A Regression Analysis: Factors that Contribute to White-Skin Preference

Among Thai College Women

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Senior Project Title   A Regression Analysis: Factors that Contribute to White-Skin

Preference Among Thai College Women

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This senior project is accepted by the Faculty of Psychology, Chulalongkorn University

in partial fulfillment of the requirements for Bachelor of Science degree (Psychological Science).

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NUALPORN SMERASUTA: THUNYAPORN KIJSATAPORN: WANPADEE KITCHAWENGKUL: A REGRESSION ANALYSIS: FACTORS THAT CONTRIBUTE TO WHITE-SKIN PREFERENCE AMONG THAI COLLEGE WOMEN: ADVISOR: ASSIST. PROF. DR. PANRAPEE SUTTIWAN, CO-ADVISOR: SAKKAPHAT T. NGAMAKE, 46 pp.

Abstract

This study aims to examine the relations between white skin preference and the influence of media and advertisement, the influence of significant people, prejudice against dark skin, skin tone esteem, and skin dissatisfaction. In this study, convenience sampling is adopted to recruit one hundred and twelve Thai female college students. A set of questionnaires that assessed five variables were completed by the mentioned target group. A standard multiple regression analysis was conducted on these variables. As predicted, all of our predictors, together, predict white skin preference as high as 74% variance accounted for, ($F(5, 106) = 59.10$, $p < .001$). It is found that, out of the five predictors, four of them significantly contribute to white skin preference among Thai college women. These predictors are *media and advertisement, significant people, prejudice against dark skin,* and *skin tone esteem*. Even though *skin tone dissatisfaction* does not significantly contribute to white skin preference, it is important to note that its small contribution as one of the predictors can still be valued. Implications of the findings for future intervention of white skin tone obsession are discussed along with possibilities for future research in this area.

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Academic Year: ....2015.............. Student's Signature ....

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Chapter 1

In Thailand and other East Asian Countries, white skin colour is perceived as "beautiful". Among Asian cultures, it indicates opportunity, achievement, high social status, and nobility (Leong, 2006; Krishen, Latour, & Alishah, 2014; Ismail, Loya, & Hussian, 2015) while dark skin is associated with workforce and hardworking, enclosed with sunlight (Shankar & Subish, 2007). This deep-rooted traditional value reflects upon film industry, media, advertisement, and beauty contest (Shankar & Subish, 2007). Shunning from sunlight, applying sun-blocking products, using whitening products, or getting skin-lightening injection are commonly seen in Thai society, especially among females (Kaewmala, 2012). While a desire to have white-skinned sounds normal and harmless, some people take it to the extreme that lead to numerous undesirable consequences.

The prevalence of white skin preference is currently exploited by numerous skincare manufacturers (Shankar & Subish, 2007). Fairness cream companies are coming up whitening products that guarantee to lighten up skin complexion in various parts, such as the face, body, armpit, or even vagina (Kaewmala, 2012). Many whitening products have a high composition of mercury, which can inhibit the production of melanin, resulting in a lighter skin complexion. Nevertheless, it demelanizes skin, which increases the sensitivity to sunlight, causing vulnerability to get damaged (Shankar & Subish, 2007). In addition, regularly using mercury products can adversely cause skin rash, skin discoloration, and scarring (World Health Organization, 2011). A survey reported that 20% of whitening products have the composition of mercury, which causes instant and long-term adverse effect, such as sensitivity to sunlight (Kaewmala, 2012).

Moreover, skin colour is another factor that impact different types of categorisation, such as race, status, and personality, which influence the way individuals are treated (Jones, 2000). The fact that most of Asian countries had been colonised by the Western empire might give rise to the association between light skin and power (Hall, 2003; Shankar & Subish, 2007). In the past, Black or dark-skinned people were looked down and were perceived as inferior (Hall, 2003; Telles, Flores, & Urrea-Giraldo, 2015). Recent studies reported that the pigmentocracy or discrimination based on skin tone is still prevalent among modern societies (Hall, 2003; Telles et al., 2015). For instance, Darker-skinned persons received more educational penalties than lighter-skinned persons (Telles et al., 2015). These example show how dark skin is less preferred and is treated negatively by society, which originated the prejudice against dark-skinned tone and promoted the preference for white skin.

Furthermore, white skin preference among Thai society can result in anxiety and depression among dark-skinned or even some white-skinned people. While dark-skinned people are motivated to lighten their skin tone up, white-skinned people are motivated to maintain their tone. White skin complexion is promoted as an ideal skin colour for both males and females, which can cause anxiety and depression regarding their skin tone dissatisfaction (Shankar & Subish, 2007). Physical appearance concern can result in negative effects, such as depression and low self-esteem, and leads to subsequent behaviours (Rongmuang, McElmurry, McCreary, Park, Miller, & Corte, 2010). One influential factor that seems to heighten the craze of white skin among Thai society is advertisement. For instance, a recent advertisement was released with a slogan of "white makes you win", featuring with a famous Thai female actress. The ads promoted how the actress attributed her success in her career to her white skin complexion. It also implied that if you were born have dark-skinned, you always lose, which caused outrage and

allegation of racism in the online world (Kaewmala, 2012). Therefore, white skin complexion is promoted to increase attractiveness for both males and females; however, it can elicit anxiety and depression which is detrimental to mental well-being (Shankar & Subish, 2007).

In the present study, white skin preference refers to any behaviours that contribute to whiter skin complexion and intentions to have lighter skin complexion. As previously mentioned, white skin preference is a widespread trend among Thai culture; however, it can lead to negative consequences, such as the exploitation of skin manufacturers, colourism discrimination, and negative mental well-being. We propose that it is crucial to identify factors that contribute to white skin preference among Thai females. Consequently, appropriate interventions can be developed afterward.

Theoretical Background

Based on social psychology perspective, some physical features seem to be socially desirable than other features. Since skin colour is the largest and most visible part of the body, it seems to be obvious and reasonable if society will value it. It is also reported that skin tone is highly associated with other phenotypic structures, such as eye colour, shape of nose and lip, and hair texture (Thompson & Keith, 2001). These presenting physical attractive features are often judged in relation to other positive predisposition toward oneself. For example, attractiveness may affect perceptions associated to life success and good characteristics (Wade & DiMaria, 2003). This phenomenon is recognised as a Halo effect. In employment, lighter-skinned job applicants are more likely to benefit from the halo effects since they are perceived as high-class and intelligence. This in turn, making fair skin women to have better job opportunities and lead to life success (Chaipraditkul, 2013). Since skin colour has an impact on perception of

attractiveness, which leads to "halo" effects, skin colour is an important body part for most people.

Based on evolutionary perspective, physical attractiveness is another crucial factor for human mating, especially for women (Gopinath, 2012). Skin tone concerns and physical attractiveness are highly linked to each other and they seems to be more heavily relevant to women across culture than men (Thompson & Keith, 2001). It has been investigated that girls are more sensitive to their skin colour than boys did during their childhood (e.g., Porter, 1971). Various studies found that many cultures emphasized the value of having lighter skin as an attractive feature for females (Lewis, 2010). In addition, whiter skin in women indicates youthfulness, positive health, and fertility, which are desired features for mating selection (Fink, Grammer, & Matts, 2006; Wade, 2008). Some studies also found that Asian males accepted that they preferred white-skin females (Thompson & Keith, 2001; Shankar & Subish, 2007). Due to sexual selection, females tend to adapt themselves to features that are considered as attractive to increase chances of getting a mate and producing offsprings (Wade, 2003; Swami & Tovee, 2007).

