Categorization of Modern Males with regard to Predictors of Menswear Design Preferences in terms of Physical and Socio-Psychological Dimensions

Dr. Travis W. Li*, Dr. Joe S. Au[1] and Prof. Raymond W. Au[2]
The Hong Kong Polytechnic University

KEYWORDS: Modern Menswear Design, Design Preferences, Males in Hong Kong

ABSTRACT

Our sizing system is commonly used for mass production today and offers the closest fit by producing various sizes. However, wearers' socio-psychological concerns are not taken into account during the development of the system, which may churn out ineffective fits. This study provides knowledge of menswear evaluation by taking into account men's physical and socio-psychological dimensions.

A questionnaire survey was carried out in this study that 143 males participated in this quantitative study. Various scaling items were adopted to examine the subjects' socio-psychological dimensions in terms of clothing evaluation (i.e. clothing functions and fashion involvement) and their preferences in eight styling attributes with a preferences-based study called menswear aesthetic attributes preferences (MAAP). By using multiple regression, eight styling attributes of menswear design were predicted by physical and socio-psychological dimensions. This study successfully categorise modern males according to their preferences of menswear, with regard to the predictors of menswear design preferences in physical (i.e. BMI) and psychological dimensions (i.e. menswear functions and menswear involvement). Subjects were divided into 3 clusters: 1) Fashion & Masculine; 2) Low-Function Value; and 3) Camouflage & Comfort; in which they were identified as having different clothing preferences as they had unique characteristics in clothing functions and levels of fashion involvement.

INTRODUCTION

For the modern menswear market that is situated in transformation, with emergence of *new man*, androgyny and metrosexuality in men's fashion presents new challenges to menswear design (Craik, 1994; Brough, 2008; Bakewell et al, 2006; Conseur et al., 2008; Edwards, 1997; Davies, 2008). Males' expectations and needs of menswear design no longer suffice; The psychological needs for male adornment has been getting stronger for menswear when utility is no longer of paramount importance. Male consumers nowadays are motivated by various purposes, it is an highly individual issue that some dress for expressing image and individuality, some for utility and some look for other functions. Facing this diversity, manufacturers and designers find it increasingly difficult to offer an 'all-conquering' design. The clothing industry also finds it increasingly difficult to satisfy male consumers as they are more value-driven and fashion-conscious (Dickerson, 2003). The discrepancy between apparel products and consumer expectations gives rise to this study which examines modern men's expectations of clothing selection and evaluation.

By suggesting a theoretical fashion adoption framework, preferences and characteristics of menswear evaluation were identified in response to physical and

socio-psychological motivation. A quantitative study targeting male subjects aged 18-32 was carried out with a self-administered questionnaire, in order to examine the predictors of menswear design preferences in terms of physical and psychological dimensions while categorize modern males in terms of their men's clothing design preferences. This study provides knowledge of sizing beyond traditional physical factors and establishes an empirical foundation for further studies segmenting consumers' preferences in size and fit according to their psychological needs. It also sheds light on researches on modern menswear, provides understanding of fit satisfaction and knowledge of sizing beyond physical dimensions, and lays an empirical foundation for further study about psychological sizing and menswear design.

LITERATURE REVIEW

Development of research on menswear

Compared to womenswear, developments of menswear researches are long way behind because traditional males are supposed to be disinterested in fashion. Some researchers still find men's fashion uninteresting, dull and simple, while others have started to notice that menswear has been changed and transformed, and is no longer related to utility only, but also involves fashion, style and individuality.

Researchers previously compared male consumers' buying behavior with women's and found that females were more prone to uniqueness and assortment seeking, more visually oriented and intrinsically motivated while males were more prone to information attainment and convenience seeking (Noble et al., 2006; Holbrook, 1986). Generally speaking, women were regarded as more fashion-conscious (Kwon & Workman, 1996). And traditionally, men's fashion was plain and simple to project a serious male image, at work and fashion was regarded as feminine on the assumption that women were decorated while men were not (Edwards, 1997). Traditionally men were assumed to be disinterested in fashion. Based on this assumption, most researches on clothing focused exclusively on women. The results of Frith et al.'s (2004) study were generated along the same lines, and showed men's atrocious lack of concern about their appearance.

However, the concept of male disinterest in fashion has been challenged in recent decades. A lot of researchers have argued that males' mode of fashion consumption is transforming due to the emergence of *new man*, androgyny and metrosexuality (Davies, 2008; Edwards, 1997; Galilee, 2002). Some apparel retailers reported that sales in menswear were robust even when sales in other apparel items declined (Torres et al., 2001). Also, men referred to clothes as a means of self-expression more emphatically than women (Cox & Dittmar, 1995). According to Torres et al. (2001: 205), 'Since men are more active and fashion-conscious, research on males' shopping behavior is imperative'. In addition to the rapid expansion of menswear since the 1980s and the development of specialist style magazines (such as Gentlemen's Quarterly and Arena), other forms of visual media and the internet also enable men to know more about men's fashion and relate to their clothed bodies from new angles (Edwards, 1997; Nixon, 1992; Galilee, 2002). The fusion of consumption and identity apparent in market segmentation places a greater emphasis on narcissistic aspects of self previously unavailable to men and evokes a greater emphasis on appearance and display (Frith et al., 2004).

Evaluation of Menswear

Woodruffe-Burton (1998) pointed out that men's "fashion literacy" arose from the plethora of men's magazines and fashion consumption. Consequently, consumers' expectation of clothing is progressively higher than previous decades; modern males now evaluate the performance of menswear clothing in a different approach from the past. Therefore, the clothing industry finds it increasingly difficult to satisfy consumers as they are now better educated in fashion and more value-driven and tend to expect more of what they pay for (Tselepis & De Klerk, 2004; Dickerson, 2003).

To examine factors in consumer evaluation of clothing attractiveness, many researchers have proposed the importance of aesthetic attributes in clothing design evaluation. Sproles (1981) stated that silhouette is a critical aesthetic attribute in decision making of fashion goods. Li et al. (2010) believed that silhouette is a critical aesthetics attribute dominating men's evaluation of suit design. The acceptance of changing shapes and proportions reflects fashion cycles, and styling details of menswear are as important as in womenswear (Aldrich, 1997). In Hong Kong, young men's acceptance of variations in silhouette is much higher than before. Li et al. (2010) conducted a study of aesthetic, fitting and functional improvements in suit design that aesthetics and fit and their relation are very important for consumers when choosing menswear; traditional design is no longer suitable for local young men who are eager to look fashionable even at the expense of comfort. A good design and a good fit are important to young male consumers in Hong Kong. Leung and Taylor (2002) found that the local X-generation consumers regard fit, personable preference and design as the three most important factors in buying fashion. In addition, fashion, individuality, identity and image were highly important during evaluation of menswear that modern males want to project their values, mood and altitude (Davies, 2008; Tungate, 2008; Galilee, 2002). Therefore, during the design process, designers need to acquire a good understanding of their target customers' preferences, including clothing evaluation, body figures, ideal figures, physical/psychological comfort and fit, and appearance which all play a part in consumers' perceived satisfaction.

Preferred Male Body Figure

Wearers select or buy suitable clothes to ease their figural problems by means of camouflaging (Tate, 2004). Each society develops an image of an ideal body. The image changes over time and is readily recognized by members of society (Roach, 1973). The classical Greek body proportions have been widely considered as an ideal for centuries. However, preferred figures vary from time to time and from culture to culture. For females, physical attractiveness means the shape (e.g. WHR) and body mass index (BMI). And for males, WHR might be a lesser concern. According to the study by AC Nielsen conducted in 2005 which surveyed over 1,000 males and females in Hong Kong aged from 15 to 54, people in Hong Kong became more image-conscious and were critical of what an acceptable body figure for themselves or celebrities should be. The phenomenon "metrosexuality" definitely facilitates the trend of weight-reduction among males in Hong Kong. A slimmer and fitter body figure is pursued. The perception of an ideal male figure also depends on changes in fashion trends.

Directing Influences on Clothing Evaluation of Fashion Adoption

The cognitive schema is the fundamental concept of this study, which explains how

people evaluate the most important aspects based on their needs, knowledge and expectations (Hawkins et al., 1998). As Tselepis and Klerk (2004, p86) mentioned, 'these expectations are not only the results of theoretical/technical knowledge of the product and its capability, but also the results of previous experiences with the product based on the socio-psychological needs that the product can or must satisfy'. Simmons et al. (2004) and Loker et al. (2005) suggested that fit is difficult to evaluate.

Fashion adoption is structured as a theoretical framework in this study (Figure 1). Regarding directing influences on evaluation of fashion adoption, internal influences are considered as important from the adopter's socio-psychological motivations. Based on Sproles's model (1979), which has been extensively used as the conceptual foundation for consumers' fashion adoption because of its generality and wide coverage of variables (Yoo, 2003; Eckman, 1997; Forsythe et al., 1991), the fashion adopter's psycho-social motivations (i.e. fashion involvement and menswear functions) are considered having directing influences on clothing evaluation. Clothing evaluation, individuals' physical and psychological factors are intimately related and influence expectations of fit and consumer satisfaction as suggested by Tselepis and Klerk (2004). The dimensions including functions (comfort), aesthetic beauty (fit, fashion) and socio-psychological dimensions (cognitive meaning) influence expectation and evaluation of fit.

Fashion involvement

In the stage of directing influences of cognitive orientation on clothing in Sproles' (1979) model, fashion involvement is indicated as one of the directing motivations in fashion adoption. Fashion involvement is adopted for measurement of consumer involvement in clothing product while consumer involvement is important because different levels of involvement may lead to different perceptions of attributes and choices (Engel et al., 1990). Involvement is conceived as a function of a person, object and situation, which is the level of perceived importance, state of arousal and/or interest evoked by a stimulus (or stimuli) within a specific situation (Rothschild, 1979; Engel et al., 1990). Some studies show that purchase of a product can be important to a participant's ego, self-esteem or needs, and a high level of involvement is likely to exist (Rajagopalan et al., 2005; Goldsmith et al., 1991; Kim, 2005; Rothschild, 1979; Zaichkowsky, 1985). Yet, there has been limited research on apparel involvement, especially for menswear items (Zaichkowsky, 1985).

Menswear Clothing Functions

Clothing can satisfy physiological, psychological and social needs (Sproles & Burns, 1994). Researchers previously suggested that clothing could serve various functions (Tiggemann et al., 2009; Kwon et al., 1994; Cox et al., 1995). Tiggemann et al. (2009) and Kwon et al. (1994) studied the dimensions of clothing functions and found that clothing can serve a variety of functions such as assurance, fashion, camouflage, individuality and comfort. Yet, most existing studies of clothing functions targeted women. However, the issue of cross-gender similarity in clothing functions is controversial. Frith et al. (2004) argued that men's clothing function is just similar to women's. However, masculinity can influence menswear functions and differentiate them from womenswear functions, and that men who identify themselves strongly with the cultural prescriptions of masculinity usually show far greater differences in self-extension through clothing than less 'gendered' individuals (Cox et al., 1995). Connell (2003) suggested that men of all ages and ethnicities are often forced to negotiate their

masculinities with other males, meaning that their manhood must be approved and validated by their peers.

