Regional Differences in Physical Appearance Identity among Young Adult Women

in Thailand

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Abstract

Physical appearance concerns lead to serious health compromising behaviors among women in Thailand, but existing studies may not be generalizable to young women in Thailand. The purpose of this study was to examine differences in physical appearance identity among young women in four regions of Thailand based on 30 physical appearance characteristics generated and validated in two previous samples of young Thai women. Using Q methodology, 200 Thai young women sorted the physical appearance characteristics in terms of importance. Across-region differences exist for the most important physical appearance characteristics. Regional differences in physical appearance identity may explain the variety of behaviors used by Thai women to enhance their physical appearance. Further research should focus on regional factors that contribute to these aspects of physical appearance becoming a dominant source of self-definition so that effective prevention strategies can be developed and targeted to women at high risk.

Keywords: physical appearance; identity; women; Thailand; Q methodology

Background

Physical appearance concerns are prevalent among women in many countries (e.g.,

Demarest & Allen, 2000; Jaeger et al, 2002; Hayashi, Takimoto, Yoshita, & Yoshiike, 2006;

Polivy & Herman, 2004) and can lead to negative affects (e.g., depression, low self-esteem) and

health compromising behaviors (e.g., self medication including diet pills, laxatives, diuretics).

Specifically in Thailand, young women engage in widespread use of oral and injectable

supplements (e.g., glutathione), illegal and unsafe forms of skin-whitening creams, cosmetic

treatments and surgery, diet pills and weight loss supplements. The data show that appearance

concerns among young females are higher than in any other age groups (Cash & Henry, 1995).

In Western cultures, physical appearance concerns in young women are tied predominantly to

body weight and shape (Annis, Cash, & Hrabosky, 2004; Brown & Dittmar, 2005; Markus,

Hamill, & Sentis, 1987). However, ideal physical appearance among young women in Thailand

is likely to encompass much more than just body weight and shape (Thianthai, 2006; 2008). In

Thailand, in addition to extreme thinness, ideal physical appearance is also tied to fair skin, an

oval face, a high and narrow nose bridge, wide eyes, and tall stature (Hesse-Swain, 2006; Rush,

2007), though the importance of these characteristics may differ for young women in the four

different regions of Thailand.

Thailand is divided into four main geographical regions: the North East region, which

borders Cambodia and Laos; the Central region, surrounding Bangkok; the North region,

bordering on Laos and Myanmar; and the South region, bordering Malaysia. Each region is

associated with a distinctive physical appearance which may lead to regional variation in the

characteristics of ideal physical appearance. For example, the focus on light skin may be more

important among women in the South region of Thailand where it is hotter and sunnier and skin

color tends to be darker. Body weight and shape may be perceived as most important to women in Central region of Thailand because of intense media influence and exposure to fashion trends. Facial features may be more salient among women in the North East region of Thailand because their faces tend to be wider and nose bridges tend to be flatter than other regions, and in the North region of Thailand women may place greater importance on eye shape because most of their ancestors emigrated from China so they tend to have the almond eye shape of their Chinese heritage. When young Thai women deem physical appearance as a centrally defining feature of who they are and their worth as a person, they often turn to extreme health compromising behaviors to alter their physical appearance to align more closely with their ideals.

Physical appearance in western society has focused primarily on body weight and shape (Grabe & Hyde, 2006; Ip & Jarry, 2008; Rudiger, Cash, Roehrig, & Thompson, 2007; Stein & Corte, 2007; 2008). However, different cultures may emphasize different aspects or components of physical appearance. The components of physical appearance identity among Thai women have not been studied. Because of regional differences in phenotypic characteristics (e.g., skin color, facial appearance) and sociocultural difference in context or experiences (e.g., pressure from family and friends, media exposure, and cultural norms or beliefs), physical appearance identity among young Thai women may differ for women in each of the four regions of Thailand.

Purpose of the Study

The purpose of this study was to examine the similarities and differences in the characteristics of physical appearance identity among young adult Thai women in four regions of Thailand (Central, North, North East, and South). The research question guiding this study was "How do the important domains of the characteristic of the physical appearance differ among

young adult women in the four regions of Thailand?" The results of this study are intended to provide a more refined understanding of physical appearance identity and the components of physical appearance among young adult women in Thai, beyond the focus on body weight and shape which predominates in Western research.