Literature review

This section discusses five major factors that seem to contribute to white skin preference among Thai females based on past research: media and advertisement, the influence of significant people, prejudice against dark skin tone, skin tone esteem, and skin tone dissatisfaction.

External factors: Media, Advertisement, and Significant People

Appearance and body image are the important indicators of one's life particularly in women. Striving to have white-skin in Asian society is considered one of the body dissatisfaction

among other body dissatisfactions such as thinness and cosmetic surgery (Aizura, 2009; Tiggeman, 2011). Body dissatisfaction is influenced by sociocultural factors; therefore, preference to have white-skin would be influenced by the same mechanism. Media, including advertisements, and social media, along with influence from family, friends, and partners can affect the body image and white-skin preference of individuals. One theoretical framework that is able to explain these factors is the 'Sociocultural Model'. It mainly emphasised on sociocultural ideals and pressures as the influential factors of body satisfaction (Tiggemann, 2011).

The Sociocultural Model provides the framework to understand body image (Tiggemann, 2011). The Sociocultural model stated that (1) societal ideals of beauty exist in one culture and (2) these beauty ideals are absorbed via various sociocultural channels. Hence, these ideals are (3) internalized by individuals and that causing (4) satisfaction or dissatisfaction with the appearance would be a function of the extent to which individuals would or would not meet the ideal prescription from the societal ideals (Tiggemann, 2011).

These societal ideals are operated in society through television, magazines and social media. Most advertisements use ideal star with fair and white skin to promote their products (Rongmuang et al., 2011). Most of the advertisements used digital modification techniques to make the model look perfect (Tiggemann, 2011). These ideals are passed through powerful and pervasive sociocultural influences (i.e. media, family and peer). Although these ideals are hard to achieve and sometimes impossible to some people, many people accept and internalize these ideals as reference points (Tiggemann, 2011). This leading to body dissatisfaction and leading to the attempts to engage any behaviour that would make them closer to their ideals.

The three socio-cultural impacts have been indicated as vital transmitters of sociocultural ideals (i.e., parents, peers, and the media). The role of each factor has been supported by abundance of the correlational research on body image (Tiggemann, 2011). However, the role of each factor and its effect on white-skin preference will be explained in further details in sub-sections. In addition, we decided to include partner as a factor that might contribute in white-skin preference in young women.

Media and Advertisement Influence. Media and advertisements in society are reflection of cultural values and promoted ideal physical attractiveness of individual (Jung & Lennon., 2003). Advertisements play an important role in changing one's ideal self-images (Eric, 2008). Sociocultural factors, especially, media may contribute to appearance-related concerns in young Thai women (Rongmuang et al., 2011; Aizura, 2009). In addition, a growing numbers of advertisements in Thailand have been promoting white skin as desirable and attractive. Young women are then exposed to ideal and unhealthy messages to have white-skin (Rongmuang et al., 2011). In addition, messages from television and magazines (e.g. advertisements and thin models) that shown beautiful white-skinned tall women are associated with physical appearance dissatisfaction in Thai women (Rongmuang et al, 2011; Thianthai, 2006). It is also found that media such as magazines and televisions is the strongest influential source in predicting body image perception among adolescents in Thailand (Thianthai, 2006).

In Asia, whitening skin products are widely promoted especially in Japan, China, Korea, Indonesia, and Thailand (Chaipraditkul, 2013; Krishen, 2014). Most of the skin products in South and East Asia emphasize an ideal image of having white skin. These products persuade people for the idea of having white skin is important through advertisements. These

advertisements would promote ideals image in order to make profits out of it without realising that it would lead to the negative effects on one's self-appearance.

In Thailand, whitening skin products accounted for half of the skincare market in 2007 (Kongwong & Wattananamkul, 2011). The image of having white Asian skin overpowers advertisements in Thailand and strongly contradicts to the darker skin of most Thais (Franklin, 2013). According to Thai's advertisements, a foreign person might assume that ideal beauty in Thai cultures value highly on skin bleaching, double fold eyelid surgery and nose surgery (Aizura, 2009).

Skin-lightening advertisements have emphasized the myth of having white-skinned as beauty and superior over the dark skin (Chaipraditkul, 2013). These advertisements have pushed pressures to consumers by exaggerating the belief that dark skin is undesirable (Glenn, 2008). For examples, some of the advertisements convince consumers not only the preexisting needs to have whiter skin but creating the needs by giving examples that having dark skin can be depressing experience. Dark-skinned women in advertisements were shown as being unhappy, having low self-esteem and using the products are the only way to avoid getting dark skin and avoid having bad lives (Glenn, 2008). In Thailand, commercial advertisements and films presented the image of ideal Thai women who has white skin not only perceived as beautiful but also a reflection of high class and being modern in the society (Rongmuang et al, 2011).

Preference for white skin in women and yearning for whitening skin are greatly influenced from social media since it determined the society what considered as attractive. When individual compares oneself to ideal image, the gap between ideal image in media (e.g. white thin models) and actual body image of oneself can create body dissatisfaction (Tiggemann & Mcgill, 2004). Automatic comparison might occur without the intentions through media such as

television and magazines that promote cultural ideals of beauty (Rudd & Lennon, 2000).It is shown that media exposures through fashion magazine or television are positively correlated with body dissatisfaction (Tiggemann & Mcgill, 2004). Furthermore, Shaw and Waller found that comparisons that made with media images by using indirect contact (e.g. looking at magazine picture) are likely to make women to use these images as a standard to evaluate their own bodies (Jung & Lennon, 2003).

Considering the number of growing advertisements of skin-whitening products that promote the models having white skins being desirable and attractive, these affects Thai women to compare with themselves and might internalise the ideals image if they are exposed to these media messages regularly (Tiggemann, 2011). In the past decade, these media messages are transmitted in everyday's life through fashion magazines and televisions. Mass media is considered as the most powerful factor contributes to beauty ideals (Tiggemann, 2011). To these modern days however, social media such as internet, Facebook, Instagram and other platforms, might even give larger impacts through young women (Gallivan, 2014; Roxby, 2014). Social media has a great effect on young women's body image since it cannot be ignored unlike traditional media (Roxby, 2014). Messages and images are more targeted to a person (Gallivan, 2014). Although the association between internet and social media use and body image are still under investigated, it is likely that social media would be the influence on young women to have white-skin preference.

To date, psychological research examining the effect of media on skin colour preference are still limited. However, recent research on tanning behaviour in Australia found that sociocultural norms including media portray images and ideal skin tone are correlated with tanning behaviours (Day et al., 2015). In addition, another study examining variables

contributing in creating obsession for white skin colour in Pakistan found that advertisements of white skin products are associated with white skin obsessions (Ismail, Loya, & Hussain, 2015).

To sum up, according to various findings on body-image and white-skin preference, media influence (e.g. televisions, advertisements and social media) could predict preference for white-skin in young women.

Influence of Significant People. Significant people around individual (i.e., families, peers, and partners) could be the influential sources in predicting white-skin preference. One of the theories that can be applied to white skin preference is the Theory of Planned Behaviour (TPB) proposed by Icek Ajzen and Fishbein (1975). According to the theory, there are three beliefs that affect how human behaviour is occurred: (1) beliefs about the likelihood that behaviours would happen (behavioural beliefs), (2) beliefs about the normative expectations of significant others (normative beliefs), and (3) beliefs about the factors that can reinforce or worsen the performance of the behaviour (control beliefs) (Fishbein & Ajzen, 1975; Ajzen, 1991). As the consequences of these beliefs, behavioural beliefs would result in positive or negative attitudes toward the behaviour, normative beliefs produce subjective norms or perceiving social pressures, control beliefs would create perceived behavioural controls. All of these three, in turn, create formation of a behavioural intention. The more intention they have from the stronger beliefs, the more likely that the actual behaviour will occur (Ajzen, 1991).