Theoretical Framework

A theoretical framework was created to highlight the study area based on Sproles's model and studies of fashion adoption in terms of directing influences on menswear evaluation. It explained that during formation of design preferences, internal influences from the adopter's motivation (i.e. menswear fashion involvement and clothing functions) have directing influences on evaluation of menswear, while clothing evaluation is also influenced by the physical factors of potential adopters.

Hypotheses

Based on the theoretical framework and related literature, the following hypotheses were generated.

H1. Menswear functions are multi-dimensional
H2. Masculinity is a dimension of menswear functions
H3. Physical factors (BMI) are a predictor of design preferences for menswear &
H4. Fashion involvement is a predictor of design preferences for menswear &
H5. Clothing functions is a predictor of design preferences for menswear
H6. There are segments of subjects having distinctive design preferences for menswear
H7. Different concerns for clothing functions can be found across various groups of subjects having distinctive design preferences (if H6 accepted)

METHODOLOGY

A structured questionnaire was developed to collect quantitative variables for statistical analysis (see Appendix). In the survey, the respondents were first required to rate the scaling items in order to find their responses to fashion involvement and clothing functions. Then the respondents were told to indicate their clothing design preferences for styling attributes on the Menswear Aesthetic Attribute Preference scale (MAAP). Factor analysis and cluster analysis were employed to identify the multi-dimension of fashion involvement and clothing functions, and to cluster subjects according to their design preferences.

Instruments measuring menswear fashion involvement

When measuring fashion involvement (Michaelidou et al., 2006), ten items rated on a 5-point Likert scale (*'strongly agree' to 'strongly disagree'*) were selected and modified (Table 1). In order to rank the respondents, summated scores and categorization methods (Zaichowsky, 1991) were used with the total possible scores ranging from the lowest (ten) to the highest (fifty).

Instruments for menswear functions

A set of 25 scaling items was adopted to identify dimensions in menswear functions (Table 3.2). 21 items were adopted from previous studies of clothing functions (Cox et al., 1995; Kwon et al., 1994; Tiggemann et al., 2009) where duplicated ideas were eliminated or merged. For the 4 remaining items, masculinity, a specific element related

to contemporary menswear fashion design, was included for studying menswear functions.

Instruments for evaluation of menswear design

Menswear Aesthetic Attribute Preference scale (MAAP) (Figure 2) was modified from aesthetic attribute preference proposed by Chattaraman et al. (2006) to measure the respondents' preferences in styling attributes using two-dimensional, computer-generated, predominantly black-and-white drawings of the stimuli. MAAP is a common methodology used in previous studies (Feather et al., 1997; Yoo, 2003; Li et al., 2010) and is composed of eight items in a semantic differential instrument with responses rated on a 7-point scale anchored by bipolar adjectives where items are accompanied by a visual scale. Within the category of tops, it measured preferences in top length, sleeve length, top silhouette and shoulder width. Within the category of bottoms (pants), preferences in silhouette, length, and waist level were measured. Inter-rating of each scaling item in MAAP was equally spaced, presenting a size interval of grading. In order to ensure all other factors (e.g. weather, season and occasions) were constant for the respondents' judgments on aesthetics and fit that the respondents were told to indicate their preference in the spring season and on dressing-up occasions.

Target Sample Population

In the survey, 143 males were invited. The suggested sample size should meet the requirements of factor analysis (Hair et al., 1998) and be at least 5 times more than the number of items. 25 rating items were about menswear functions; 15 rating items were about fashion involvement and 8 rating items in MAAP. Thus, the sample size provided a suitable environment to conduct factor analysis of each component of this study.

In this study, the target group was composed of young males aged 20 to 32. Occupation was also a determinant influencing a person's fashion involvement and consumer behavior. It was also closely associated with dressing styles and clothing preferences (Sproles & Burns, 1994; Marshall et al, 2004). To attain a representative population for the survey, 143 respondents were invited based on the profiles of local workers. From the population by-census report in 2006 (Census and Statistics Department, 2007), 1) wholesale, retail and import/export trades, restaurants and hotels; 2) financing, insurance, real estate and business services and 3) community, social and personal services were the three major industries which accounted for 65 to 70% of the entire working population from the age groups of 20-24, 25-29 and 30-34. In addition to the working population, students also formed the main part of the sample in this study. School attendance rates for males aged 19 to 24 were as high as 38.4% of the total population aged 19 to 24. To facilitate a more even, impartial and reliable sample, the respondents invited to the survey included workers from the three main industries and students.

Pilot study

A pilot study was conducted to gain information on improvement in communication. Some duplicated or highly similar scaling items were merged or eliminated as some respondents claimed slight fatigue on the survey. The original pool of fifteen statements measuring involvement (Michaelidou et al., 2006) was reduced to ten with two duplicated statements eliminated while the statements about involvement with similar

ideas were merged. Some of the respondents showed better interpretation of their preferred designs of tops and bottoms after being asked to "show what design you usually wear assuming that you are attending a casual, social occasion in spring" during the pilot test. This guiding sentence appeared on the MAAP in the final survey (Figure 3). In addition, some other minor changes were made. For example, kg was replaced by lb as the weight unit as lb was a more common unit of measurement used in Hong Kong.

Data Analysis

Factor analysis was employed to identify the multi-dimension of clothing functions while multiple regression was used to identify the predictors of preferences in various styling attributes in terms of physical and socio-psychological dimensions. Instead of factor scores, summated scoring was used for multiple regression, which offered a descriptive comparison of mean ratings between components of clothing functions. Oblique rotation was used in the principal factor analysis of clothing functions because the preliminary correlational analysis indicated significant correlations among many clothing measures (Kwon et al., 1994). The data were analyzed using the Cronbach reliability test for internal consistency of the instrument, the principal axis factor analysis with oblique rotations, the multivariate ANOVA with Scheffe tests for multiple comparisons, multiple regression, and Pearson's and Spearman's correlation. Principal components factor analysis and K-means non-hierarchical cluster analyses were used to identify and cluster various orientations to menswear clothing.

RESULTS & DISCUSSION

Factor components of menswear functions

Various tests were undertaken to validate the appropriateness of factor analysis of menswear functions. That Cronbach's alpha was .891 demonstrated a high internal reliability of the 25 items which examined menswear functions. An acceptable measure of sampling adequacy (MSA) (.778) and a significant correlation matrix with the Barlett test (.000) were conducted to ensure the appropriateness of the use of factor analysis. To perform a reliable factor analysis, the variable with the smallest communality (i.e. .482), such as 'my clothing suits my mood', was dropped. The communalities of all variables were above .60 while the mean value of all communalities was over .07.

A scree plot and eigenvalues (>1) indicated that 7 factors were extracted (Tables 3 & Appendix I), where only loadings more than .50 are considered. Hair et al. (1998) suggested that significant loadings of .50 were needed for a sample of 120 when there were 143 subjects in this study. The total variance of menswear functions was 68%. However, two factors, each with two variables (i.e. one with 'enable me to participate in sporting/leisure activities' and 'are recommended by men's magazines' and the other one with 'are expensive, rare or unique' and 'have special utility') were dropped because a factor with fewer than three variables is generally weak and unstable (Costello & Osborne, 2005) (Appendix I).

The first factor 'Fashion & Masculine' (eigenvalue = 7.1) accounted for 29.5% of variance containing 6 items of fashion and masculinity (i.e. 'are fashionable', 'are stylish', 'can have my manhood approved and validated by my peers and society',

'project a sexually attractive masculine image', 'allow me to engage in social activities' and 'are tight-fitting') (Appendix I). The second factor (eigenvalue = 2.64, 11% of variance) 'Camouflage & Comfort' contained 7 items of camouflage, hiding, comfort and durability (i.e. 'are of good quality and durable', 'do not draw attention to my figure', 'camouflage imperfections of my figure', 'are loose-fitting', 'are dark-coloured', 'are comfortable' and 'are less garish to avoid looking feminine' (Appendix I). The third factor (eigenvalue = 1.55, 6.5% of variance) 'Emotional' contained 3 items (i.e. 'link me to a desirable place/person or event', 'make me feel emotionally attached to them' and 'do not hide my weight problems') (Appendix I). The forth factor (eigenvalue = 1.21, 5% of variance), 'Individuality' contained 4 items (i.e. 'allow me to express myself', 'symbolise my individuality and personality', 'link me to a desirable place/person or event' and 'make me feel emotionally attached to them') while the fifth factor (eigenvalue = 1.04, 4.36% of variance) 'Social Identity' contained 3 items of social functions and self-confidence enhancement (i.e. 'allow me to engage in social activities', 'make me feel good and enhance my self-confidence' and 'indicate that I am part of a particular group and communicate my social identity') (Appendix I). There was an acceptable level of internal reliability for each function with over 3 statement items (Fashion & Masculine: .818; Camouflage & Comfort: .820; Emotional: .681; Luxurious Utility: .614; Individuality: .765). In terms of the mean rating of various factor components (Table 4), Masculine Fashion (M = 3.64, SD =.65), Camouflage & Comfort (M = 3.38, SD =.70), Formal & Trendy (M =2.59, SD =.77), Emotional (M =3.52, SD =.82), Luxurious Utility (M = 3.23, SD = .77), Individuality (M =3.80, SD =.70) and Social Identity (M =4.02, SD = .62) were obtained. Most clothing functions were moderately rated (above the mid-point of 3) except for Formal & Trendy, which indicated that clothing can serve a variety of functions.

H1. Menswear functions are multi-dimensional

Through the principal component analysis, 5 extracted components of menswear functions supported the hypothesis that menswear functions serve a variety of functions. Thus, Hypothesis 1 is accepted.

H2. Masculinity is a dimension of menswear functions

4 masculinity items were added to the pool of menswear functions to examine if masculinity was a dimension of menswear functions. According to the principal component analysis, masculinity was not a distinct component factor; the three masculinity items were accompanied by fashion/styles items to serve as the factor component *Fashion & Masculine*. Therefore, Hypothesis 2 is not accepted. But masculinity was suggested to be associated with menswear function, in particular for the dimension of Fashion & Masculine.

Preferences for Various Styling Attributes – MAAP

Preferences for 8 styling attributes of tops and bottoms design were examined on the MAAP. On a rating scale from 1 to 7 (4 representing the standard fit), the mean rating for each styling attribute was obtained (Table 5). A shorter fit was preferred for short-sleeve length (M= 3.81), length of tops (M= 3.22) and long-sleeve length (M= 3.90), while a much tighter fit was preferable in terms of shoulder width (M= 3.38), silhouette of tops (M = 3.27) and bottoms (M= 3.07). As for the waistline level and bottom length, the respondents preferred lower rise (M= 4.29) and longer bottom (M= 4.27).

Regarding shoulder width, a strong preference for narrow shoulder width was shown.