Setting and Sample

The study was conducted in four regions of Thailand. The participants were 200 young adult women, 50 from each region, recruited from public places such as beauty shops and health clubs. The sites were chosen because these sites are locations where large numbers of young Thai women who are interested in physical appearance can be found. The eligibility criteria required that participants be: 1) female ages 18 to 24 and 2) born and living in the geographic region of the study site. Written informed consent was obtained from all participants. A convenience, purposive sampling method was used to recruit participants.

Methods

In this study, we used Q methodology, which has the strengths of both qualitative and quantitative approaches (Dennis & Goldberg, 1996). Q methodology has been used to examine subjective attitudes, beliefs, or values (Amin, 2000; Jacobson & Aaltio-Marjosola, 2001; Prasad, 2001, Venables, Pidgeon, Simmons, Henwood, & Parkhill, 2009). With this methodology, participants sort cards each labeled with a characteristic (e.g. a physical appearance characteristic) according to the perceived importance of the characteristic. When a standard questionnaire is used, cultural differences in physical appearance identity may increase measurement error. Q methodology can reduce the response biases (i.e., avoiding extreme answers) that frequently occur in Asian populations when using traditional methods such as questionnaires with Likert scales (Polit & Beck, 2004).

Identifying the Physical Appearance Characteristics. The first step of Q methodology is to identify the characteristics to be used in the Q sort by using different sources of information (Brown, 1996). The list of characteristics, which is called the 'concourse,' was developed using free listings, in which 78 physical appearance characteristics were generated by a previous sample of demographically similar women in Thailand. These characteristics were later validated with another sample of young Thai women using focus group discussions. The 30 physical appearance characteristics mentioned most frequently in the free listings and later validated by focus group discussions were used in this study. The 30 characteristics consisted of 6 characteristics in each of 5 domains: facial appearance (oval face, bright [radiant] facial skin, big eyes, high nose bridge, beautiful lips, and nice teeth), body weight and shape (shapely, full breasts, small waist, beautiful hips, flat belly, and skinny), skin (bright skin, smooth skin, white-pink skin, honey skin, tan skin, and white skin), hair (long hair, short hair, straight hair, wavy hair, brown hair, and black hair), and general appearance (slim fingers, slender neck, broad shoulders, long fingers, petite frame, and large frame). Once identified, each characteristic was typed onto a separate card for use in the Q sorting task.

Procedure. The data were collected in individual sessions using a template grid and the set of 30 cards. The template had a grid layout of a normal distribution, with column heights ranging from 1 at the extreme left and right, to 6 in the central column. Each column was labeled with a value from -5 = least important (extreme left column) to +5 = most important (extreme right column), with the central column 0 = neutral or not sure (see Figure 1).

Participants were asked to rank-order the 30 characteristics of physical appearance using the following script: *"I placed a grid in front of you. Here are 30 cards—each has a physical appearance word on it. You will rank each of the 30 cards on the grid. Characteristics that you*

think are most important go on the right, and characteristics that you think are least important

go on the left. Those of moderate importance go somewhere in the middle. It is acceptable for

you to move the cards as many times as you want to until you are satisfied with the placement of

the characteristics. The only rule is that you can place only one card on each space. If you have

any questions feel free to ask me at any time."

Data Analysis

Each card, which is labeled with a unique code number, is entered onto a data coding

sheet with a normal distribution grid. See Figure 2.

The data were then entered into Predictive Analytics Software, PASW Statistics

(formerly SPSS). First, we conducted a *variable-centered* factor analysis to examine regional

differences for the most important physical appearance characteristics identified by women in

each region. Second, we used *person-centered* factor analysis to identify subgroups of women

within each region. Using PQMethod 2.11 for Windows we conducted principal components

analysis with varimax rotation to identify subgroups of women characterized by a unique set of

physical appearance characteristics based on their perception of the characteristics they deemed

most important.