According to TPB, normative beliefs are the ones that explains how significant people which are family, friends, and partner to influence how a person to have preference on white-skin colour. Normative beliefs are one's beliefs about what other significant people (e.g. person's spouse, family, and friends) around them think they should or should not do the behaviour (Fishbein & Ajzen, 1975; Ajzen, 1991). These normative beliefs or perceiving these expectations

from other significant people, along with person's motivation to comply with different referents of other people, would lead to subjective norm (Ajzen, 1991). Subjective norm is the perceived social pressure from referents to do or not to do the behaviour. It is the predictor of intention to engage in the behaviour and would lead to actual behaviour in the end (Ajzen, 1991). Hence, the more positive the attitude and subjective norm towards the behavior have, the stronger person's intention to engage the behaviour. In regards to our study, "I think my parent wants me to have white-skin" would be subjective norm beliefs. And the intention to be have white-skin would be "I want to have white-skin because my parents want me to be."

Apart from Theory of planned behaviour, sociocultural model of body image might be able to explain the significant people and white-skin preference. From sociocultural perspective, social influences such as family and pressure from friends may affect the concerns on their appearance in young Thai women (Rongmuang et al., 2011). Peers and families supported body ideals both directly and indirectly that are usually in accordance with ideal images that presented in media (Hermann, 2013). In addition, recent study from Day et al. (2015) examining sociocultural norms (i.e. media, peer and family norms) found that perceptions of sociocultural norms on tanning behaviour influenced individual to engage in behaviour with peer norms being the strongest predictor. However, none of the previous studies has examined the direct relationship between parents, peers, and partners influence on one's white skin preference.

Families. Families are critical in a development of body image by shaping attitudes and values for children (Jones, 2011). Parents show their expectations and beliefs about the appearance in daily lifestyle. They function as models, critics, and support the development of body image since early childhood (Jones, 2011). Parents serve as model by expressing their attitudes about appearance and evaluating their own and other's bodies. These lead the children

to value or critique themselves and other people accordingly. Parents who tend to criticise about their children's weight and physical limitations can lead the children to develop body image dissatisfaction (Aliyev & Turkmen, 2014). Moreover, there were number of studies on adolescent tanning behaviour that is affected by parental attitudes and can be compared to white-skin contexts. It was found in five studies that adolescents who tanned or have a notion that significant people look more attractive with a tan skin were more likely to get indoor tan themselves. At the same time, adolescents with parents who do not encouraging for tanning behaviours were less likely to have indoor tanning (Holman & Watson, 2013).

In addition, the role of siblings is found to be associated with body-image, however, direct effect between influence of siblings and white-skin preference are also under-investigated (Jones, 2011). It is suggested that siblings are more prone to share the same levels of body dissatisfaction. Moreover, appearance teasing is common amongst siblings but it is more common if those parents also tease children about appearance (Jones, 2011).

Peers. Role of peers in influencing body image perceptions have contributed an important factor in adolescents and young women. Social comparison is occurred among adolescents. It is probable that peer messages concerning body shape is likely to affect one's body image (Aliyev & Turkmen, 2014). Friends often share similar interests and values including appearance (Jones, 2011). These concerns over body image are often found in conversations about appearance and body change strategies (Jones, 2011).Friends can be influential via swapping information, modeling behaviours, pushing pressure and peer teasing. It can be seen that perceived social peers towards tanning and tanned skin are significantly related to one person to get tanning (Holman & Watson, 2013). Studies found that having friends who were tan or who like to be tan was positively related with indoor tanning. On the other hand,

Thianthai (2006) found that peer groups ranked as a third influential source (following magazines and televisions as most influential sources) in contributing to body image perception for Bangkok adolescents. It was found that friends' words of complimenting, teasing and criticizing body image to name calling affect one's body image (Thianthai, 2006). In addition, in Thailand, being called or teased as "tua dam" or black body, along the same meanings as "e dam" (black girl) or "dam tap pet" (black like a duck's liver) could be considered as common insult in society (Aizura, 2009). Teasing from peers about these things could be hurtful and least humorous for one to receive (Jones, 2011)

   Partners. Although there is no research of partner influence on female's preference on white skin, there is few research of the role of the partner may contribute to the body dissatisfaction (Markey and Markey, 2006). It is found that young women are worried about their appearance of how it would be perceived by others such as potential partners and opposite genders. It is also suggested that young women's body dissatisfaction can be affected from criticism from romantic partners (Befort et al., 2001). Furthermore, it is found that physical appearances are important for attracting romantic partners for both genders (Jones, 2011). These could create indirect pressure on women to be attractive according to what characteristics that men want to date with partner (Jones, 2011). Influences from opposite gender such as being in a relationship or the desire to attract the human mates are the contributing factors that affecting a person to concern about their appearance (Thianthai, 2006).

   As a cultural belief in Asia, having fairer skin leads to more probability to have higher marriage partner's social class in the future (Chaipraditkul, 2013). According to evolutionary perspective, females would try to adapt themselves to attract the partners in order to be successful in mating (Wade, 2008). We assume that women will try to remain attractive to the

standard that their partners have towards their preference of physical attractiveness. If the partners prefer the women to have whiter skin, it might be the contributing factors to a person to have desire to have whiter skin as well.

According to theory of planned behaviours, perceived social pressure from subjective norms such as families, peers, and partners about having white-skin preference would lead individuals to have the same beliefs and lead them to have preference for white skin (Ajzen, 1991). Along with the sociocultural model, individuals who internalising messages from significant people who convey the message directly and indirectly, would be more likely to have desire for their skin to be white as well (Tiggemann, 2011). Hence, we hypothesised that the influence of significant people (i.e. families, peers and partners) would predict one's preference to have white skin.

Internal Factors: Prejudice against Dark Skin, Skin Tone Esteem, and Skin Dissatisfaction

      Prejudice against Dark Skin. Prejudice against dark skin, in this study, is referred to the negative generalising attitudes directed toward people with dark skin tone. This prejudice against dark skin is very prevalent in Thai society (Aizura, 2009). Many research conducted in Thailand found that Thai women believe that having dark skin is equal to lower job opportunities, less beautiful, not trendy, less favourable to Thai men, unattractive, poor, come from rural background, suspicion involvement with prostitution, worse job opportunities and lower self-confidence (Buranasak, 2006; Esara, 2009; Sunanta, 2004; Aizura, 2009). These attitudes revealed a great prejudice Thai people have against dark skin.

According to Allport (1953)'s 5 stages of prejudices, prejudice against dark skin color in Thai society is in the stage of anti-locution which is the verbal attack, malicious gossip and nasty jokes. Showing through media, there have always been jokes or verbal put down about people

with dark skin tone (Rongmuang et al., 2011). Frequent exposure to negative evaluation can undermine women's sense of self (Thompson & Keith, 2001). Women who are in this devalued social group would evaluate themselves more negatively and they would feel the pressure to enhance their skin tone. For the member of devalued social group to deal with this prejudice, according to social identity theory, one of the strategies they would employ when they perceived low permeability between the two groups is the individual mobilisation, which is that they would try to enhance themselves to be in a valued social group (Tajfel & Turner, 1979). It could be possible that females who hold such prejudice would engage in whitening behaviour in order to escape the devalued group or to enhance their social status. At the same time, people who are in the valued group, or having white skin, who also hold such prejudice, would feel the pressure to maintain their skin tone in order to maintain their social status. For these reasons, it is likely that Thai females, regardless of the skin tone, could have higher white-skin preference with increasing prejudice against dark skin.