25.9 % of the respondents preferred the standard fit and 55.9 % preferred shoulder width shorter than standard. As for the sleeve length of short-sleeve tops, 15.4 % preferred the standard fit and 48.3 % preferred sleeve length shorter than standard. As for length of tops, a significantly shorter fit was preferred (M = 3.22, SD = 1.56), 16.9 % selected the standard fit, and 57.3% preferred shorter tops. Regarding the sleeve length of long-sleeve tops, 23.1% preferred the standard fit while 41.3% preferred shorter sleeve length. As for the silhouette of tops, the respondents showed a strong preference for a tighter fit. 66.4% preferred a tighter fit while 20.3% preferred the standard one. As for the silhouette of bottoms, 71.3% preferred a tighter fit. As for the waistline level, 20.3% preferred the standard level and 48.3% preferred lower rise. Regarding bottom length, 62.9% preferred longer bottom design

BMI & Fashion Involvement

In terms of BMI, 32 respondents (22.4 %) were underweight, 89 (62.2%) were normal while 22 (15.4 %) were overweight (Table 6).

Regarding fashion involvement, an acceptable level of Cronbach's reliability was obtained (alpha > .776). The respondents showed a high level of fashion involvement with a mean score of 38.5, which was much higher than the neutral score of 30. 87.4% of the respondents scored over 30 in fashion involvement (Figure 4)

Predictors of Design Preferences

Based upon the theoretical framework suggested, all the independent variables, including 7 component factors of menswear functions, BMI and fashion involvement went into regression simultaneously to study the eight styling attributes and dependent variables, which examined the potential predictors of design preferences for various styling attributes, in order to study the formation process of design preference with regard to the relation between internal influence and evaluation of menswear design. Tables 7 to 21 show the results of the stepwise multiple regression analyses of the eight attributes and the correlation analyses of BMI, fashion involvement, menswear functions with design preferences for various styling attributes.

Predictors of shoulder width

Table 7 shows the correlations between preferences for shoulder width and all independent variables. As mentioned above, the respondents preferred shorter shoulder width associated with lower BMI, higher fashion involvement and lower function value of Camouflage & Comfort. In order to find out which variables offered unique prediction, the simultaneous multiple regression was conducted and there was a significant 32.5% of variance, R square = .325, F (3, 139) = 22.16, p< .001. The beta coefficients in Table 8 show that fashion involvement, Camouflage & Comfort and BMI were independent predictors of preferences for shoulder width, while lower fashion involvement, Camouflage & Comfort, and higher BMI predicted longer shoulder width.

Predictors of sleeve length of short-sleeve tops

The respondents preferred sleeve length close to the standard fit. The correlation results show that a shorter short-sleeve length was associated with lower BMI and lower function value of Camouflage & Comfort (Table 9). The simultaneous multiple regression was conducted with a significant 17.6% of variance, R square = .176, F (2,

140) = 14.80, p< .001. Based on the beta coefficients in Table 10, Camouflage & Comfort and BMI were independent predictors of preferences for short-sleeve length, when higher BMI and Camouflage & Comfort predicted longer sleeve length for short-sleeve tops.

Predictors of length of tops

The respondents preferred shorter tops associated with lower BMI, lower function value of Camouflage & Comfort, and higher fashion involvement (Table 11). There was a significant 25% of variance, R square = .250, F (4, 138) = 15.350, p< .001. The results show that BMI, Camouflage & Comfort and Fashion & Masculine were independent predictors of preferences for length of tops when higher BMI and Camouflage & Comfort predicted longer length of tops (Table 12).

Predictors of long-sleeve length

Length close to the standard fit was generally preferred when shorter long-sleeve length was associated with lower BMI, lower function value of Camouflage & Comfort and higher fashion involvement (Table 13). Multiple regression was conducted with a significant 14.9% of variance, R square = .149, F (3, 139) = 12.152, p< .001. Table 14 shows that Camouflage & Comfort and Fashion Involvement were independent predictors of preferences for long-sleeve length, when lower fashion involvement and Camouflage & Comfort predicted longer long-sleeve length.

Predictors of silhouette of tops

Regarding silhouette of tops, the respondents generally preferred a tighter fit. It was found that a tighter fit of tops was associated with lower BMI, higher fashion involvement, higher function value of Fashion & Masculine and lower function value of Camouflage & Comfort (Table 15). In the multiple regression analysis, there was a significant 28.5% of variance, R square = .285, F (2, 140) = 18.326, p< .001. BMI, Camouflage & Comfort and Fashion & Masculine were independent predictors of preferences for silhouette of tops, when higher BMI and Camouflage & Comfort predicted looser silhouette (Table 16).

Predictors of silhouette of bottoms

The preferred tighter fit was associated with higher function value of Fashion & Masculine. The simultaneous multiple regression was conducted and showed a remarkably low 4.8% of variance, R square = .048, F (1, 141) = 7.067, p< .001. Fashion & Masculine was the only independent predictor of preferences for silhouette of bottoms when Fashion & Masculine predicted a tighter fit of bottom silhouette (Table 17 - 18).

Predictors of waistline level

Generally, the respondents preferred lower rise. The simultaneous multiple regression showed a significant 5.6% of variance, R square = .056, F (2, 140) = 4.12, p< .001, indicative of Emotional and Individuality as independent predictors of preferences for silhouette of tops, when Individuality predicted a lower-rise bottom (Table 19).

Predictors of bottom length

Regarding bottom length, the respondents preferred longer bottom which was associated with higher functional value of Camouflage & Comfort and Emotional (Table 20). The results of multiple regression indicated a significant 27.9% of variance, R square = .279, F (6, 136) = 8.708, p< .001. All five clothing functions and Fashion Involvement were independent predictors of preferences for bottom length, which indicated that higher fashion involvement, Camouflage & Comfort and Emotional predicted longer bottom length (Table 21).

Table 22 summarizes the predictors of design preferences for various styling attributes. Each of the 8 styling attributes could be predicted by at least one factor component of menswear functions. Camouflage & Comfort was the most extensive predictor of various styling attributes (i.e. 6), including shoulder width, short-sleeve length, long-sleeve length, silhouette of tops, silhouette of bottoms, and bottom length. Fashion & Masculine was the second most extensive predictor, which predicted length of tops, silhouette of tops, silhouette of bottoms and bottom length. Bottom length could be predicted by 5 factors of menswear functions. In addition to menswear functions, BMI and fashion involvement were also predictive variables of design preferences for various styling attributes. BMI predicted design preferences for shoulder width, short-sleeve length and length of tops while fashion involvement predicted shoulder width, long-sleeve length and bottom length.

H3. Physical factors (BMI) are a predictor of design preferences for menswear, H4. Fashion involvement is a predictor of design preferences for menswear & H5. Clothing functions is a predictor of design preferences for menswear

The results of multiple regression analyses showed that BMI, fashion involvement and various component factors of clothing functions were significant predictors of eight styling attributes on the MAAP. Therefore, Hypotheses 3, 4 and 5 are accepted.

Clusters in terms of design preferences on MAAP

Cluster analysis was adopted to identify various groups of subjects regarding their preferences for the eight styling attributes on the MAAP (tops and bottoms design). The hierarchical cluster analysis (i.e. Ward's method) suggests that 2, 3 or 4 clusters are a reasonable number of clusters. By using the non-hierarchical analysis and K-means cluster analysis after deleting seven identified outliers; a three-cluster solution demonstrated a clearer profile of significantly different and distinctive preferences for all the eight attributes. As shown in Table 23, there are three clusters of respondents formed in terms of their preferences for the eight styling attributes; 43 subjects for cluster 1, 46 for cluster 2 and 47 for cluster 3.

Significant differences were found across the clusters by the ANOVA analysis (Table 24) that compared various sets of mean preference ratings of each cluster shown in Table 26. But according to the formation of the clusters, cluster 3 was singled out first in a two-cluster solution while clusters 1 and 2 formed another cluster afterwards, which indicated that the subjects of clusters 1 and 2 were similar to each other in terms of design preference. But in order to achieve a more evenly structure of clusters which supported the significant differences, the results of the three-cluster solution were adopted in this study.

Table 25 shows the mean ratings and standard deviations of preferences for the eight styling attributes on the MAAP for the three clusters. For each styling attribute of seven fitting levels, the mean ratings indicated the average fit preferences. Based on their preferences, cluster 3 was regarded as "Long & Loose Fit" as its respondents generally preferred a longer and looser fit than the other two clusters, such as the loosest fit of shoulder, loosest silhouette of tops and bottoms, longest short-sleeve and long-sleeve, and longest top. Cluster 2 was regarded as "Short & Tight Fit" as its respondents preferred tops with a tight and short fit, such as the shortest short and long-sleeve, shortest tops, and tightest silhouette of tops; however, they preferred the longest bottom length. Cluster 1 was regarded as "Bottom-Fit-Concern" as its respondents had distinctive preferences for bottom design, which was significantly different from the other clusters, with the tightest silhouette, lowest waistline and shortest bottom length.

Significance of differences in clothing functions between clusters

The three clusters of respondents were also characterized based on their uniqueness in clothing functions. In order to test the presence of a significant difference between the clusters regarding their psychological dimensions, the multivariate ANOVA with multiple comparisons by Scheffe tests was employed. The ANOVA results indicated that there were significant differences between the three clusters in terms of three factor components of clothing functions, which were Fashion & Masculine, Camouflage & Comfort and Luxurious Utility (Tables 26 and 27). Table 28 shows the mean ratings and standard deviations of various factor components in terms of clothing functions from the three clusters.

Specific comparison of various statements about clothing functions

In order to further examine the specific characteristics of clothing functions, an ad hoc Scheffe test after ANOVA was conducted to locate the rating difference in the statements about clothing functions (Table 29). There was not any significant difference between various clusters in the four statements about masculinity. However, significant differences were identified when the respondents from cluster 1 highly rated the statements 'allow me to express myself', 'symbolize my individuality and personality', 'allow me to engage in social activities', 'enable me to participate in sporting/leisure activities', 'are fashionable', 'fit my mood on the day' and 'are a tight fit to my figure'; while lowly rated the statements 'are of good quality and durability', 'are loose-fitting' and 'are dark-coloured'. The respondents from cluster 2 lowly rated the statements 'symbolize my individuality and personality', 'enable me to participate in sporting/leisure activities', 'have a specific utility', 'are of good quality and durability', 'are fashionable', 'do not draw attention to my figure', 'camouflage (hide) my figural problems', 'are dark-coloured', 'fit my mood on the day' and 'are comfortable'. And the respondents from cluster 3 highly rated the statements 'enable me to participate in sporting/leisure activities', 'have a specific utility', 'are of good quality and durability', 'do not draw attention to my figure', 'camouflage (hide) my figural problems', 'are loose-fitting', and 'are dark-coloured', while they just lowly rated ' allow me to express myself'.