Results

Mean age of the sample was 20.4 years (SD=1.56) and mean BMI was 19.6 kg/m^2. Two

percent of the women were severely underweight (BMI <16 kg/m^2), 3.5% were moderately

underweight (BMI 16.0-16.9 kg/m^2), and 26.5% were mildly underweight (BMI 17.0-18.49

kg/m^2). Sixty-five percent were within normal range (BMI 18.5-24.9 kg/m^2) and only 3% of the

women were overweight (BMI > 25 kg/m^2).

Variable Centered Factor Analysis by Region. In order to obtain factor scores (Z scores)

for each item so that we could determine those characteristics that the young women deemed

most important, we constrained the factor analysis to one factor. The factor scores revealed that

'shapely' was the most important physical appearance characteristic for participants in all four

regions (Central = 2.32; North East = 1.80; North = 1.92; South = 2.01). Women in the Central

region had the highest factor score for 'shapely.' The second most important physical appearance

trait for young women in all four regions was 'bright face skin' (Central = 1.57; North East =

1.70; North = 1.81; South = 1.69). The third most important physical appearance trait for young

women all four regions was 'white-pink skin' (Central = 1.57; North East = 1.02; North = 1.47;

South = 1.55). Women in the North East region placed more importance on high nose bridge, big

eyes, and oval face than did those in the other regions (1.23, 1.18, and 1.02 respectively). Young

women in the South region were more concerned with white skin than were women in other

regions (1.08). See Figure 3.

Person-Centered Factor Analysis by Region. Next, we conducted person-centered factor

analysis by region to identify subgroups of women within each region that differed according to

the physical appearance characteristics they deemed most important. Factor scores ranged from -

5 (least important) to +5 (most important). Although the analysis included factors that

distinguished subgroups of women based on physical appearance characteristics they considered

least important, we focused only on those factors that distinguished women based on physical

appearance characteristics they considered *most* important.

Considering factor scores of +4 and +5 most important characteristics, the results showed

that in the Central region, there were two subgroups or typologies of women: 1) one group

focused on body weight/shape, skin, and facial appearance; 2) a second group focused only on

body weight/shape and skin. In the North region there were three typologies: 1) one group focused on body weight/shape and facial appearance; 2) a second group focused on facial appearance, body weight/shape, and skin; 3) a third group focused on facial appearance and skin. In the North East region there were four typologies: 1) one group focused on body weight/shape and facial appearance; 2) a second group focused on body weight/shape, facial appearance, and skin; 3) a third group focused on facial appearance and skin; 4) and a fourth group focused on facial appearance and hair. In the South region there were five typologies: 1) one group focused on body weight/shape, facial appearance, and skin: 2) a second group focused on skin and facial appearance; 3) a third group focused on body weight/shape, facial appearance and general appearance; 4) a fourth group focused on facial appearance and hair; 5) and a fifth group focused on skin, body weight/shape and hair. See Table 1.

Discussion

In this study, we examined the similarities and differences in the characteristics of physical appearance identity among young adult women in the Central, North, Northeast and South regions of Thailand using Q-methodology—a methodology that incorporates the strengths of both qualitative and quantitative techniques. We found interesting similarities and differences in the physical appearance characteristics deemed most important by women *across regions* of Thailand and *within regions* of Thailand. The differences noted across regions may be due in part to distinct regional phenotypic characteristics (e.g. wider face and flatter nose bridge in the North East region and almond shaped eyes in the North region) and the diversity of skin color across the regions of Thailand, from light skin in the North region to dark skin in the South region.

In this study, young women in all four regions of Thailand identified 'shapely' as the most important physical appearance characteristic. This finding is very consistent with young

women in the west whose focus is primarily on body weight and shape (Annis, Cash, & Hrabosky, 2004; Brown & Dittmar, 2005; Markus, Hamill, & Sentis, 1987). Among all young Thai women, however, those from the Central region of Thailand were most concerned about body weight and shape. This finding is consistent with previous studies that showed that young women in Bangkok (in the Central region of Thailand) are particularly concerned about body weight and shape (Jennings, Forbes, McDermott, Hulse, & Juniper, 2006; Rush, 2007) and that men in Bangkok rated as most attractive women who were at the lower end of the normal range BMI (Swami & Tovée, 2007). Because Bangkok is in the Central region of Thailand which is the most metropolitan area, women in the Central region are likely to be more highly exposed to billboard advertisements, the internet, fashion magazines, clothing stores, and extremely thin models that contribute to the prevailing view that to be beautiful is to be thin.