Another model that could help in strengthening the logical background of this relationship is the tricomponent model. From this model, there are three components of attitudes: cognitive component, affective component and behavioural component. These three components interact with each other to shape one's attitude (Newcomb et al., 1961). The prejudice against dark skin, as defined in this research, could be categorised as both cognitive and affective components as it is the negative belief and feeling that people have against female with dark skin. This prejudice would potentially affect the white-skin preference which is defined as the behavioural aspect in this study. It is important to note that not all prejudices would lead to self-enhancement behaviour but skin colour in Thailand is perceived as having low permeability of the group boundaries, which is that it is possible for one to make themselves whiter skin (Aizura,

2009). Therefore, it can be assumed that people with high prejudice against dark skin would have more whitening intentions and behaviour.

For the past literature, since the concept of white-skin preference is new and it is only problematic mainly in Asia, there are not many psychological literatures explored on this area. However, there are some literatures focused on factors underlying anti-fat attitudes and tan-preference attitudes, which have the huge overlap with skin preferences such as it is both under the concept of physical appearance and it is the trend of beauty (Chaipraditkul, 2013). Anti-fat attitudes studies found that prejudice, attributions and personality factors are the important contributors for this anti-fat preference (Crandall, 1994; Crandall et al., 2001). More interestingly, a study in USA found that artificial tanning attitudes can be made less favourable by decreasing the misbelief that tanning makes one more attractive (Hillhouse, Turrisi, Kastner, 2000). According to these past research and sound theory mentioned earlier, we hypothesised that there will be a significant positive correlation between prejudice against dark skin and white-skin preference.

Skin Tone Esteem. Much research has studied an association between global self-esteem and body-image matters, such as eating disorder and shape concern (Thompson & Keith, 2001; Fairburn et al., 2003; Zeigler-Hill & Noser, 2015). A global self-esteem can be defined as the positive or negative attitude about oneself (Rosenberg, 1965). Several researchers supported the notion that self-esteem is one of a major factor that drives our behaviours, intention, and decision making (Baumeister & Leary, 1995; Karelas, 2011). In order to increase self-esteem, people generally engage in various forms of activities that can boost personal and social acceptance (Baumeister & Leary, 1995; Karelas, 2011). For instance, a study found that people who reported lower global self-esteem tended to commit extreme weight-control strategies (Fairburn et al.,

2003). Therefore, due to a high correlation, global self-esteem is highly used in body image matters.

Nonetheless, recent studies has introduced that more specific types of esteem might be a better predictor for specific body image matters. It was suggested that studies about global self-esteem and appearance often overlooked the importance of contingencies of self-worth (i.e., domains that individuals place their value on). If people valued a specific part of the body more than other parts, the attitude about that specific part should be a better predictor for their behaviours and intention. Therefore, a domain-specific self-esteem should have a stronger correlation with a related behaviour than global self-esteem (Dorairaj et al., 2013). For instance, appearance-based contingent self-esteem was better predictor for eating disorder (i.e., body image concern) (Zeigler-Hill & Noser, 2015) and Body-Specific Self-Esteem was more closely correlated with dietary restraint than Global Self-Esteem was (Dorairaj et al., 2013). Accordingly, it can be inferred that specific self-esteem is a better predictor for related behaviours and intentions.

Therefore, this study proposed a newly developed term 'skin tone esteem', which involves evaluating oneself in terms of skin complexion. Adapted from Mendelson et al's definition for global self-esteem, skin tone esteem is defined as the positive or negative attitude about one's skin tone. As such, people who have high skin tone esteem tend to have a positive attitude toward their skin. On the other hand, people who have low skin tone tend to have a negative attitude toward one's skin tone. Since skin is a major visible physical part of the body and is closely linked with perceived physical attractiveness, it is reasonable that people behaviours are driven by negative attitude about their skin tone (Thompson & Keith, 2001). For instance, skin tone alteration, skin bleaching, and using whitening products are common ways to

change skin complexion. Therefore, we predicted that skin tone esteem could be another predictor for white skin preference among Thai female college students.

Skin Tone Dissatisfaction. As previously mentioned, white or light skin tone seems to be an ideal complexion in the East, especially Asian countries (Krishen, LaTour, & Alishah, 2014; Prichard, Kneebone, Hutchinson, & Wilson, 2014; Maxwell, Brevard, Abrams, & Belgrave, 2015). As a result of holding these ideals, people whose skin tone is incongruent with the ideal tone tend to be disappointed or dissatisfied. Therefore, skin tone dissatisfaction can be defined as the discrepancy between current skin tone and desired skin tone (Prichard et al., 2014), which is also known as skin tone tension in some research (e.g., Krishen et al., 2014).

The concept of skin tone dissatisfaction is derived from self-discrepancy theory. According to the theory, there are three fundamental concepts of self: actual, ideal, and ought self (Higgins, 1987). The actual self was defined as the collection of attributes a person thinks he or she currently holds; for instance, I think I have a dark skin tone. The ideal self can be defined as the attributes that the person would like to possess; for instance, I would like to have a light skin tone. When the actual self (I have dark skin tone) is incongruent with the ideal self (I want to have light skin tone), the discrepancy occurs. Consequently, the person is frustrated and motivated to reach the ideal self (Higgins, 1987; Moretti & Higgins, 1990). Therefore, we hypothesized that skin tone dissatisfaction might be another underlying factor that drive the motivation, behaviours, and preference for white skin in Thai females as a result of the discrepancy between the actual and the ideal self.

According to Krishen et al.'s study (2014), both Asian males and females reported a tendency toward lighter skin tone as their ideal complexion when they rated a skin tone tension (skin tone dissatisfaction) scale. The result indicated that white skin preference was reflected on

their ideal skin tone perception among Asian people. Even though there is not much research that studied the relationship between skin tone dissatisfaction and light skin preference in Eastern side, Western studies revealed that skin tone dissatisfaction might play an important role in predicting sun-tanning behaviours. A study reported that women who scored higher on skin tone dissatisfaction tended were more likely to engage in sun-tanning behaviour than those who scored lower (Prichard et al., 2014). In addition, another study also found that Australian secondary school students who scored high on skin tone dissatisfaction scale were less likely to use sun protection products and more likely to commit sun exposure behaviour. These results showed that skin tone dissatisfaction could be a predictor for sun-tanning behaviour. Furthermore, they might also imply that the bigger the gap between the actual self and the ideal self, the more motivation people have to reach the ideal self, according to self-discrepancy theory (Higgins, 1987; Moretti & Higgins, 1990). Specifically, people who scored high on skin tone dissatisfaction were more motivated to be tanned than people who scored low on skin tone dissatisfaction scale.

To sum up, the results from previous studies indicated that skin tone dissatisfaction could predict preference for tanned skin. Therefore, similar to tanned skin preference, we believe that skin tone dissatisfaction can also predict white skin preference among Thai females.