Characteristics of each cluster

Apart from the multivariate ANOVA analyses and the multiple comparisons of the means of various clothing functions, the correlation analyses of various clothing functions and the eight styling attributes were conducted for each cluster. Tables 30 - 32 are the summaries demonstrating the unique Pearson's correlation between clothing functions and styling attributes for each cluster. By comparing the results of the whole sample, different results were found in each cluster; when some originally non-correlated results between clothing functions and styling attributes found in the whole sample became significantly correlated in particular clusters. For example, shoulder width correlated with and was predicted by Camouflage and Comfort only for the whole sample; however, it no longer correlated with Camouflage & Comfort in cluster 1 but significantly negatively correlated with Fashion & Masculine. These differences raised the importance of the characteristics of each cluster. Meanwhile, each of the three clusters was also characterized in terms of BMI and fashion involvement when variations in BMI and fashion involvement were different among clusters (Tables 33 – 34).

i. Cluster 1 - Bottom-Fit-Concern

The respondents from cluster 1, who were in the group of Bottom-Fit-Concern (N=43, 31.6%), rated Fashion & Masculine (M=3.8915) higher than Camouflage & Comfort (M= 3.1561) (Tables 26 - 28). Thus, they were regarded as the *Fashion and Masculine group*. In terms of BMI, 97.1% of the respondents were in the group of underweight BMI and normal BMI while only one respondent was considered overweight (Table 33). In terms of fashion involvement, the mean involvement score of the respondents in cluster 1 (M= 40.49) was the highest among the three clusters by the ad hoc Scheffe test after ANOVA (Table 34). Regarding the unique correlation between styling attributes and clothing functions in cluster 1 (Table 30), there were significantly negative correlations between shoulder width and Fashion & Masculine ($r = -.352$, $p < .05$), and long-sleeve length and Fashion & Masculine ($r = -.311$, $p < .05$), while there were significantly positive correlations between short-sleeve length and Emotional ($r = .330$, $p < .05$), length of tops and Luxurious Utility ($r = .330$, $p < .05$) and silhouette of tops and Camouflage & Comfort ($r = .308$, $p < .05$). And based on the mean rating comparison of statements regarding menswear functions (Table 29), males from cluster 1, the fashion and masculine group, had distinctive preferences on bottom designs, while they preferred fashionable clothing for social purpose; which was in tight fit that could draw attention, not in dark colour.

ii. Cluster 2- Short & Tight Fit

The respondents from cluster 2 preferred a short & tight fit (N=46; 33.8%). They were regarded as a *low functional value group* as they lowly rated functional value in terms of Fashion & Masculine (M = 3.5326) and Camouflage & Comfort (M=3.1677), which could also be shown in the averagely low functional values for various factor components (Tables 26 - 28). Regarding the unique correlation between styling attributes and clothing functions in cluster 2 (Table 31), there were negative correlations between silhouette of tops and Fashion & Masculine ($r = -.319$, $p < .05$), silhouette of tops and Emotional ($r = -.433$, $p < .01$), silhouette of bottoms and Camouflage & Comfort ($r = -347$, $p < .05$) and silhouette of bottoms and Individuality ($r = -.304$, $p < .05$); while significantly positive correlations were found between short-sleeve length and Trendy & Business Purpose ($r = .377$, $p < .01$) and waistline level

and Camouflage & Comfort ($r = .306$, $p < .05$). In terms of BMI, more overweight respondents were found in this cluster. 89.1% of the respondents were in the group of underweight and normal while 10.9% were considered overweight (Table 33). As for fashion involvement, the mean involvement score of the respondents in this cluster (M= 39.24) was a bit lower than those in cluster 1 (Table 34).

Although the respondents from cluster 2 generally gave low ratings to various functions, the Scheffe test conducted on each statement item of fashion involvement indicated that they rated the statement 'Clothing is not part of my self-image' significantly lower than cluster 3, which was the lowest among the three clusters (Table 29). And in spite of a significantly low rating of clothing functions, the respondents in this cluster demonstrated their concern beyond clothing functions. For example, they were as highly fashion-involved as cluster 1, which was significantly higher than cluster 3. Males from cluster 2 preferred short and tight fit clothing; they were not intended to stand out; preferred clothing design in formal and subtle colour; without specific utility; not fashionable; not for camouflaging.

iii. Cluster 3 - Long & Loose Fit

The respondents from cluster 3 who preferred a long & loose fit (N= 47; 34.6%) were highly concerned about the functions of Camouflage & Comfort (M= 3.8085) (Tables 26 - 28). Hence, they were regarded as the *Camouflage & Comfort group*. In terms of BMI, more overweight respondents were found in this cluster. Not many respondents having normal BMI were found in this cluster, who accounted for only 46.8% (compared with 76.7% in cluster 1 and 65.2% in cluster 2), while 27.7% were overweight. In comparison to the other 2 clusters, more underweight and overweight respondents having extreme BMI were found in this cluster (Table 33). In terms of fashion involvement, the mean involvement score of the respondents in this cluster (M= 37.32) was the lowest among the three clusters (Table 34). And there was only one significantly positive correlation between styling attributes and clothing functions in cluster 3 (Table 32), which was between shoulder width and Emotional ($r = .327$, $p < .05$). Males from cluster 3 preferred leisure & sports clothing in loose and long fit for the use of camouflaging. Clothing was not expressive; dark in colour; utility oriented; in good quality and durability; not needed to be fashionable.

H6. There are segments of subjects having distinctive design preferences for menswear & H7. Different concerns for clothing functions can be found across various groups of subjects having distinctive design preferences (if H6 accepted)

The comparison between the clusters regarding design preferences for various styling attributes suggested that there was a conflict of preferences in different clusters. Based on the respondents' preferences for various styling attributes, the formation of the clusters and the characteristics of each cluster, design preferences for menswear varied with each subject in terms of evaluation and expectation of clothing functions, and they had different preferences for various styling attributes on the MAAP. Therefore, Hypotheses 6 and 7 are accepted.

RESULT & DISCUSSION

Based on the theoretical framework (Figure 1), the results of this study were discussed in two areas: Area I: Internal influences on adopters' motivation; Area II: Formation of design preference

In Area I, internal influences on adopters' motivation in terms of clothing functions and fashion involvement were examined. Menswear could serve as many functions as womenswear. However, the extracted pattern of this study was not the same as those of previous studies. In the previous studies related to clothing functions, (Tiggemann & Lacey, 2009; Kwon & Parham, 1994) there were four dimensions, including Assurance, Fashion, Camouflage and Individuality, while the single item Comfort was factorized. Each of the factors was clearly defined. Instead of a clear definition of each dimension found in the previous studies, the results of this study showed that each clothing component encompassed a mix of functions. For example, Camouflage and Comfort were combined into one function component as Camouflage & Comfort. The newly examined statements about masculinity were combined with fashion items such as Fashion & Masculine, which was the factor in most of the variance in clothing functions. To explain the difference between this study and previous researches, there were at least two possible answers. First, this study of clothing functions targeted modern males, which was different from the existing female-oriented studies; second, there were cultural, demographical and geographical differences in clothing functions. And comparing with the first component, Fashion & Masculine, the second component, Camouflage & Comfort was the less important; which indicated that this function of utility was no longer the most important to modern males. Meanwhile, the modern males in Hong Kong have a general high level of fashion involvement.

Masculinity was a very important idea in menswear design. Despite that masculinity could not be singled out as a single component of clothing functions while *H2 Masculinity is a dimension of menswear functions* is not accepted, two statements about masculinity were factorized in the function Fashion & Masculine. The idea of merging fashionability and masculinity explained that modern menswear design and masculinity were indivisible. More significantly, Fashion & Masculine was the first factor accounting for 29.3% of the variance in menswear functions, which revealed the importance of fashion and masculinity in modern menswear design.

In Area II, the driving force behind formation of design preferences was examined, which provided understanding of the predictors of styling attributes during evaluation of menswear design. The findings of this study suggested that formation of design preferences for various styling attributes was motivated by different physical and psychological dimensions, To put it simply, preferences for menswear can be explained by how males define themselves and what they think. In particular, BMI predicted various styling attributes that fatter young men liked clothes with longer and looser silhouette, coherent with the study by Chattaraman and Rudd (2006), which targeted at women subjects. In other words, fatter males in Hong Kong preferred looser and longer clothes for extra camouflage. Those with higher fashion involvement were predicted to prefer tight-fitting shoulder, shorter sleeves and longer bottom length. Those who sought higher function value of Fashion & Masculine preferred shorter, tighter tops and bottoms. Meanwhile, young men preferred longer, looser tops and longer bottoms for greater camouflage and comfort.

Regarding the significantly negative correlation and the causal relationship between Fashion & Masculine and silhouette of tops, the respondents expected to look more fashionable and masculine by wearing tight-fitting clothing to engage in social activities and enhance sex appeal. Wearing skinny clothing to enhance sex appeal might no longer be exclusive to womenswear as traditionally assumed. Wearing skinny clothing to accentuate male figures was masculine and fashionable for modern men to engage in social activities and attract the opposite sex.

In the theoretical framework, formation of design preferences bridged the gap between adopters' background and internal influences. This study successfully identified the determinants during formation of design preferences, which provided knowledge and understanding of why young men preferred a particular style. For instance, the findings of this study served to explain why those seeking individuality, fashion, masculinity, and social confidence preferred shorter bottoms.

On the other hand, the result of categorization of young males in terms of their design preferences defined that there are three groups of young males in Hong Kong (i.e. Fashion & Masculine group, Low-Function-Value Group and Camouflage & Comfort group); they preferred their own style of clothing as they have different concerns during menswear evaluation. To utilize the findings of this study, designers and retailers are able to have better understanding on the local menswear market in Hong Kong while offering the right clothing design to their target customers.

SUGGESTIONS TO MODERN MENSWEAR INDUSTRY

Based on the findings of this study, some suggestions are made and recommended to manufacturers, retailers and designers.

Silhouette regarded as an important element in menswear fashion designs

This study further explained the importance of silhouette as a design element, which is related to the psychology of menswear evaluation. It is recommended that designers pay more attention to silhouette and demonstrate the characteristics or image of their designs for their target customers. For customers who are more concerned with fashionability and masculinity, designers should design tops and bottoms in tighter and shorter silhouette. On the other hand, silhouette can be utilized as a tool to promote brand images. It is also recommended that designers create shorter bottoms with a lower waistline in order to project a more individual image.

The predictor summary of various styling attributes on MAAP

The predictor summary of various styling attributes is a tool to explain menswear trends. Yet, this summary can go out of date and should be reviewed on a regular basis.

The importance of categorizing males into groups and understanding them individually

The main idea of this study was that male customers should be categorized into groups and understood individually. The findings of this study indicate that it is meaningless to obtain their general design preferences. Male customers can be characterized in terms

of BMI, fashion involvement, menswear functions and menswear evaluation. And especially during the current stage of transformation of modern menswear, retailers can use this idea to get a better understanding of their target male customers. Sales and marketing people can also predict what their customers really need with the help of this study's findings.