Young women in all four regions of Thailand considered 'bright face skin' and 'white-pink (body) skin' as the next most important physical appearance characteristics. Women in the North region were most concerned about having bright face skin, perhaps because they already tend to have lighter body skin which is viewed as desirable. Women in South region were most concerned with body skin color, which may be because they tend to have darker skin color. Previous work has shown that white-pink skin suggests health and youthfulness (Matts, Fink, Grammer, & Burquest, 2007). White skin was associated with beauty, high social status, self confidence, modernity, and better job opportunities for Thai women (Aizura, 2009; Buranasak, 2006; Mills, 1997). Light skin is not only considered desirable in Thailand, but also in South Africa, Mexico, East Asia (Korea, Japan, and China), India, the Philippines (Ashikari, 2005; Glenn, 2008) and among African Americans (Atabe, 1998; Bond & Cash, 1992). In Caucasian

women, however, having tanned skin is considered most attractive (Smith, Cornelissen, and

Tovée, 2007).

Across all regions of Thailand, facial features (e.g. oval face, big eyes, and high nose

bridge) were also considered very important to physical appearance. Women in the North East

region were most concerned with facial features, which may be because they tend to have wider

faces and flatter nose bridges. Our finding is consistent with a previous study that showed that

young women in North East region considered having an oval face, a high and narrow nose

bridge, and wide eyes to be the definition of beauty (Hesse-Swain, 2006). Several studies in the

U.S. have similarly found that Caucasian young adult men and women view large round eyes as

indicators of youth and attractiveness (Berry & McArthur, 1985; Cunningham, 1986;

Cunningham, Roberts, Barbee, Druen, & Wu, 1995). Asian American women, including Thai

women, often have cosmetic surgery to achieve the Asian standard of beauty that includes large

round eyes (i.e., double fold eyelid surgery) and more prominent nose, facial features that are

associated with the ideals of beauty, success and modernity that they believe will increase the

likelihood of finding a desirable mate and getting a good job (Aizura, 2009; Kaw, 1993)

Despite regional similarities and differences, we also found interesting within-region

differences. In the Central region, there were only two subgroups of women, whereas in the

South region there were five distinct subgroups of women. Women in Central Thailand tended

not to have the perceived undesirable characteristics of darker skin noted in the South region,

wider face and flatter nose bridge noted in the North East region, and almond shaped eyes noted

in the North region. Perhaps because Central Thailand is the most metropolitan area, women

tended to focus more exclusively on body weight and shape than on other areas of the body.

Interestingly, the least metropolitan area (the South region) had the most distinct subgroups of

women (5), followed by the North East region (4) and then the North region (3). This raises interesting questions about factors in urban and rural areas that might differentially contribute to the focus on physical appearance.

This was the first study to empirically examine components of physical appearance identity in young women in Thailand. The important differences we found both within and across regions may explain the variety of behaviors used by Thai women to enhance their physical appearance. The unique regional and within-region factors that contribute to women adopting different aspects of physical appearance as central sources of self-definition remain unknown, however.

Despite these strengths, there were some limitations. First, the cross-sectional nature of this study prohibits causal inferences. Second, because the research participants were obtained using convenience, purposive sampling, with only 50 women per region, the generalizability of the findings is limited. Third, we did not measure factors that contribute to physical appearance identity.

Based on the findings from this study, there are several recommendations for further research, education and practice. Further research should focus on regional factors that contribute to physical appearance becoming a dominant source of self-definition, and the developmental time points most sensitive to intervention. Because of the considerable health risk behaviors associated with physical appearance identity, nursing education should add this focus to the curriculum. Finally, it is important for nurses in diverse practice settings to educate young women about the risks associated with the health compromising behaviors aimed at altering physical appearance and carefully assess young women who may be at high risk for engaging in health compromising behaviors aimed at altering physical appearance.