Operational Definitions

White skin preference. Any behaviour or intention that contributes to whiter skin complexion. It can be measured by *White Skin Preference Scale.*

Media and advertisement. The active exposure to media, including advertisements on television, advertisements on billboards, internet, and social media (i.e., Instagram and social sites). It can be measured by *Media and Advertisement Scale.*

Significant people. The perceived pressure of white skin preference from family (i.e., parents and siblings), friends, and partner. It can be measured by *Significant People Scale.*

Prejudice against dark skin. The negative attitudes on people with dark skin. It can be measured by *Prejudice Against Dark Skin Scale*

Skin tone esteem. A positive or negative attitude towards one's skin tone. It can be measured by *Skin Tone Esteem Scale.*

Skin Tone Dissatisfaction. A perceived discrepancy between actual and ideal skin tone. It can be measured by *Skin Tone Dissatisfaction Scale*.

Research Framework

```
┌────────────────────────────────┐
│   Media and Advertisements     │ ──┐
└────────────────────────────────┘   +
┌────────────────────────────────┐   ┐
│      Significant People        │ ──┤ +
└────────────────────────────────┘   │        ┌──────────────────────────┐
┌────────────────────────────────┐   +        │                          │
│   Prejudice against Dark Skin  │ ──────────▶ │   White-skin Preference  │
└────────────────────────────────┘   −        │                          │
┌────────────────────────────────┐   ┘        └──────────────────────────┘
│        Skin Tone Esteem        │ ──┤ +
└────────────────────────────────┘   ┘
┌────────────────────────────────┐   ┘
│     Skin Tone Dissatisfaction  │ ──┘
└────────────────────────────────┘
```

Research Hypotheses

Media and advertisements, significant people, prejudice against dark skin, skin tone esteem, skin tone dissatisfaction, together, predict white-skin preference.

Chapter 2

Method

Participants

Participants were 112 Thai female Chulalongkorn University students aged between 17

and 25 years old (*M* = 20.31, *SD* = 1.56). Participants were voluntarily recruited through

convenient sampling. They were both Thai and international programmed undergraduate

students in academic year of 2015.

Measures

Demographic information. Participants were asked to report their age before they

completed the questionnaire.

White Skin Preference Scale. This newly developed scale that measures level of white

skin preference was adapted from Physical Appearance Reasons for Tanning Scale (PARTS:

Cafri et al., 2006). It consisted of 17 items. The first five questions were taken from PARTS

(e.g., I tan because it makes me more attractive) and were wordily transformed to match white

skin preference context (e.g., I want to have white skin because it makes me more attractive).

These questions were translated to Thai. In addition, 7 questions were newly developed to assess

white skin preference that is affected by media (e.g., I want to have white skin like celebrities)

and significant people (e.g., I want to have white skin because my family wants me to). The

other 5 questions were developed to assess white skin preference through whitening behaviours

(e.g., I use whitening products). This questionnaire use 5-point Likert scale, ranging from 1

(strongly disagree) to 5 (strongly agree). High scores indicate high white skin preference. After

pilot study conducted, one question assessing white skin preference through whitening

behaviours "I inject Glutathione to make me whiter" was wordily corrected to "I take supplement

that including Glutathione to make me have whiter skin" as it had low value in corrected item-total correlation. In the current study, the Cronbach's alpha estimated for scores on scale's reliability was .95, suggesting high internal consistency.

Media and Advertisement Scale. The measure of media and advertisement was adapted from PARTS (Cafri et al., 2006), comprised of 10 statements (e.g., I'm interested in watching advertisement about skin whitening products on television). Among 10 items, 2 items are reversed items (e.g., I'm interested in watching advertisement with dark skin model). This measure uses 5-point rating scale, ranging from 1 (never) to 5 (everyday). High scores indicate that participants are highly exposed to white-skin-related media and advertisement. After the scores were collected and calculated from pilot study, two of reversed items yielded low values in corrected item-total correlation and were discarded from the questionnaires. The Cronbach's alpha or reliability of the scale was .90, indicating high internal consistency.

Significant People Scale. The measure of perceived expectations of significant people on white-skin preference was newly developed based on Theory of planned behaviour (Ajzen, 1991). Significant people included parents, close friends, relatives and partner. It comprised of 10 items (e.g., "I think my parents want me to have whiter skin" and "I think my partner likes white skin women"), ranging from 1 (strongly disagree) to 5 (strongly agree). High scores indicate higher perception of significant people white-skin preference. The Cronbach's alpha of the scale was .90, yielded high reliability.

Prejudice against Dark Skin Scale. The measure of prejudice against dark skin was newly developed based on previous literatures (Buranasak, 2006; Esara, 2009; Sunanta, 2004 & Aizura, 2009). It consisted of 15 items (e.g., "Most of the rich women have white skin" and "White skin made women attractive"), ranging from 1 (strongly disagree) to 5 (strongly agree).

High scores indicate high prejudice against dark skin. After the pilot study was conducted, Cronbach's alpha score was .90, suggesting high reliability.

Skin Tone Esteem Scale. The scale of Skin Tone Esteem was adapted from Body Esteem Scale (BES) (Mendelson, White, & Mendelson, 1996) . Nine items were taken from BES and wordily modified to match the context of skin tone esteem (e.g. "I am proud of my skin colour"). Five items are reversed score (e.g. "I want my skin colour to be whiter"). Total of 9 items used Likert-type scale ranged from 1 (strongly disagree) to 5 (strongly agree). Higher scores on the measure reflect higher skin tone esteem toward self. In the current study, Cronbach's alpha score was .83.

Skin Tone Dissatisfaction Scale. We developed a chart of 10 skin colours to measure skin dissatisfaction, ranging from 1 (very light) to 10 (very dark). The skin colour charts were adapted from cosmetic product that is applicable to Asian skin women. Participants were asked to choose their actual skin tone and desired skin tone (Hutchinson, Prichard, Ettridge, & Wilson, 2015). The skin dissatisfaction score is the actual skin colour subtracted by the desired skin colour (See Appendix G for calculation method).

Procedure

The paper-pencil questionnaires were distributed to female college students. They were informed that this survey was on a voluntary basis and were given a brief introduction about the survey. Only those questionnaires that were fully completed will be computed in this survey study. The first set of questionnaires was used to conduct a pilot study. After the first collectection, analysis was made to see if all the scales yielded high internal consistency (high scores of Cronbach's alpha). Some of the items were improved the meanings and discarded if there are not aligned with the constructs. After the scales were validated and improved to be

reliable, revised questionnaires were distributed to another 112 females through the same procedure.

Data Analysis

The SPSS was used for analysing data in the current study. The analysis methods included the descriptive analysis in which the distribution, mean, and standard deviation of the variables were assessed. Then, a correlation and standard multiple regression were conducted. For multiple regression analysis, white skin preference was assigned as the criterion. The predictors were media and advertisement, significant people, prejudice against dark skin, skin tone esteem, and skin dissatisfaction.

Chapter 3

Results

Six variables were examined using descriptive statistics and found to meet the assumptions as data are normally distributed and there were no skewed data. Moreover, the descriptive statistics suggested that averaged Thai female college students tended not to prefer for white skin tone (see Table 1). Also, they tended not to be actively exposed to media and advertisement that were related to white skin. Their significant people, including parents, relatives, peer, and partners, tended not to support for white skin. Also, their averaged skin tone esteem seemed to be relatively high. They also were not prejudiced against dark skin tone on average. Lastly, there was a small gap between their reported actual and ideal skin tone, which indicated small skin tone dissatisfaction among averaged Thai female college students.

Table 1.