CONCLUSION AND FURTHER STUDY

This study provides knowledge of menswear evaluation in both practical and theoretical senses. In terms of practical significance, manufacturers and designers can understand more about young males' clothing preferences and therefore can produce products which their customers really need. In terms of theoretical significance, this study enriches the knowledge of fashion adoption, revealing directing influences building up the interaction between socio-psychological motivations and menswear design evaluation. It also generates original knowledge of design preferences beyond physical dimensions. The results translated intangible needs in terms of socio-psychological orientation into measurable preferences for menswear design. Mass customization and body scanning are perceived as the new direction for a better fit (Schofield et al., 2006). This study offers new knowledge of sizing from a different perspective, which can improve the fit of ready-to-wear clothing and facilitate the development of garment sizing, particularly in beyond physical sense.

This study also offers empirical understanding of young males' psychological expectation and evaluation of menswear in terms of the relationship between physical factors, psychological factors and design preferences. The results strongly suggested that modern men treat fashion in a multi-dimensional way which might be even more complicated than women. The results also show that the local young men's fashion involvement is significantly higher than the mid-score, which shows that modern males in Hong Kong shake off gender stereotypes and dress to promote their identity, style and image based on their own concerns. Compared with practical functions like camouflage and comfort, fashion and masculinity have become more important; which explained more variance about menswear functions. In addition, their evaluation of modern menswear is so complicated that physical factors (BMI), fashion involvement and clothing functions are all suggested for prediction of design preferences. The findings of this study indicate that the modern menswear market should no longer be ignored commercially or academically. It is strongly recommended that researchers should pay more attention to modern menswear, of which many aspects remain unexplained. Finally, the generality of this study was limited by age, gender and demographic factors. These constraints should be tackled in future study to further the research on menswear.

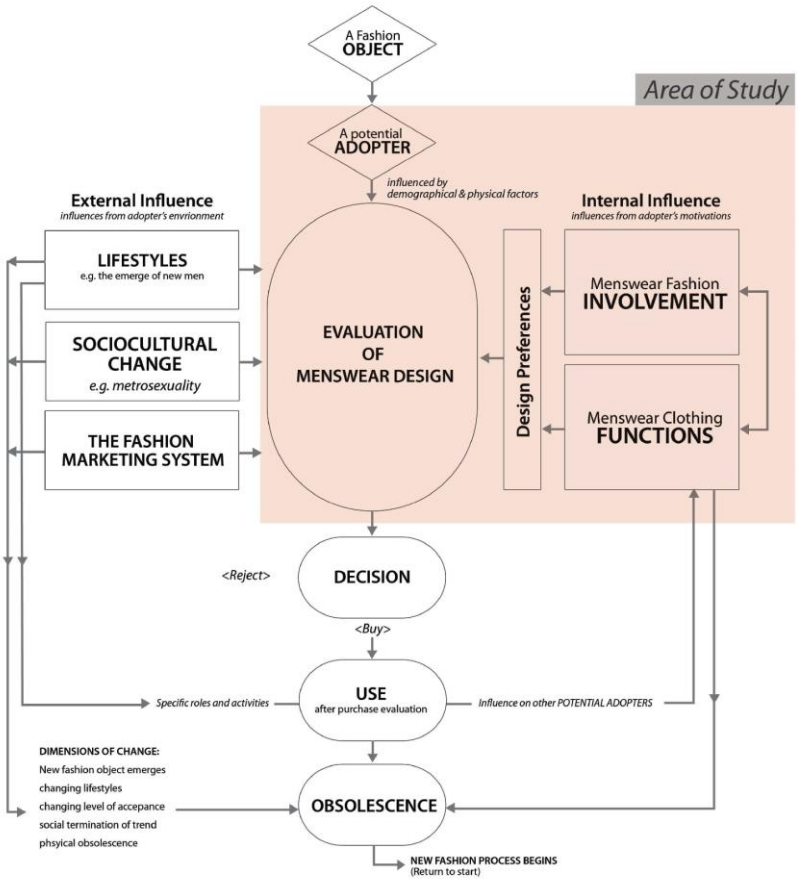

Figure 1: The study area in the conceptual framework of fashion adoption

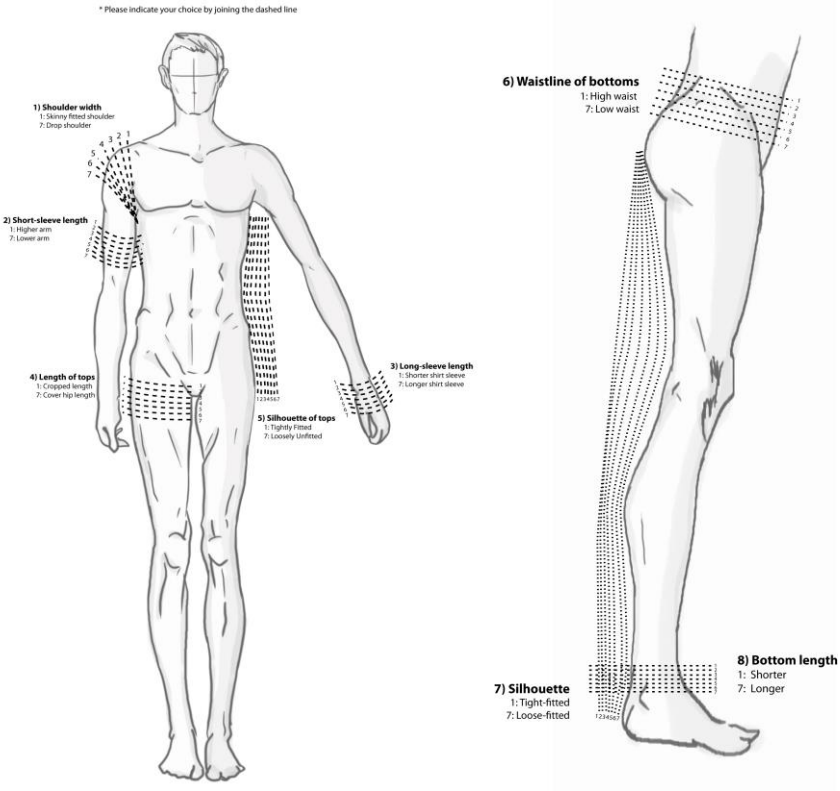

Figure 2: Menswear aesthetic attribute preference scale (MAAP)

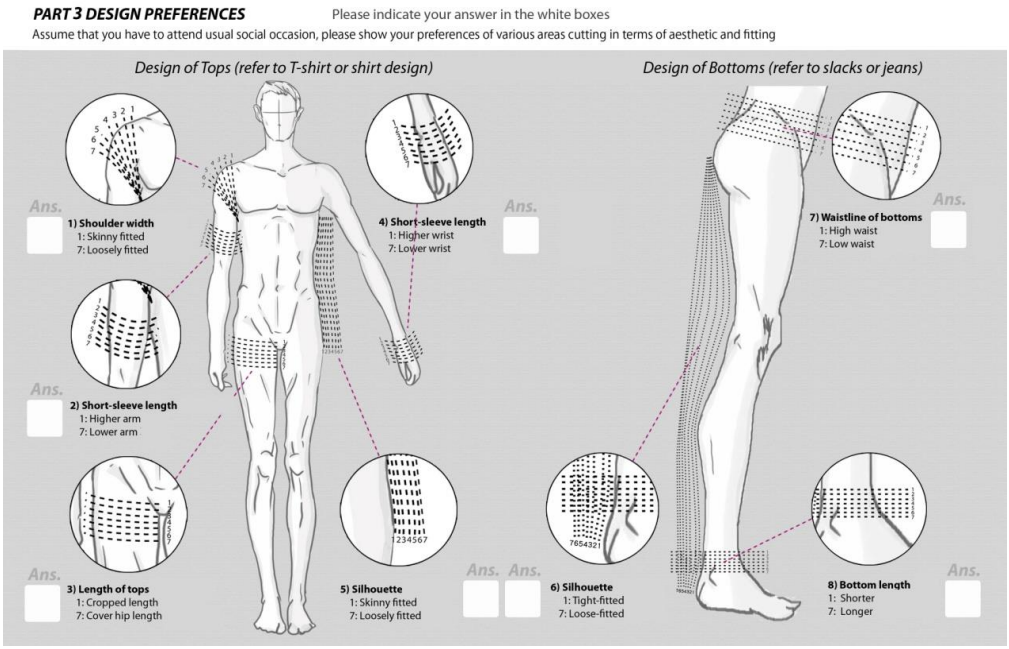

Figure 3: Modified presentation of MAAP in the survey

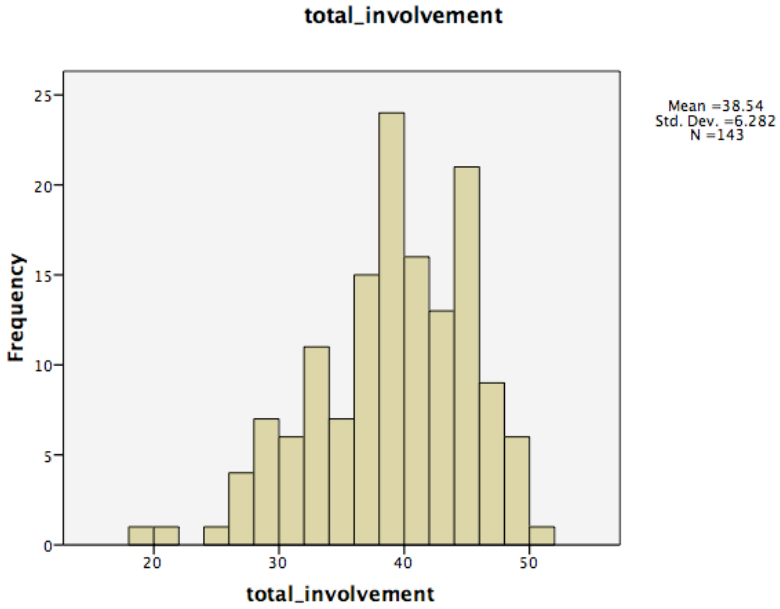

Figure 4: Respondents' summated scores in fashion involvement

Item	Dimension
1. It gives me pleasure to shop for clothes.	Hedonism
2. I can think of instances where a personal experience was affected by the way I dressed.	Importance
3. Clothing is important in my life.	Importance
4. Clothing interests me a lot.	Interest
5. I enjoy buying clothes for myself.	Hedonism
6. I rate my dress sense as highly important to me.	Importance
7. I attach great importance to how people are dressed.	Importance
8. Clothing is a topic to which I am indifferent.	Interest
9. Clothing is not part of my self-image.	Self expression
10. Buying clothes feels like giving myself a gift.	Hedonism

Table 1: Items measuring menswear fashion involvement (Michaelidou et al., 2006)

The clothes I wear……
1. allow me to express yourself
2. symbolise my individuality/personality
3. link me to a desirable place/person or event
4. make me feel emotionally attached to them
5. allow me to engage in social activities
6. make me feel good and enhance my self-confidence
7. are expensive, rare or unique
8. enable me to participate in sporting/leisure activities
9. indicate that I am part of a particular group and communicate my social identity
10. have a specific utility
11. are of good quality and durable
12. are fashionable
13. are stylish
14. do not call attention to my figure
15. camouflage the imperfections of my figure
16. are dark-coloured
17. are loose-fitting
18. do not hide my weight problem
19. suit my mood
20. are tight-fitting
21. are comfortable
22. can have my manhood approved and validated by my peers and society (Connell et al, 2003)
23. project a sexually attractive masculine image (Craik, 1994)
24. are recommended by men's magazines (Edwards, 1997; Craik, 1994; Galilee, 2002)
25. are less garish to avoid looking feminine (Edwards, 1997)