References

Aizura, A. Z. (2009). Where health and beauty meet: Femininity and Racialisation in Thai

cosmetic surgery clinics. *Asian Studies Review, 33*(3), 303-317.

doi:10.1080/10357820903153707

Amin, Z. (2000). Q methodology: A journey into the subjectivity of human mind. *E-Journal of

Singapore Medical Journal, 41*(8), 410-414. Retrieved from

http://www.sma.org.sg/smj/4108/4108ra1.pdf

Annis, N. M., Cash, T. F., & Hrabosky, J. (2004). Body image and psychosocial differences

among stable average weight, currently overweight, and formerly overweight women: the

role of stigmatizing experiences. *Body Image, 1*(2), 155-167. doi:

10.1016/j.bodyim.2003.12.001

Ashikari, M. (2005). Cultivating Japanese whiteness: The whitening cosmetics boom and the

Japanese identity. *Journal of Material Culture, 10*(1), 73-91. doi:

10.1177/1359183505050095

Atabe, M. (1998). Ethnicity and body image: quantitative and qualitative analysis. *International

Journal of Eating Disorders, 23,* 135-159. doi:10.1002/(SICI)1098-

108X(199803)23:2<153::AID-EAT5>3.0.CO;2-J

Berry, D. S., & McArthur, L. Z. (1985). Some components and consequences of a babyface.

Journal of Personality and Social Psychology, 48(2), 312-323. doi:10.1037/0022-

3514.48.2.312

Bond, S., & Cash, T. F. (1992). Black beauty: Skin color and body image among African-

American college women. *Journal of Applied Social Psychology, 22*(11), 874-888.

doi:10.1111/j.1559-1816.1992.tb00930.x

Brown, A., & Dittmar, H. (2005). Think thin and feel bad: the role of appearance schema

    activation, attention level, and thin-ideal internalization for young women's responses to

    ultra-thin media ideals. *Journal of Social and Clinical Psychology, 24*(8), 1088-1113.

    doi: 10.1521/jscp.2005.24.8.1088

Brown, S. R. (1996). Q methodology and qualitative research. *Qualitative Health Research, 6*,

    561-567. doi:10.1177/104973239600600408

Buranasak, J. (2006). *The whitening cream influences self and identity of female workers*

    (Master's thesis, Mahidol University, Thailand). Retrieved from

    http://mulinet10.li.mahidol.ac.th/e-thesis/4437082.pdf

Cash, T. F., & Henry, P. E. (1995). Women's body image: The results of a national survey in the

    U.S.A. *Sex Role, 33*(1-2), 19-28. doi:10.1007/BF01547933

Cunningham, M. R. (1986). Measuring the physical in physical attractiveness: Quasi-

    experiments on the sociobiology of female facial beauty. *Journal of Personality and*

    Social Psychology, 50(5), 925-935. doi:10.1037/0022-3514.50.5.925

Cunningham, M. R., Roberts, A. R., Barbee, A.P., Druen, P.B., & Wu, C-H. (1995). "Their ideas

    of beauty are, on the whole, the same as ours": Consistency and variability in the cross-

    cultural perception of female physical attractiveness. *Journal of Personality and Social*

    Psychology,68(2), 261-279. doi:10.1037/0022-3514.68.2.261

Demarest, J., & Allen, R., (2000). Body image: Gender, ethnic, and age differences. *The Journal*

    of Social Psychology, 140(4), 465-472. doi:10.1080/00224540009600485

Dennis, K. E., & Goldberg, A. P. (1996). Weight control self-efficacy types and transitions affect

    weight-loss outcomes in obese women. *Addictive Behaviors, 21*(1), 103-116.

    doi:10.1016/0306-4603(95)00042-9

Glenn, E. N. (2008). Yearning for lightness: Transnational circuits in the marketing and

    consumption of skin lighteners. *Gender and Society, 22*, 281-302.

    doi:10.1177/0891243208316089

Grabe, S., & Hyde, J. S. (2006). Ethnicity and body dissatisfaction among women in the United