Means, Standard Deviations and Bivariate Correlations for White Skin Preference, Media and Advertisement, Significant Others, Prejudice, Skin Tone Esteem, and Skin Tone Dissatisfaction

Variable	Range	M(SD)	WP	SP	SE	P	SD
White Skin Preference (WP)	1-5	2.26(.89)	.77***	.41***	-.70***	.58***	.50***
Media and Advertisement (MA)	1-5	2.25(.88)	-	.28**	-.61***	.51***	.47***
Significant People (SP)	1-5	2.00(.87)		-	-.27**	.38***	.19*
Skin Tone Esteem (SE)	1-5	3.74(.70)			-	-.32**	.54***
Prejudice (P)	1-5	2.91(.84)				-	.32**
Skin Tone Dissatisfaction (SD)	-10 to 10	.95(2.11)					-

*p < .05, **p < .01, ***p < .001

This study used a standard multiple regression analysis to examine the association between media and advertisement, significant people, skin tone esteem, prejudice, and skin tone dissatisfaction on white skin preference. The criterion was white skin preference while the predictors were media and advertisement, significant people, skin tone esteem, prejudice, and skin tone dissatisfaction. Preliminary analyses showed significant positive zero-order correlations between white skin preference and three predictors which are media and advertisement, significant people and prejudice (see Table 1). It also showed a significant negative zero-order correlation between white skin preference and skin tone esteem. However, no significant zero-order correlation was found between white skin preference and skin tone dissatisfaction.

Prior to standard multiple regression analysis, three assumptions were investigated to see whether there was multicollinearity. Firstly, the correlation between a pair of predictors must be lower than 0.7. Results showed that none of the correlations among predictors was higher than 0.7. Secondly, "tolerance" rate must be greater than .10. And lastly, the variance inflation factor or VIF has to be equal or less than 10. As shown in Table 2, it has found that each tolerance rate was greater than .10. In addition, all VIFs were found to be less than 10. Since all of the assumptions were met, a standard multiple regression analysis was conducted.

The result suggested that 74% of the variance in white skin preference was significantly accounted for by these predictors, $F(5, 106) = 59.10$, $p < .001$ (see Table 2). Media and advertisement had a significant positive relationship with white skin preference and uniquely accounted for 8% of the variance in white skin preference, $\beta = .42$, $p < .001$. Significant people had a significant positive relationship with white skin preference and uniquely accounted for 1% of the variance in white skin preference, $\beta = .12$, $p = .037$. Skin tone esteem had a significant

negative relationship with white skin preference and uniquely accounted for 6% of the variance

in white skin preference, β = -.33, p < .001. Prejudice had a significant positive relationship with

white skin preference and uniquely accounted for 2% of the variance in white skin preference, β

= .202, p = .001. However, skin tone dissatisfaction had no significant relationship with white

skin preference and uniquely accounted for less than 1% of the variance in white skin preference,

β = .04, p = .546. According to the results, media and advertisement was the strongest predictor.

Table 2.

Summary of Multiple Regression Analysis for the Predictors of White Skin preference (enter, N = 112)

				Collinearity Statistics	
Independent Variables	b	SE$_b$	Beta	Tolerance	VIF
Media and Advertisement (MA)	.418	.071	.417***	.502	1.990
Significant People (SP)	.118	.056	.116*	.834	1.199
Skin Tone Esteem (SE)	-.416	.086	-.330***	.535	1.868
Prejudice (P)	.214	.064	.202**	.672	1.488
Skin Tone Dissatisfaction (SD)	.015	.026	.037	.673	1.486
Constant	2.004	.441	-	-	-

Note. R^2 = .736, F = 59.098, *p < .05, **p < .01, ***p < .001, one-tailed

Chapter 4

Discussion

This study aimed to examine whether media and advertisement, significant people, skin tone esteem, prejudice against dark skin, and skin tone dissatisfaction contribute to white skin preference among Thai female college students. As predicted, all of our predictors, together, predict white skin preference as high as 74%. However, since skin tone dissatisfaction could not predict white skin preference, the hypothesis is partially supported. Still, it is important to note that even though skin tone dissatisfaction cannot uniquely predict white skin preference, its small contribution as one of the predictors is still valued.

External Factors

As predicted, both external factors significantly accounted for white skin preference. Firstly, the results suggested the more frequent young women actively perceived information about white skin from media, the more they have high preference for white skin. As it was supported by sociocultural model of body-image, ideal images that are existed in society can be transmitted through sociocultural channels such as media and advertisements. In this context, white skin tone, which is the ideal image, is then internalised by young women, causing them to have higher preference in white skin tone (Rongmuang, 2011; Tiggemann, 2011). Align with findings from Day et al. (2015) that found media influences to predict tanning-behaviour, we found that our finding shows a similar effect on white-skin preference. In addition, similar to findings from Ismail et al. (2015) influence of advertisements was associated with white skin color obsession in Pakistan women. In addition, it is also found that the influence from media and advertisements are the strongest predictor toward white skin preference. The previous

finding on Thai adolescents' body image also supported that media is the biggest influential source in body image perception in Thailand (Thianthai, 2006).

Secondly, the results suggested that the higher perceived pressure from significant people (i.e., family, peers, and partner), the more likely participants hold white skin preference. The findings indicated that significant people have an influence on the individual's value of white skin preference. Thus, this finding substantiated theory of planned behaviour (TPB) where perceived expectations of significant people together with individual's motivation could predict the intention of one behaviour (i.e., white-skin preference: Azjen, 1991). In addition, previous findings also supported that sociocultural norms of families and peers (e.g., parents' values and peer pressures) were influential factors in predicting tanning behaviour (e.g., Holman & Watson, 2013, Day et al., 2015). In this context, perceived pressure from significant people can predict one's white-skin preference which include both behaviour and intentions.

Internal Factors

As predicted, participants who reported higher prejudice against dark skin tended to score higher on white skin preference. This finding went in line with previous literatures on the positive relationship between attitude against unfavourable self-image and self-enhancing behaviour, which are tanned skin preference (Hillhouse, Turrisi, & Kastner, 2000) and anti-fat attitudes (Crandall, 1994; Crandall et al., 2001). Moreover, this association could be best explained by the individual mobilisation and tricomponent model of attitudes (Tajfel & Turner, 1979; Pattigrew, 1979). From the individual mobilisation strategy (Tajfel & Turner, 1979), since skin tone is perceived as an adjustable trait in Thailand, people who hold the prejudice against dark skin tone perceived that it is possible for them to escape the dark skin categories; therefore, they engage in whitening intention and behaviour to move themselves from the devalued group

(i.e., dark-skin-tone category) to the valued group (i.e., white-skin-tone category). From tricomponent model of attitude, prejudice against dark skin, which is both cognitive and affective components, affects white skin preference, which is the behaviour component (Pattigrew, 1979).

Furthermore, consistent with the prediction, participants who scored higher on skin tone esteem tended to score lower on white skin preference. Specifically, those who had positive attitude toward their skin tone were less likely to prefer white skin tone. On the other hand, those who had negative attitude toward their skin tone were more likely to prefer for white skin tone. As being explained in previous research, individuals tend to engage in various form of behaviours and intentions (e.g., desire to have white skin complexion, using sunscreen and whitening products) in order to increase their esteem (Baumeister & Leary, 1995; Karelas, 2011). In addition, the results also implied that specific esteem can be a predictor for specific body-image matters as were found in previous studies (e.g., Dorairaj et al., 2013; Zeigler-Hill & Noser, 2015). In this context, skin tone esteem, which is a specific esteem, could be a predictor for white skin preference, which is the related behaviours and intentions.

