair to be more professional than those in their 10's to 30's did.

Among 18 stimuli, the short straight hair in black was evaluated the highest in professional image, and the long straight hair in bright brown was the lowest. The midium length wavy hair in black was preferred the most, with the long straight hair in black evaluated next best, and the short

straight hair in bright brown was preferred the least.

The present findings provide that hairstyle, hair length, and hair color are significant cues in perceiving women's professional image.

There are limitations in generalizing the results of this research as the evaluation of hair was performed by a small number of people, and pictures would be perceived differently from actual person's hair. In future research, it would be necessary to examine the effect of variations of the hairstyles with gender, different cultures, and the features of the object persons.

References

- Do, J. (1991). A study on the face image and shape to hairstyle variation: Using by computer graphic simulation. Mater's thesis, Pusan National University.
- Kim, B. (1999). Impression effect of female hairstyles. Master's thesis, Inha University.
- Kim, Y. (1996). The relationships between fashion hair style preference and personality dimension. Mater's thesis, Konkuk University.
- 4) Lee, D. (2004, 12. 7). Womantimes. retrieved 2004, 12.10, from http://www.iwomantimes.com
- 5) Lee, J. (2003, 9. 16). Womantimes. retrieved 2004, 12.10, from http://www.iwomantimes.com
- Lee, Y., & Suh, M. (1998). Effect of neckline-hairstyle combinations on the perception of face image and type. The Research Journal of the Costume Culture, 6(4), pp. 13-25.
- Mahannah, L. (1968). Influence of clothing color on the perception of personality. Master's thesis, University of Nevada.
- 8) Paek, H. (2003, 9. 23). *Womantimes*. retrieved 2004, 12.10, from http://www.iwomantimes.com
- Pancer, S. M., & Meindl, J. R. (1978). Length of hair and beardedness as determinants of personality Impressions. *Perceptual and Motor Skills*, 46. pp. 1328-1330.
- 10) Peterson, D., & Curran, J. P. (1976). Trait attraction as a function of hair length and correlates of subjects'

- preferences for hair style. *Journal of Psychology*, 93(2), pp. 331-339.
- Thurston, J. L., Lennon, S. J., & Clayton, R. V. (1990). Influence of age, body type, fashion, and garment type on women's professional image. *Home Economics Research Journal*, 19(2), pp. 139-150.
- Yoon, S. (2001). The effect of make-up and hair style for impression formation. Mater's thesis, Daegu Catholic University.
- 13) Yun, J. (2001). A study on the change of the image with hair color. Mater's thesis, Sejong University.