    States: A meta-analysis. *Psychological Bulletin, 132*(4), 622-640. doi:10.1037/0033-

    2909.132.4.622

Hayashi, F., Takimoto, H., Yoshita, K., & Yoshiike, N. (2006). Perceived body size and desire

    for thinness of young Japanese women: A population-based survey. *British Journal of

    Nutrition, 96*, 1154-1162. doi: 10.1017/BJN20061921

Hesse-Swain, C. (2006). Programming beauty and the absence of Na Lao: popular Thai TV and

    identity formation among youth in Northeast Thiland. *GeoJournal, 66*(3), 257-272.

    doi:10.1007/s10708-006-9028-x

Ip, K., & Jarry, J. L. (2008). Investment in body image for self-definition results in greater

    vulnerability to the thin media than does investment in appearance management. *Body

    Image, 5*(1), 59-69. doi:10.1016/j.bodyim.2007.08.002

Jacobson, S. W. & Aaltio-Marjosola, I. (2001). "Strong" objectivity and the use of Q-

    methodology in cross-cultural research: Contextualizing the Experience

    of Women Managers and Their Scripts of Career. *Journal of Management Inquiry, 10*(3),

    228-248. doi:10.1177/1056492601103006

Jaeger, B., Ruggiero, G. M., Edlund, E., Gomez-Perretta, C., Lang, F., Mohammadkhani, P., et

    al. (2007). Body dissatisfaction and its interrelations with other risk factors for bulimia

    nervosa in 12 countries. *Psychotherapy and Psychosomatics, 71*(1), 54-61.

    doi:10.1159/000049344

Jennings, P. S., Forbes, D., McDermott, B., Hulse, G., & Juniper, S. (2006). Eating disorder

    attitudes and psychopathology in Caucasian Australian, Asian and Australian and Thai

    university students. *Australian and New Zealand Journal of Psychiatry, 40*(2), 143-149.

    doi:10.1111/j.1440-1614.2006.01761.x

Kaw, E. (1993). Medicalization of racial features: Asian American women and cosmetic surgery.

    Medical Anthropology Quarterly, 7(1), 74-89. doi:10.1525/maq.1993.7.1.02a00050

Markus, H., Hamill, R., & Sentis, K. P. (1987). Thinking fat: Self-schemas for body weight and

    the processing of weight relevant information. *Journal of Applied Social Psychology,

    17*(1), 50–71. doi:10.1111/j.1559-1816.1987.tb00292.x

Matts, P. J., Fink, B., Grammer, K., & Burquest, M. (2007). Color homogeneity and visual

    perception of age, health, and attractiveness of female facial skin. *Journal of American

    Academy of Dermatology, 57*, 977-984. doi:10.1016/j.jaad.2007.07.040

Mill, M. B. (1997). Contesting the margins of modernity: Women, Migration, and consumption

    in Thailand. *E-Journal of American Ethnologist, 24*(1), 37-61. Retrieved from

    http://www.jstor.org/stable/pdfplus/646565.pdf

Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods* (7th ed.).

    Philadelphia: Lippincott, Williams & Wilkins.

Polivy, J., & Herman, C. P. (2004). Sociocultural idealization of thin female body shapes: An

    introduction to the special issue on body image and eating disorders. *Journal of Social

    and Clinical Psychology, 23*(1), 1–6. doi:10.1521/jscp.23.1.1.26986

Prasad, R. S. (2001). Development of the HIV/AIDS Q-sort instrument to measure physician

    attitudes. *E-Journal of Family Medicine, 33*(10), 772-778. Retrieved from

    https://www.stfm.org/fmhub/fm2001/nov01/cram.pdf

Rudiger, J. A., Cash, T. F., Roehrig, M., & Thompson, J. K. (2007). Day-to-day body-image

states: Prospective predictors of intra-individual level and variability. *Body Image, 4*(1),

1-9. doi:10.1016/j.bodyim.2006.11.004

Rush, E. (2007). A reflective analysis of a transformative pedagogical approach at a rural Thai

university (Master's thesis, Murdoch University, Perth, Western Australia). Retrieved

from http://wwwlib.murdoch.edu.au/adt/browse/view/adt-MU20071129.122953

Smith, K. L., Cornelissen, P. L., & Tovée, M. J. (2007). Color 3D bodies and judgments of

human female attractiveness. *Evolution and Human Behavior, 28*, 48-54.

doi:10.1016/j.evolhumbehav.2006.05.007

Stein, K. F., & Corte, C. (2007). Identity impairment and the eating disorder: content and

organization of the self-concept in women with anorexia nervosa and bulimia nervosa.