Table 2: Instruments for menswear functions (Cox et al., 1995; Kwon et al., 1994; Tiggemann et al., 2009)

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	Variance (%)	Cumulative (%)	Total
1. Fashion & Masculine	7.090	29.541	29.541	4.356
2. Camouflage & Comfort	2.636	10.982	40.523	4.058
3. Emotional	1.547	6.448	46.971	2.518
4. Individuality	1.207	5.031	52.002	3.161
5. Social Identity	1.045	4.355	56.357	3.631

Table 3: Results of extraction of various components in terms of menswear functions (Extraction Method: Principal Component Analysis; two factors with two variables were dropped)

	Mean	Std. Deviation
Fashion & Masculine	3.6364	.64720
Camouflage & Comfort	3.3846	.69723
Emotional	3.5280	.81745
Individuality	3.7271	.70265
Social Identity	4.0186	.61765

Table 4: Summated scores with means and SDs for various factor components of menswear functions

Styling attributes	Mean	S.D.
1. Shoulder width (1: tighter – 7: looser)	3.38	1.352
2. Sleeve length of short-sleeve tops (1: shorter – 7:longer)	3.81	1.899
3. Length of tops (1: shorter – 7:longer)	3.22	1.562
4. Sleeve length of long-sleeve tops (1: shorter – 7:longer)	3.90	1.591
5. Silhouette of tops (1: tighter – 7: looser)	3.27	1.246
6. Silhouette of bottoms (1: tighter – 7: looser)	3.07	1.304
7. Waistline level (1: higher – 2: lower)	4.29	1.453
8. Bottom length (1: shorter – 7:longer)	4.72	1.590

Table 5: Mean ratings of various styling attributes in MAAP

Level of BMI	Frequency	Percent
Underweight (BMI <20)	32	22.4
Lower Normal (BMI: 20-23)	64	44.8
Higher Normal (BMI: 24-26)	25	17.5
Overweight (BMI > 26)	22	15.4

Table 6: Respondents' BMI

Shoulder width variables	r	Sig.
BMI (spearman's correlation)	.286**	.001
Fashion involvement	-.409**	.000
Camouflage & Comfort	.360	.000

**Significant correlation at the 0.01 level (2-tailed); * Significant correlation at the 0.05 level (2-tailed).
Spearman's correlation was used for BMI analyses as it was ranked in ordinal concept as 0, 1, 2 & 3 (i.e. 0: underweight, 1: lower normal, 2: higher normal and 3: overweight)

Table 7: Pearson's correlation results (shoulder width against menswear functions, BMI and fashion involvement)

Variables	Beta	t	Sig.
Fashion Involvement	-.357	-4.612	.000
Camouflage & Comfort	.285	3.677	.000
BMI	.190	2.633	.012
Multiple R = .570			
R square = .325			
Adjusted R square = .310, < 0.001			
F (df = 3,139) = 22.16			

Table 8: Stepwise regression results (dependent variable = shoulder width)

Short-sleeve length variables	r	Sig.
BMI (Spearman's correlation)	.280**	.001
Camouflage & Comfort	.342**	.000

*** Significant correlation at the 0.01 level (2-tailed);*
** Significant correlation at the 0.05 level (2-tailed).*

Table 9: Pearson's correlation results (short-sleeve length against menswear functions, BMI and fashion involvement)

Variables	**Beta**	**t**	**Sig.**
Camouflage & Comfort	.765	3.501	.001
BMI	.472	3.036	.003
Multiple R = .419			
R square = .176			
Adjusted R square = .164, < 0.001			
F (df = 2,140) = 14.80			

Table 10: Stepwise regression results (dependent variable = short sleeve length)

Length of tops variables	**r**	**Sig.**
BMI (Spearman's correlation)	.364**	.000
Camouflage & Comfort	.343**	.000
Fashion involvement	-.252**	.002

*** Significant correlation at the 0.01 level (2-tailed); * Significant correlation at the 0.05 level (2-tailed).*

Table 11: Pearson's correlation results (length of tops against menswear functions, BMI and fashion involvement)

Variables	**Beta**	**t**	**Sig.**
BMI	.200	2.434	.016
Camouflage & Comfort	.869	4.531	.000
Fashion & Masculine	-.605	-2.978	.003
Multiple R = .500			
R square = .250			
Adjusted R square = .234, < 0.001			
F (df = 4,138) = 15.350			

Table 12: Stepwise regression results (dependent variable = length of tops)

Long-sleeve length variables	**r**	**Sig.**
Fashion involvement	-.251**	0.03
Camouflage & Comfort	.301**	.000
BMI (Spearman's Correlation)	.180*	.032

*** Significant correlation at the 0.01 level (2-tailed); * Significant correlation at the 0.05 level (2-tailed).*

Table 13: Pearson's correlation results (long-sleeve length against menswear functions, BMI and fashion involvement)

Variables	**Beta**	**t**	**Sig.**
Camouflage & Comfort	.653	3.633	.000
Fashion involvement	-.060	-2.973	.003
Multiple R = .386			
R square = .149			
Adjusted R square = .137, < 0.001			
F (df = 3,139) = 12.152			

Table 14: Stepwise regression results (dependent variable = long-sleeve length)

Silhouette of tops variables	**r**	**Sig.**
BMI (Spearman's correlation)	.265*	.001
Fashion involvement	-.343**	.000
Camouflage & Comfort	.347**	.000
Fashion & Masculine	-.215**	.010

**. Significant correlation at the 0.01 level (2-tailed); *. Significant correlation at the 0.05 level (2-tailed).

Table 15: Pearson's correlation results (silhouette of tops against menswear functions, BMI and fashion involvement)

Variables	**Beta**	**t**	**Sig.**
Camouflage & Comfort	.801	5.423	.000
Fashion involvement	-.032	- 1.732	.086
Fashion & Masculine	-.560	-.2970	.004
Multiple R = .534			
R square = .285			
Adjusted R square = .269, < 0.001			
F (df = 2,140) = 18.326			

Table 16: Stepwise regression results (dependent variable = silhouette of tops)

Silhouette of tops variables	**r**	**Sig.**
Fashion & Masculine	-.210**	.012

**. Significant correlation at the 0.01 level (2-tailed); *. Significant correlation at the 0.05 level (2-tailed).

Table 17: Pearson's correlation results (silhouette of bottoms against menswear functions, BMI and fashion involvement)

Variables	**Beta**	**t**	**Sig.**

Fashion & Masculine	-.434	-2.658	.009
Multiple R = .219			
R square = .048			
Adjusted R square = .041, < 0.01			
F (df = 1,141) = 7.067			

Table 18: Stepwise regression results (dependent variable = silhouette of bottoms)

Variables	**Beta**	**t**	**Sig.**
Emotional	-.583	-3.28	.005
Individuality	.495	2.39	.039
Multiple R = .237			
R square = .056			
Adjusted R square = .042, < 0.01			
F (df = 2,140) = 4.12			

Table 19: Stepwise regression results (dependent variable = waistline height)

Bottom length variables	**r**	**Sig.**
Camouflage & Comfort	.271**	.001
Emotional	.166*	.048

** Significant correlation at the 0.01 level (2-tailed) * Significant correlation at the 0.05 level (2-tailed)

Table 20: Pearson's correlation results (bottom length against menswear functions, BMI and fashion involvement)

Variables	**Beta**	**t**	**Sig.**
Camouflage & Comfort	1.243	5.903	.000
Social Confidence	-.722	-2.879	.005
Fashion Involvement	.096	3.929	.000
Fashion & Masculine	-.693	-2.546	.012
Emotional	.764	3.855	.000
Individuality	-.747	-2.781	.006
Multiple R = .528			
R square = .279			
Adjusted R square = .247, < 0.001			
F (df = 6,136) = 8.708			

Table 21: Stepwise regression results (dependent variable = bottom length)

DESIGN PREFERENCES	**PREDICTORS**
1. Shoulder width (higher rating with	Fashion involvement (-)

longer shoulder width)	Camouflage & Comfort (+)
	BMI (+)
2. Short-sleeve length (higher rating with longer sleeve length)	Camouflage & Comfort (+)
	BMI (+)
3. Length of tops (higher rating with longer length)	BMI (+)
	Camouflage & Comfort (+)
	Fashion & Masculine (-)
4. Long-sleeve length (higher rating with longer sleeve length)	Camouflage & Comfort (+)
	Fashion involvement (-)
5. Silhouette of tops (higher rating with looser silhouette)	Camouflage & Comfort (+)
	Fashion involvement (-)
	Fashion & Masculine (-)
6. Silhouette of bottoms (higher rating with looser silhouette)	Fashion & Masculine (-)
7. Waistline height (higher rating with lower waistline)	Emotional (-)
	Individuality (+)
8. Bottom length (higher rating with longer length)	Camouflage & Comfort (+)
	Social Confidence (-)
	Fashion involvement (+)
	Fashion & Masculine (-)
	Emotional (+)
	Individuality (-)

*(-) and (+) indicated the positive and negative relationship respectively

Table 22: Summary of predictors of various styling attributes on MAAP

Clusters	**Cases**
1	43.000
2	46.000
3	47.000

Table 23: Number of cases for each cluster in MAAP

	Cluster		**Error**			
	Mean Square	**df**	**Mean Square**	**df**	**F**	**Sig.**
1. Shoulder width	33.800	2	1.033	133	32.719	.000
2. Short-sleeve length	113.706	2	1.871	133	60.777	.000
3. Length of tops	60.321	2	1.259	133	47.906	.000
4. Long-sleeve length	21.123	2	2.112	133	10.003	.000
5. Silhouette of tops	31.686	2	.810	133	39.135	.000
6. Silhouette of bottoms	14.657	2	1.089	133	13.463	.000

	Cluster		Error			
	Mean Square	**df**	**Mean Square**	**df**	**F**	**Sig.**
1. Shoulder width	33.800	2	1.033	133	32.719	.000
2. Short-sleeve length	113.706	2	1.871	133	60.777	.000
3. Length of tops	60.321	2	1.259	133	47.906	.000
7. Waistline level	28.810	2	1.691	133	17.041	.000
8. Bottom length	73.693	2	1.214	133	60.714	.000

Table 24: Significance differences in various styling attributes across three clusters of MAAP – ANOVA