However, in contrary to the prediction, there was no significant correlation between skin tone dissatisfaction and white skin preference among Thai college students found in this study. Therefore, two explanations could be drawn from the findings. Firstly, because averaged participants seemed to be satisfied with their skin tone, the power was insufficient to detect the correlation. Secondly, skin tone dissatisfaction might not be a predictor for white skin preference as it was for tanning skin preference (Prichard et al., 2014; Hutchinson et al, 2015).

Strengths and Limitations of the Study

Our study is one of the first studies that examined the external socio-cultural factors together with internal psychological factors contributing to white skin preference in Thailand.

Moreover, the results revealed that the predictors can predict white skin preference as high as 74%, which is considered remarkably high. In addition, four out of five predictors had done a great job in uniquely predicting white skin preference. This result also went in line with the previous research and theories that we reviewed earlier; therefore, it provided another solid evidence to research in this field. Accordingly, these findings increase an understanding of factors that contribute to white skin preference, which can be useful for future research and inventions. In terms of the measures, the Cronbach's alpha for every measures were above .7, indicating that the items in a measure were measuring the same construct (internal consistency). Therefore, the questionnaires used in this study were fairly reliable. Lastly, this study proposed the term "skin tone esteem", which was newly coined, and we found that it was a significant predictor for white skin preference among Thai society. Therefore, this variable is valuable to be further studied.

Despite the strengths discussed above, some limitations were important to be noted. The first limitation of this study is the restriction of range. Based on the skin tone dissatisfaction findings, most of the participants seemed to have average-to-white current skin tone. It could be possible that the participants are not dissatisfied with their skin tone because they are already have lighter skin complexion. Moreover, since all of our participants are Chulalongkorn University undergraduates, it could be considered as restriction of age, educational level and social status. If the study was conducted with high schoolers, working women or the undergraduates from different Universities, the result could be different because environment plays a critical role in shaping one's attitude. Therefore, it is crucial to know that this finding cannot be generalised to females in those groups. Second, there were some methodological limitations. Since previous questionnaire that directly assess white skin preference and other

predictors were not found, our questionnaires were freshly created based on literature review or adapted from tanning behaviour and body-esteem scale. Even though all of our questionnaire yielded high internal consistencies, the validities were not investigated. Specifically, white-skin preference questionnaire, which was adapted from tanning behaviour scale, might not reflect construct validity of white skin preference. Thirdly, since all of our questionnaires are self-report measures, the results could be affected by social desirability bias. Participants might answer the questions in a favourable manner, which might not reflect their true feelings or behaviour.

Implications

The current research findings are valuable for researchers and practitioners because an increase understanding of factors that contribute to white skin preference may allow them to advance future research and intervention. For instance, this research provided a valuable finding to Thai psychological field. As this preference is a problematic issue in Thai society, knowing how much these contributors affect the preference could facilitate psychologists to approach the problem quickly and accurately. For example, the result showed that the most powerful predictor of white skin preference is media and advertisement, if a psychologist wants to treat someone with severe white preference or white skin obsession, it could be best to focus on situating media literacy. This can be done by teaching them to access, analyse and evaluate the white-skin-related media. In the larger context, to eradicate this issue in Thai society, knowing that asking the cooperation from media and advertisement to make such move is essential. This could also serve as one of the reasons for Thai government to reconsider the policy concerning the issue of media and advertisement on white skin preference in Thailand.

Future Research

      Future research can be conducted to overcome the limitations of this study. First, to overcome the restriction of range, participants from various backgrounds (e.g., socioeconomic status, age group, universities or provinces) should be recruited. Second, future researchers can consider to improve skin tone chart by adding wider range of colour and adjusting the colour to be more realistic. Third, the validity of the questionnaire should be tested to improve the research methodology. Fourth, implementing implicit association test to measure white skin preference is suggested in order to reduce social desirability. Fifth, future research is encouraged to use skin-tone dissatisfaction as a mediator for white skin preference and skin tone esteem as suggested in Zeigler-Hill's and Noser's study (2015). Lastly, other factors that could mediate or moderate the relation between these contributors and white-skin preference should be investigated, such as self-consciousness about appearance, perceived control over whitening behavior and rejection of the societal value of white skin.

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Appendix A

Demographic Questionnaire recording participant's age.

อายุ: ___ ปี

Appendix B

White Skin Preference Questionnaire was adapted from Physical Appearance Reasons for

Tanning Scale (Mendelson, White, & Mendelson, 1996).

ความคิดเห็นเกี่ยวกับสีผิว...

1.　ฉันอยากมีผิวขาวกว่านี้ เพราะมันทำให้ฉันดูมีเสน่ห์มากขึ้น

2.　ฉันอยากมีผิวขาวกว่านี้ เพราะมันทำให้ฉันดูดีขึ้น

3.　ฉันอยากมีผิวขาวกว่านี้ เพราะมันทำให้ฉันมั่นใจกับรูปลักษณ์ของตัวเองมากขึ้น

4.　ยิ่งขาวมากเท่าไหร่ ฉันก็ยิ่งดูดีมากขึ้นเท่านั้น

5.　ถ้ามีผิวขาว ฉันก็จะเป็นที่ติดตาต้องใจต่อเพศตรงข้ามมากขึ้น

6.　ถ้ามีผิวขาว ฉันก็จะดูไฮโซมากขึ้น

7.　ฉันอยากมีผิวขาวเหมือนคนที่เห็นในสื่อ (เช่น โทรทัศน์ นิตยสาร อินเตอร์เน็ต)

8.　ฉันอยากมีผิวขาวเหมือนดารา

9.　ฉันอยากมีผิวขาวเหมือนนางแบบโฆษณา

10.　ฉันพยายามให้ตัวเองมีผิวขาวมากขึ้น เพราะคนในครอบครัวอยากให้ฉันขาวกว่านี้

11.　ฉันพยายามให้ตัวเองมีผิวขาวมากขึ้น เพราะเพื่อนอยากให้ฉันขาวกว่านี้

12.　ฉันพยายามให้ตัวเองมีผิวขาวมากขึ้น เพราะแฟนอยากให้ฉันขาวกว่านี้　　　N/A

13.　ฉันใช้ผลิตภัณฑ์บำรุงผิวขาว

14.　ฉันเข้าคอร์สปรับสีผิวเพื่อให้ผิวขาวขึ้น

15.　ฉันทานวิตามีนเพื่อทำให้ผิวขาวมากขึ้น

16.　ฉันทาครีมกันแดดให้ผิวขาวมากขึ้น

17.　ฉันทานผลิตภัณฑ์ที่มีส่วนผสมกลูต้าไทโอนเพื่อให้ผิวขาวมากขึ้น

Scoring Item responses recorded were on a 5-point Likert scale, with 1 being 'strongly disagree'

and 5 being 'strongly agree'. All items were positively worded with no reverse scoring involved.

High total scores indicate high white skin preference

Appendix C

Skin-Esteem Questionnaire was adapted from Body Esteem Scale (Mendelson, White, &

Mendelson, 1996).

ความพึงพอใจในสีผิว..