European Eating Disorders Review, 15(1), 58-69. doi:10.1002/erv.726

Stein, K. F., & Corte, C. (2008). The identity impairment model: A longitudinal study of self-

schemas as predictors of disordered eating behaviors. *Nursing Research, 57,* 182-190.

doi:10.1097/01.NNR.0000319494.21628.08

Swami, V., & Tovée, M. J. (2007). Differences in attractiveness preferences between observers

in low and high-resource environments in Thailand. *Journal of Evolutionary Psychology,

5*, 149-160. doi:10.1556/JEP.2007.1005

Thianthai, C. (2006). Influential sources affecting Bangkok adolescent body image perceptions.

International Journal of Adolescent Medicine and Health, 18(4), 633-641.

Thianthai, C. (2008). Do male and female adolescents view their dissatisfaction with body parts

in the same way?. *International Journal of Adolescent Medicine and Health, 20*(1), 33-

39.

Venables, D., Pidgeon, N., Simmons, P., Henwood, K., & Parkhill, K. (2009). Living with

    nuclear power: A Q-method study of local community perceptions. *Risk Analysis, 29*(8),

    1089-1104. doi:10.1111/j.1539-6924.2009.01259.x

least important					neutral or not sure					most important
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Large frame	Petite frame	Black hair	Straight hair	Beautiful lips	Beautiful hips	Slim fingers	Oval face	High nose bridge	Bright face skin	Shapely
	Slender neck	Long hair	Long fingers	Honey skin	Smooth skin	Flat belly	Small waist	Beautiful breasts	Nice teeth	
			Big eyes	Short hair	White skin	Skinny	Bright skin			
				Broad shoulders	Tan skin	White-pink skin				
					Wavy hair					
					Brown hair					