	Bottom-Fit-Concern (N=43)		**Short & tight Fit (N=46)**		**Long & Loose Fit (N=47)**	
	M	**S.D.**	**M**	**S.D.**	**M**	**S.D.**
1. Shoulder width	2.72 (S.L.)	1.008	2.74	.913	4.21 (S.H.)	.999
2. Short-sleeve length	3.30	1.440	2.35 (S.L.)	1.205	5.40 (S.H.)	1.330
3. Length of tops	3.07	1.121	1.93 (S.L.)	1.071	4.21 (S.H.)	1.232
4. Long-sleeve length	3.93	1.438	3.11 (S.L.)	.577	4.45 (S.H.)	1.348
5. Silhouette of tops (higher rating of looser silhouette)	2.70	.914	2.61 (S.L.)	1.567	4.09 (S.H.)	1.120
6. Silhouette of bottoms (higher rating of looser silhouette)	2.33 (S.L.)	1.085	2.91	.998	3.47 (S.H.)	.975
7. Waistline height (higher rating of lower waistline)	5.05 (S.L.)	1.308	4.28	1.337	3.45 (S.L.)	1.380
8. Bottom length	3.26 (S.L.)	1.157	5.50 (S.H.)	1.042	5.49	1.214

S.L. represents significantly lower mean rating while S. H. represents significantly higher

Table 25: Mean ratings of preferences for various styling attributes from three clusters

Factor component of clothing functions	**Bottom-Fit-Concern (N=43)**	**Short & Tight Fit (N=46)**	**Long & Loose Fit (N= 47)**	**F**	**Sig.**
Fashion & Masculine	3.8915 (sig. higher)	3.5326 (sig. lower)	3.5993	4.354	.015
Camouflage & Comfort	3.1561 (sig. lower)	3.1677 (sig. lower)	3.8085 (sig. higher)	17.035	.000

Table 26: Differences in various clothing functions between three clusters of design preferences (remarks on significant differences by Scheffe tests)

	Bottom-Fit-Concern	Short & Tight Fit	Long & Loose Fit
Fashion & Masculine	3.8915 (H)	3.5326 (L)	3.5993 (M)
Camouflage & Comfort	3.1561 (L)	3.1677 (M)	3.8085 (H)
Emotional	3.5581 (M)	3.5217 (L)	3.6170 (H)
Individuality	3.8430 (H)	3.6087 (L)	3.7819 (M)
Social Confidence	4.1550 (H)	3.9275 (L)	4.0922 (M)

H: highest mean rating; M: medium mean rating; L: lowest mean rating

Clothing Function Component	Cluster-cluster		Mean Difference (I-J)	Std. Error	Sig.
Fashion & Masculine	2.Short & Tight Fit	1.Bottom-Fit-Concern	.35886*	.12884	.023
Camouflage & Comfort	2. Short & Tight Fit	3.Long & Loose Fit	-.65236*	.12962	.000
	1. Bottom-Fit-Concern	3. Long & Loose Fit	-.64081*	.12739	.000

*. The mean difference is significant at the 0.05 level.

Table 27: Multiple comparison by Scheffe tests of significant differences between clusters

Cluster	Function	Min.	Max.	Mean	S.D.
Bottom-Fit-Concern (N=43)	Fashion & Masculine	2.33	5.00	3.8915	.69091
	Camouflage & Comfort	2.29	4.29	3.1561	.54694
	Emotional	1.00	5.00	3.5581	.83957
	Individuality	2.50	5.00	3.9612	.55971
	Social Confidence	2.33	5.00	4.1550	.63973
Short & Tight Fit (N=46)	Fashion & Masculine	2.33	4.67	3.5326	.57265
	Camouflage & Comfort	1.00	4.29	3.1677	.60856
	Emotional	1.50	5.00	3.5217	.72232
	Individuality	1.50	5.00	3.6522	.66279
	Social Confidence	2.67	5.00	3.9275	.54394
Long & Loose Fit (N=47)	Fashion & Masculine	2.50	4.67	3.5993	.55675
	Camouflage & Comfort	2.14	5.00	3.8085	.67486
	Emotional	2.00	5.00	3.6170	.85474
	Individuality	2.00	5.00	3.8369	.78903
	Social Confidence	3.00	5.00	4.0922	.51406

Table 28: Mean ratings and standard deviations for functional value of various component factors in terms of clothing functions from three clusters

Statements	Scheffe test sig.	Cluster 1: Fashion & Masculine group	Cluster 2: Low-function-value group	Cluster 3: Comfort & Camouflage group

Allow me to express myself	.045	4.28 (S.H.)	4.04	3.94 (S.L.)
Symbolize my individuality and personality	.031	4.40 (S.H.)	3.93 (S.L.)	4.13
Allow me to engage in social activities	.014	4.21(S.H.)	3.80	4.11
Enable me to participate in sporting/leisure activities	.008	3.84 (S.H.)	3.28 (S.L.)	3.81 (S.H.)
Have a specific utility	.017	3.63	3.20 (S.L.)	3.72 (S.H.)
Are of good quality and durability	.005	3.35 (S.L.)	3.28 (S.L.)	3.83 (S.H.)
Are fashionable	.005	3.81 (S.H.)	3.26 (S.L.)	3.40
Do not draw attention to my figure	.000	2.93	2.87 (S.L.)	3.64 (S.H.)
Camouflage (hide) my figural problems	.001	3.47	3.30 (S.L.)	3.98 (S.H.)
Are loose-fitting	.000	2.39 (S.L.)	2.59	3.77 (S.H.)
Are dark-coloured	.017	2.93 (S.L.)	3.02 (S.L.)	3.53 (S.H.)
Fits my mood on the day	.040	3.81 (S.H.)	3.26 (S.L.)	3.66
Are a tight fit to my Figure	.000	4.02 (S.H.)	3.41	3.21 (S.L.)
Are comfortable	.004	3.88	3.85 (S.L.)	4.40 (S.H.)

Table 29: Mean rating comparison of statements about menswear functions with significant differences between clusters (by ad hoc Scheffe tests of ANOVA, sig. < 0.05)

Styling attributes	**Function factors**	**r.**	**Sig.**
Shoulder width	Fashion & Masculine	-.352	.021
Short-sleeve length	Emotional	.330	.031
Long-sleeve length	Fashion & Masculine	-.311	.042
Silhouette of tops	Camouflage & Comfort	.308	.045

Table 30: Pearson's correlation between styling attributes and clothing functions in cluster 1 (Bottom-Fit-Concern)

Styling attributes	**Function factors**	**r.**	**Sig.**
Silhouette of tops	Fashion & Masculine	-.319	.030
Silhouette of tops	Emotional	-.433	.003
Silhouette of bottoms	Camouflage & Comfort	-.347	.018
Silhouette of bottoms	Individuality	-.304	.040
Waistline height	Camouflage & Comfort	.306	.038

Table 31: Pearson's correlation between styling attributes and clothing functions in cluster 2 (Short & Tight Fit)

Styling attributes	**Function factors**	**r.**	**Sig.**
Shoulder width	Emotional	.327	.025

Table 32: Pearson's correlation between styling attributes and clothing functions in cluster 3 (Loose & Long Fit)

Cluster	**Groups of BMI**	**Frequency**	**Percent**
1: Bottom-Fit-Concern	underweight	9	20.9
	Normal low	25	58.1
	Normal high	8	18.6
	overweight	1	2.3
	Total	43	100.0
2: Short & Tight Fit	underweight	11	23.9
	Normal low	25	54.3
	Normal high	5	10.9
	overweight	5	10.9
	Total	46	100.0
3: Long & Loose Fit	underweight	12	25.5
	Normal low	12	25.5
	Normal high	10	21.3
	overweight	13	27.7
	Total	47	100.0

Table 33: Frequencies of various groups in terms of BMI for each cluster

Clusters	N	Minimum	Maximum	Mean	S.D.
1: Bottom-Fit-Concern	43	26	49	40.49 (sig. higher)	5.763
2: Short & Tight Fit	46	26	50	39.24	5.007
3: Long & Loose Fit	47	20	49	37.32 (sig. lower)	6.175

Table 34: Fashion involvement of clusters (significant difference by Scheffe tests)

REFERENCES

Aldrich, W. (1997). *Metric Pattern Cutting for Menswear (3rd edn).* London: Bell & Hyman Limited.

Bakewell, C., Mitchell, V., & Rothwell, M. (2006). UK Generation Y male fashion consciousness. *Journal of Fashion Marketing and Management, 10* (2), 169-180.

Brough, D. (2008). Neo-Dandy Wearability. *Master of Arts (research) Dessertation,* Queensland University of Technology Creative I.

Chattaraman, V., & Rudd, N. A. (2006). Preferences for aesthetic attributes in clothing as a function of body image, body cathexis and body size . *Clothing and Textiles Research Journal, 24* (1), 46–61.

Connell, L. J. (2003). *Body Scan Analysis for Fit Models Based on Body Shape and Posture Analysis (No. S01-AC27).* National Textile Center.

Conseur, A., Hathcote, J. M., & Kim, S. (2008). Consumer Masculinity Behavior Among College Students and Its Relationship to Self Esteem and Media Significance. *Sex Roles, 58,* 549–555.

Costello, A. B. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*. 10 (7). Available online: http://pareonline.net/pdf/v10n7.pdf.

Cox, J., & Dittmar, H. (1995). The functions of clothes and clothing (dis)satisfaction: A gender analysis among British students . *Journal of Consumer Policy , 18* (3), 237-265.

Craik, J. (1994). Journal of Consumer Policy. *13* (1), 15–31.

Davies, H. (2008). *Modern Menswear.* U.K.: Laurence King Publishers.

Dickerson, K. (2003). *Inside the Fashion Business. (7th edn)* . New Jersey: Prentice Hall.

Eckman, M. (1997). Attractiveness of men's suits: the effect of aesthetic attributes and consumer characteristics. *Clothing Textiles Research Journal , 15,* 193-202.

Edwards, T. (1997). *Men in the Mirror – Men's Fashion, Masculinity and Consumer Society.* London: Cassell.

Engel, J., Blackwell, R., & Miniard, P. (1990). *Consumer Behavior, (6th edn)., T.* he Dryden Press, Chicago, IL.

Feather, B., Herr, D., & Ford, S. (1997). Black and white female athletes' perceptions of their bodies and garment fit. *Clothing and Textiles Research Journal, 15* (2), 125-128.

Forsythe, S., Butler, S., & Kim, M. (1991). Fashion adoption: theory and pragmatics. *Clothing and Textiles Research Journal, 9* (4), 8-15.

Frith, H., & Gleeson, K. (2004). Clothing and embodiment: men managing body image and appearance . *Psychology of Men & Masculinity, 5* (1), 40–48.

Galilee, J. (2002). Class consumption: understanding middle-class young men and their fashion choices. *Men and Masculinities, 5* (1), 32-52.

Goldsmith, R. E., & Emmert, J. (1991). Measuring product category involvement: a multitrait–multimethod study. *Journal of Business Research, 23*, 363–371.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis, (5th edn).* Upper Saddle River, N.J.: Pretence Hall.

Hawkins, D., Best, R., & Coney, K. (1998). *Consumer Behaviour – Building a Marketing Strategy, (7th edn).* Boston, MA.: McGraw-Hill.

Holbrook, M. B. (1986). Aims, concepts, and methods for the differences in aesthetic responses to design features. *Journal of Consumer Research, 13*, 337-347.

Kim, S. (2005). Consumer profiles of apparel product involvement and values. *Journal of Fashion Marketing and Management, 9* (2), 207-220.