1. ฉันพอใจในสีผิวของฉัน

2. ฉันหวังว่าฉันจะผิวขาวเหมือนคนอื่น

3. ฉันชอบสีผิวของตัวเองเวลามองในกระจก

4. ฉันมีผิวขาวอย่างที่ฉันอยากจะเป็น

5. ฉันกังวลเกี่ยวกับสีผิวของฉัน

6. ฉันอยากมีผิวขาวกว่านี้

7. เวลาฉันเห็นตัวเองในรูปถ่าย ฉันพอใจในสีผิวของฉัน

8. ฉันรู้สึกไม่พอใจเมื่อนึกถึงสีผิวของตัวเอง

9. ฉันรู้สึกอายในสีผิวของตัวเอง

Scoring Item responses recorded were on a 5-point Likert scale, with 1 being 'strongly disagree'

and 5 being 'strongly agree'. Five items are negatively worded and score need to be reversed

(i.e., 2, 5, 6, 8, 9). High total scores indicate high skin-esteem.

APPENDIX D

Perceived Significant People Preference Questionnaire was freshly developed base on past

literature.

ความคิดเห็นของบุคคลอื่น

1.   ฉันคิดว่า พ่อแม่อยากให้ฉันมีผิวขาวกว่านี้

2.   ฉันคิดว่า พ่อแม่ชอบคนผิวขาว

3.   ฉันคิดว่า พ่อแม่ไม่อยากให้ฉันผิวคล้ำ

4.   ฉันคิดว่า พี่น้อง/ญาติอยากให้ฉันมีผิวขาวกว่านี้

5.   ฉันคิดว่า พี่น้อง/ญาติไม่อยากให้ฉันมีผิวคล้ำ

6.   ฉันคิดว่า เพื่อนอยากให้ฉันมีผิวขาวกว่านี้

7.   ฉันคิดว่า เพื่อนไม่อยากให้ฉันมีผิวคล้ำ

8.   ฉันคิดว่า แฟนของฉันอยากให้ฉันมีผิวขาวกว่านี้

9.   ฉันคิดว่า แฟนชอบผู้หญิงผิวขาว

10.   ฉันคิดว่า แฟนไม่อยากให้ฉันมีผิวคล้ำ

Scoring Item responses recorded were on a 5-point Likert scale, with 1 being 'strongly disagree'

and 5 being 'strongly agree'. All items were positively worded with no reverse scoring involved.

High total scores indicate higher support of significant people white-skin preference.

Note: Items 8-10 have N/A choice if participants currently have no partner

Appendix E

Prejudice against Dark Skin Questionnaire was freshly created based on past literature.

ความเชื่อของท่าน..

1.   ผู้หญิงขาวดูไฮโซกว่าผู้หญิงผิวคล้ำ

2.   ผู้ชายส่วนใหญ่ชอบผู้หญิงผิวขาวมากกว่าผู้หญิงผิวคล้ำ

3.   ผู้หญิงผิวขาวดูสะอาดสะอ้าน

4.   ความขาวทำให้ผู้หญิงสวยขึ้น

5.   ผู้หญิงผิวขาวดูมีฐานะมากกว่าผู้หญิงผิวคล้ำ

6.   ผู้หญิงผิวขาวดูมีสุขภาพดี

7.   ผู้หญิงผิวขาวมักจะได้รับโอกาสในการทำงานมากกว่าผู้หญิงผิวคล้ำ

8.   คนรวยส่วนใหญ่มีผิวขาว

9.   คนจนส่วนใหญ่มีผิวคล้ำ

10.   คนสวยส่วนใหญ่ผิวขาว

11.   คนที่มีการศึกษาสูงส่วนใหญ่ผิวขาว

12.   ผู้หญิงผิวขาวมีโอกาสเลือกแฟนมากกว่า

13.   ผู้หญิงผิวขาวเป็นที่ยอมรับของสังคมและเพื่อนรอบข้าง

14.   ผู้หญิงผิวขาวดูมีเสน่ห์

15.   ผู้หญิงผิวขาวดูน่าหลงใหล

Scoring Item responses recorded were on a 5-point Likert scale, with 1 being 'strongly disagree' and 5 being 'strongly agree'. All items were positively worded with no reverse scoring involved. High total scores indicate high prejudice against dark skin.

APPENDIX F

Exposure to Media and Advertisement Questionnaire was adapted from Physical Appearance

Reasons for Tanning Scale (Mendelson, White, & Mendelson, 1996).

ช่วงหนึ่งเดือนที่ผ่านมา...

1.　　ฉันสนใจดูโฆษณาที่เกี่ยวกับผลิตภัณฑ์บำรุงผิวขาวบนโทรทัศน์

2.　　ฉันสนใจดูโฆษณาที่เกี่ยวกับผลิตภัณฑ์บำรุงผิวขาวบนอินเตอร์เน็ต

3.　　ฉันสนใจฟังพนักงานขายเครื่องสำอาง หรือ พนักงานที่สถาบันความงามโฆษณาผลิตภัณฑ์บำรุงผิวขาว

4..　　ฉันสนใจดูโฆษณาบำรุงผิวขาวบนโปสเตอร์ตามข้างทาง หรือที่ป้ายรถประจำทาง หรือรถไฟฟ้า

5.　　ฉันสนใจดูโฆษณาบนสื่อต่างๆที่ใช้นางแบบผิวขาว

7.　　ฉันติดตาม Instragram ของไอดอลที่มีผิวขาว

8.　　ฉันสนใจเข้าไปอ่านกระทู้ในเว็บบอร์ดที่พูดถึงวิธีทำให้ผิวขาว

9.　　ฉันสนใจว่าไอดอลที่มีผิวขาวใช้ผลิตภัณฑ์บำรุงผิวอะไร

Scoring Item responses recorded were on a 5-point rating scale, with 1 being 'never' and 5 being

'everyday'. All items were positively worded with no reverse scoring involved. High total scores

indicate that participants are actively exposed to white-skin-related media and advertisement.

Appendix G

Skin Tone Dissatisfaction Questionnaire was freshly developed base on past literature

(Hutchinson, Prichard, Ettridge, & Wilson, 2015).

คำชี้แจง จงเลือกหนึ่งเฉดสีจากแถบสีต่อไปนี้

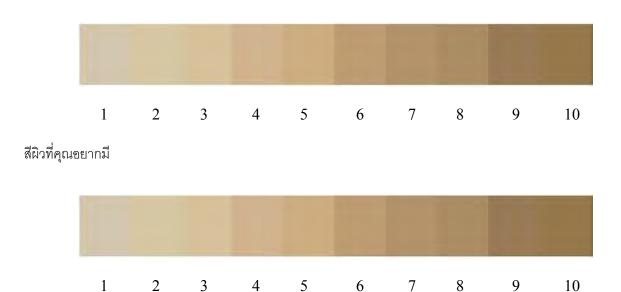สีผิวปัจจุบันของคุณ

สีผิวที่คุณอยากมี

Scoring The skin dissatisfaction score is the actual skin colour subtracted by the desired skin

colour.

For examples,

Participant A

คำชี้แจง จงเลือกหนึ่งเฉดสีจากแถบสีต่อไปนี้

สีผิวปัจจุบันของคุณ

1　　2　　3　　4　　5　　6　　7　　8　　9　　10

สีผิวที่คุณอยากมี

1　　2　　3　　4　　5　　6　　7　　8　　9　　10

The participants cannot see these indicating numbers (i.e., 1-10) on their paper survey because we want to eradicate the issue of distraction. However, we put on these numbers afterwards in order to calculate their skin-tone discrepancy.

Example of calculation. Participant's actual skin colour = 8

Participant's desired skin colour = 4

Therefore, her skin tone dissatisfaction = 8 - 4 = 4