Figure 1. Example completed 'Q-sort' configuration

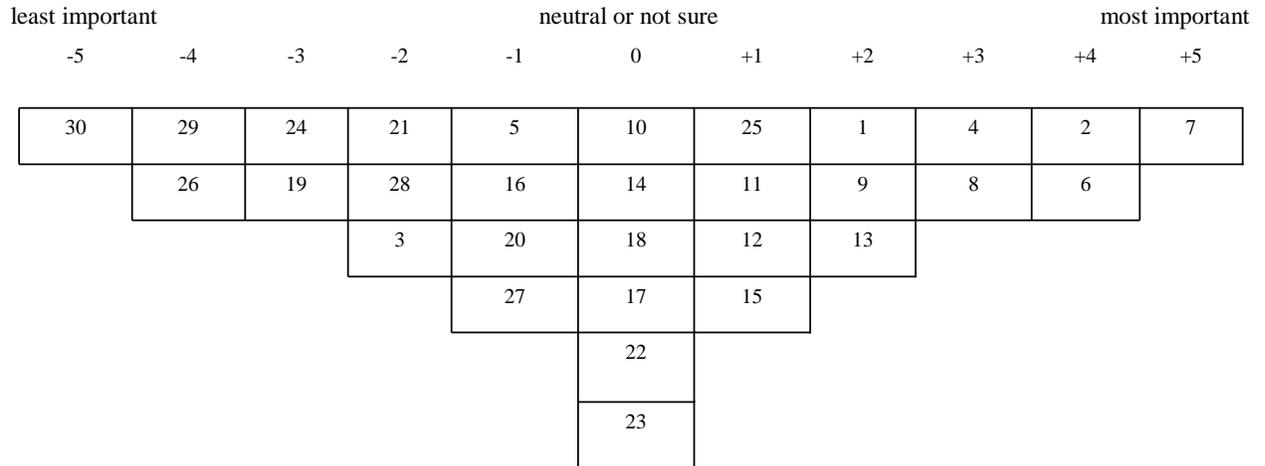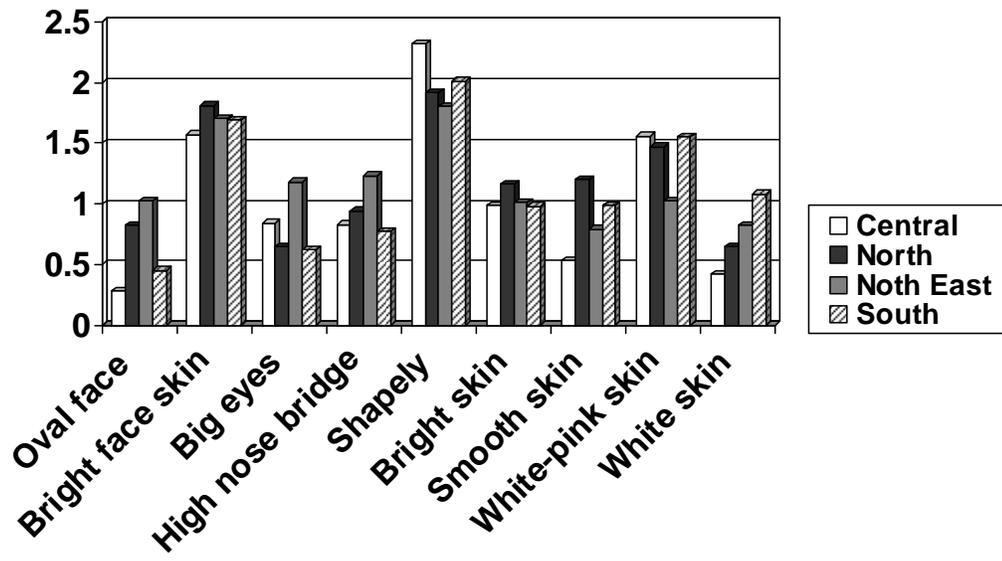| least important					neutral or not sure					most important
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
30	29	24	21	5	10	25	1	4	2	7
	26	19	28	16	14	11	9	8	6	
			3	20	18	12	13			
				27	17	15				
					22					
					23					

Figure 2. Sample coded Q-sort

Figure 3. Regional differences in factor scores for the physical appearance characteristics

considered most important

Table1

Physical appearance typologies of women in Thailand by region

	Trait	Typology 1	Typology 2	Typology 3	Typology 4	Typology 5
Central	Bright face skin	**4**	3			
	Shapely	**5**	**5**			
	White-pink skin	**4**	**4**			
	White skin	-1	**4**			
	Trait	Typology 1	Typology 2	Typology 3		
North	Oval face	**4**	0	2		
	Bright face skin	**5**	**5**	**4**		
	Big eyes	1	1	**4**		
	Shapely	3	**4**	**5**		
	Bright skin	3	**4**	-1		
	White-pink skin	**4**	3	2		
	Trait	Typology 1	Typology 2	Typology 3	Typology 4	
North East	Oval face	**5**	3	1	-1	
	Bright face skin	-1	2	**5**	**4**	
	Big eyes	**4**	1	3	**5**	
	High nose bridge	**4**	**4**	3	1	
	Shapely	3	**5**	**4**	-1	
	Bright skin	2	**4**	2	0	
	Smooth skin	-2	1	2	**4**	
	White skin	0	0	**4**	0	
	Trait	Typology 1	Typology 2	Typology 3	Typology 4	Typology 5
South	Bright face skin	1	**4**	**4**	2	**4**
	Big eyes	2	2	1	**4**	3
	High nose bridge	1	3	3	**4**	1
	Shapely	**4**	**5**	**5**	1	2
	Petite frame	-3	**4**	-1	-2	1
	Smooth skin	0	1	0	3	**4**
	White-pink skin	**5**	0	**4**	1	0
	White skin	3	-2	0	3	**5**
	Black hair	0	1	-3	**5**	-1
	Long hair	**4**	2	1	-3	1

*Factor scores of 4 or 5 indicate high importance of the characteristic to the self-definition