Kwon, Y., & Parham, E. (1994). Effects of state of fatness perception on weight conscious women's clothing practices . *Clothing and Textiles Research Journal, 12* (4), 16-21.

Kwon, Y., & Workman, J. (1996). Relationship of optimum stimulation level to fashion behavior. *Clothing and Textiles Research Journal, 14* (4), 249-256.

Leung, J., & Taylor, G. (2002). Fashion Buying Criteria of X Consumers in Hong Kong. *Journal of Fashion Marketing and Management, 6* (1), 63-76.

Li, T., Au, J., & Au, R. (2010). A study of the perfect suit for young men in Hong Kong in terms of aesthetics, comfort and functionality. *The Design Journal, 13* (3), 265-290.

Loker, S., Ashdown, S., & Schoenfelder, K. (2005). Size-specific analysis of body scan data to improve apparel fit. *Journal of Textile and Apparel, 4* (3), 1-15.

Marshall, S., Jackson, H., Stanley, M., Kefgen, M., & Touchie-Specht, P. (2003). *Individuality Clothing Selection & Personal Appearance* (6th edition ed.). Pearson Education, Inc.

Michaelidou, N., & Dibb, S. (2006). Product involvement: an application in clothing. *Journal of Consumer Behavior, 5* (5), 442-53.

Nixon, S. (1992). *Have You Got the Look? Masculinity and Shopping Spectacle Cited in Shields, R. (Ed.).* London: Routledge.

Noble, S., Griffith, D., & Adjei, M. (2006). Drivers of local merchant loyalty: understanding the influence of gender and shopping motives. *Journal of Retailin, 82* (3), 177-188.

Rajagopalan, R., & Heitmeyer, J. (2005). Ethnicity and consumer choice- A study of consumer levels of involvement in Indian ethnic apparel and contemporary American clothing. *Journal of Fashion Marketing and Management, 9* (1), 83-105.

Roach, M. &. (1973). *The Visible Self: Perspectives on dress.* Englewood Cliffs, NJ: Prentice Hall.

Rothschild, M. (1979). Advertising strategies in high and low involvement situations. In J. in Maloney, & B. Silverman (eds.), *Attitude research plays for high stakes,* (pp. 74-93). Chicago, IL: American Marketing Association.

Simmons, K., Istook, C., & Devarajan, P. (2004). Female figure identification technique (FFIT) for apparel, part II: development of shape sorting software. *Journal of Textile and Apparel Technology and Management, 4*(1), 1-23.

Sproles, G. B. (1981). The role of aesthetics in fashion-oriented consumer behavior. In *In Perspectives of Fashion* (pp. 120-127). Minneapolis, MN: Burgess.

Sproles, G. B. (1979). *Fashion: Consumer Behavior Toward Dress.* MN: Minneapolis, Burgess.

Sproles, G. B., & Burns, L. D. (1994). *Changing Appearance – Understanding Dress in Contemporary Society.* New York: Fairchild Publications.

Tate, S. (2004). *Inside Fashion Design, 5th ed.* NJ.: Prentice-Hall, Englewood Cliffs.

Tiggemann, M., & Lacey, C. (2009). Shopping for clothes: Body satisfaction, appearance investment, and functions of clothing among female shoppers. *Body Image, 6,* 285-291.

Torres, I., Summers, T., & Belleau, B. (2001). Men's shopping satisfaction and store preferences. *Journal of Retailing and Consumer Services , 8,* 205-212.

Tselepis, T., & De Klerk, H. (2004). Early adolescent girls' expectations about the fit of clothes: A conceptual framework. *Journal of Family Ecology and Consumer Sciences, 32,* 83-93.

Tungate, M. (2008). *Fashion Brands, Branding Style from Armani to Zara. (2nd edn).* U.K.: Kogan Page Ltd. .

Woodruffe-Burton, H. (1998). Private Desires, Public Display. *International Journal of Retail & Distribution Management, 26* (8), 301-310.

Yoo, S. (2003). Design elements and consumer characteristics relating to design preferences of working females. *Clothing and Textiles Research Journal, 21* (1), 49-62.

Zaichkowsky, J. (1985). Measuring the involvement construct. *Journal of Consumer Researches, 12,* 341-352.

ACKNOWLEDGEMENTS
The authors wish to thank The Hong Kong Polytechnic University for funding this research project, and all interviewees who participated in the study

BIOGRAPHIES

Dr. Travis W. Li obtained his PhD degree in the Institute of Textiles and Clothing, The Hong Kong Polytechnic University. He is currently a visiting lecturer in The Technological and Higher Education Institute of Hong Kong and Hong Kong Design Institute. His research interests include menswear design, clothing psychology and smart fashion.

Dr. Joe S. AU is currently an Assistant Professor of the Institute of Textiles & Clothing, The Hong Kong Polytechnic University. His research interests include fashion design theory and smart fashion.

Prof. Raymond W. Au is currently an Associate Head and Associate Professor of the Institute of Textiles and Clothing, The Hong Kong Polytechnic University. His research interests encompass a wide range of topics including fashion design, fashion illustration, and fashion semiology.

APPENDIX I

Factor loadings of various factors in menswear functions (significant items of factor loading > .50 highlighted):

Statements	*Fashion/ Masculine*	*Camouflage /Comfort*	*Trendy/ Business*	*Emotional*	*Luxurious Utility*	*Individuality*	*Social Identity*
allow me to express myself	.468	.109	.075	.109	.296	.800	.334
symbolise my individuality & personality	.347	.191	-.083	.138	.160	.841	.447
links me to a desirable place/person or event	.159	.315	.301	.584	.353	.549	.174
Make me feel emotionally attached to them	.167	.219	.425	.557	.308	.519	.334
allow me to engage in social activities	.581	.285	-.085	.025	.349	.337	.635
make me feel good and enhance my self-confidence	.325	.034	.155	.300	.066	.417	.744
are expensive, rare or unique	.152	.082	.372	.119	.725	.230	.168
enable me to participate in sporting/leisure activities	.268	.350	-.729	.175	.222	.123	.309
indicate that I am part of a particular group and communicate my social identity	.177	.286	.001	.177	.327	.187	.844
have a specific utility	.187	.276	-.258	.024	.757	.163	.180
are of good quality and durable	.438	.644	-.077	.396	.413	.146	.292
are fashionable	.677	-.006	.235	.072	.395	.338	.413
are stylish	.715	-.079	.198	.155	.308	.338	.415
do not call attention to my figure	.155	.780	-.159	.162	.217	.126	.265
camouflage the imperfections of my figure	.382	.572	.080	-.136	.350	.405	.175
are loose-fitting	.029	.773	.121	.009	.203	.355	.164
are dark-coloured	.270	.553	.416	.167	.323	.044	.316
suit my mood	.326	.144	.046	.182	.668	.133	.344
do not hide my weight problems	.188	.053	-.041	.834	.133	.100	.235
are tight-fitting	.648	-.213	.045	.335	.432	.088	.330
are comfortable	.341	.707	-.304	.303	.192	.115	.345
can have my manhood approved and validated by	.769	.432	.042	.168	.230	.251	.246

my peers and society							
project a sexually attractive masculine image	.827	.266	-.126	.124	.143	.370	.294
are recommended by men's magazines	.455	.178	.679	.121	.312	.291	.445
are less garish to avoid looking feminine	.096	.580	-.188	.557	-.071	.098	.265

Extraction Method: Principal Component Analysis; Rotation Method: Oblimin with Kaiser Normalization (factor loading >.50 highlighted)

APPENDIX II
Questionnaire Survey:

Questionnaire: A Study of Motivations Regarding Menswear Design Preferences

Hello, I am Travis Li, a PhD candidate of Fashion and Textile Design of the Hong Kong Polytechnic University.
This is the questionnaire survey for my PhD dissertation, the objective of this questionnaire is to understand design preferences of menswear in Hong Kong.

Please be assured that these data will be used for academic study only and your personal data will not be disclose for any other purpose

Questionnaire: A Study of Motivations Regarding Menswear Design Preferences

What is your weight?

1. <110 lbs 2. 111 lbs - 125 lbs 3. 126 lbs - 140 lbs 4.141 lbs - 155 lbs
5. 156 lbs - 170 lbs 6. >170 lbs

What is your height?

1. <160cm 2. 161-165cm 3. 166-170cm 4. 171-175cm 5. 176-180cm
6. 181-185cm 7. > 186cm

What is your working field?

1) wholesale, retail and import/export trades, restaurants and hotels 2) financing, insurance, real estate and business services

3) Community, social and personal services 4) Students 5)Others

What is your age group

1) Under 18 2) 18-25 3) 26-32 4) Above 32

Your contribution is highly appreciated.

Questionnaire: A Study of Motivations Regarding Menswear Design Preferences

Part I Functions of Menswear Clothing

Do you agree with the statements below

The clothes I wear……

	1: Strongly disagree; 2: disagree; 3: Neutral; 4: Agree; 5: Strongly agree
1. Allows me to express yourself	☐1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
2. Symbolises my individuality/personality	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
3. Links me to a much liked place/person or event	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
4. I feel emotional attachment to it	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
5. Allows me to engage in social activities	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
6. Makes me feel good and enhances my self-confidence	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
7. It is expensive, rare or unique	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
8. Enables me to participate in sporting/leisure activities	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
9. Indicates that I am a member of a particular group communicates my social identity	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
10. It has a specific utility	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
11. It is of good quality and durable	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
12. are fashionable	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Your contribution is highly appreciated.

Questionnaire: A Study of Motivations Regarding Menswear Design Preferences

Part II Product Involvement

Do you agree with the statements below about menswear fashion?	*1: Strongly disagree; 2: disagree; 3: Neutral; 4: Agree; 5: Strongly agree*
26. It gives me pleasure to shop for clothes.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
27. I can think of instances where a personal experience was affected by the way I dressed.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
28. Clothing is important in my life	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
29. Clothing interests me a lot	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
30. I enjoy buying clothes for myself.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
31. I rate my dress sense as being of high importance to me.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
32. I attach great importance to the way people are dressed.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
33. Clothing is a topic about which I am indifferent.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
34. Clothing is not part of my self-image.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
35. Buying clothes feels like giving myself a gift.	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Your contribution is highly appreciated.

Questionnaire: A Study of Motivations Regarding Menswear Design Preferences

13. are stylish	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
14. do not call attention to my figure	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
15. camouflage (hide) my figure problems	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
16. Loosely fitting clothes	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
17. are dark coloured	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
18. are wore according to the mood I am in that day	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
19. are wore regardless my weight problem	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
20. are tightly fitting to my figure	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
21. are comfortable	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
22. can show my manhood for approval and validation by my peers and society	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
23. demonstrate a masculine image as sexual attraction	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
24. are recommended by men's magazines	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
25. are less decorated to avoid being viewed as feminine	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Your contribution is highly appreciated.

PART 3 DESIGN PREFERENCES Please indicate your answer in the white boxes

Assume that you have to attend usual social occasion, please show your preferences of various areas cutting in terms of aesthetic and fitting