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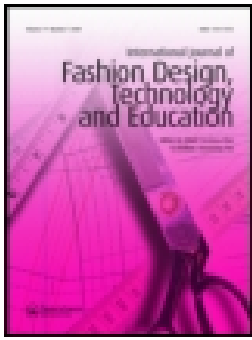
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The effect of concept congruence on preference for culturally diverse apparel products

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ABSTRACT

The global market for designer apparel, especially the American market, is attractive to include in Asian designers' internationalisation strategies. In an effort to identify factors that may impact acceptance of Asian designers' culturally inspired work in the United States (US), one of the most challenging and largest apparel markets in the world, this study explored the effect of consumers' perceptions of self- and product-concept congruence on their attitudes and intention to purchase Asian designers' apparel products. Results suggest that US females whose self-concept is consistent with the product-concept will be likely to have a positive attitude towards that product and, consequently, to intend to purchase that product. Managerial implications suggest that Asian designers entering the American market could target consumers by designing communication efforts to appeal to Americans who share personality characteristics similar to their Asian designs.

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Apparel design; aesthetics; consumer; self-perception; culture

1. Introduction

The United States (US) represents an attractive market for fashion designers who are pursuing sales growth and market expansion at various price levels (Statista, 2013). Designers not only find a market sector for high-end luxury apparel, but also for mass-produced garments, both of which represent ample opportunities for translating designer's ideas into fashion products (Ruppert-Stroescu & Hawley, 2014). Especially, those who display both leadership creativity at the high end, and adaptive creativity at the low end, are able to compete in both market sectors (Ruppert-Stroescu & Hawley, 2014). Despite the number of opportunities presented by the size of the US market, success is not guaranteed simply because it is a large market. Fashion designers need to identify aspects of their products that make them appealing to US apparel consumers.

The editor of *Vogue* magazine has indicated that some of the most promising designers in the future of fashion are Asian-Americans (Wilson, 2010). Asian-American designers have won an unusually high percentage of prestigious fashion awards (Tu, 2011) considering the fact that Asian-Americans compose a mere 5.4% of the population in the US (United States Census Bureau, 2014). Even though Asian-American designers are familiar with US culture, the work of designers of Asian

descent often reflects aesthetic qualities that are distinct from those of American designers who are not of Asian descent (Tu, 2011). With research findings on consumers' aesthetic responses to apparel products, Asian-American designers may be better able to predict which individuals in the US will be likely to purchase their products. While attractiveness is in the eye of the beholder, Govers and Schoormans (2005) show that product personality influenced consumer preference through a congruence effect, such that people were attracted to products that were similar to them. Based on this logic, US consumers who share personality traits with products created by Asian-American designers should express greater purchase intention for those products than US consumers who do not share those traits.

In an effort to identify factors that may impact acceptance of Asian-American designers' work in the US, a theoretical framework based on the congruence effect (Sirgy, 1982) and the Theory of Reason Action (TRA) (Ajzen & Fishbein, 1977) will be used in the current study. The main goal is to explore the effect of US consumers' perceptions of self- and product-concept congruence on their attitudes and intention to purchase apparel reflecting Asian and American design. This congruence effect should apply regardless of product price. While price is an important extrinsic cue that consumers

use to guide apparel purchase decisions, congruence has been shown to influence consumer preference for products (Govers & Schoormans, 2005) and purchase intention (Kwak & Kang, 2009) independently of price. For the present research, Asian design is defined as apparel design that is created by designers who have an Asian cultural heritage while representing their Asian cultural aesthetic to the US consumer in their designs. In particular, the researchers focused on Asian-American designers who are Asian by ethnicity and were born in the US. American design is defined as apparel design reflecting the American aesthetic and created by designers who have an American but non-Asian cultural heritage. Few researchers have addressed the aesthetic properties of apparel products, especially of Asian-American designers. By filling this research gap, the present study will be helpful to fashion designers, firms, and brands creating designs while targeting the global market and more specifically the US. Findings could also provide clues to Asian-American designers for developing or improving communication efforts when targeting the US apparel market.

2. Literature review and hypotheses development

2.1. Designers with Asian descent in the US

The unique aesthetic presented by fashion designers with Asian cultural backgrounds has achieved considerable traction with US consumers, and after years of media promotion its influence is on the rise (Tu, 2011). It is no coincidence, that for the first time, three prizes given by the Council of Fashion Designers of America in 2010 were awarded to designers who are of Asian descent (Wilson, 2010). Designers with Asian descent have attempted to balance an emphasis on unique design aesthetics derived from their cultural background and the desire to conceal their cultural background in order to enter the popular culture of their target market (Min, 2015). Asian-American designers indicated that they do not want to confine themselves culturally or geographically, but admitted that their works were informed by their roots in unexpected ways (Tu, 2011). They often play with this balance depending on the needs of their target consumers and current fashion trends (Tu, 2011). In other words, designers with Asian descent are taking advantage of their cultural backgrounds in order to appeal to the US market.

Furthermore, the general US consumer usually does not perceive differences of particular aesthetics from a specific Asian country. Curators in US museums with expertise in Asian culture confirmed this when

discussing how American visitors perceive aesthetic differences of cultural objects from different Asian countries (Min & Jin, 2015). Extrapolating from this sentiment, to US consumers, Asian apparel design encompasses apparel products that are created by designers who have any Asian cultural heritage while representing the general Asian cultural aesthetic to the global consumer in their designs.

2.2. Culture and aesthetics

Culture refers to part of the human created social environment in which people live (Herskovits, 1955). When individuals live within a particular cultural environment, they tend to share values (Alas & Tuulik, 2007). Hence, while individuals originating from many different countries reside in the US, an American culture, which is different from other national cultures, exists (Phinney, Horenczyk, Liebkind, & Vedder, 2001). While each nation tends to possess its own unique culture, certain characteristics of national cultures can be shared across cultures. Thus, Western cultures, like those present in the US, Canada, and England, tend to be different from Eastern cultures, like those present in Japan, Korea, and China. Because Asian nations' cultures are less distinct from each other and more distinct from American culture, researchers have found it fruitful to compare Asian consumers, as a whole, to US consumers (Wong, Rindfleisch, & Burroughs, 2003).

Differences in culture have been shown to affect behaviour (Alas & Tuulik, 2007). Despite exceptions, Asians tend to be more collectivistic individuals placing more importance on the *we* than the *I*, and therefore tend to display a higher degree of conformity with respect to fashion than Americans, who tend to be more individualistic (Lee, Geistfeld, & Stoel, 2007). Differences in culture may also impact individuals' aesthetic preferences. Aesthetics relates to the visual qualities of objects that individuals find attractive (DeLong, 1998). Hekkert and Leder (2008) classified properties of aesthetics in terms of their psychophysical (e.g. colour), organisational (e.g. complexity), and meaningful properties (e.g. product expression and association). The focus of this paper is on the meaningful properties, which are subjective because they are not properties of things, but properties of how objects are perceived.

The reactions of individuals based on aesthetics are diverse but not arbitrary; therefore, despite universal principles, people can differ considerably in taste (Hekkert & Leder, 2008). Some of the differences in aesthetic preference have been shown to be related to socio-cultural factors (Fiore, Moreno, & Kimle, 1996). Culture impacts object designers' creative processes, such that

they tend to create objects that reflect the aesthetic preferences associated with their cultural origins (Debeli & Jiu, 2013). When an individual observes the objects, his/her brain searches the memory for a means to categorise the objects (Whitfield & Slatter, 1979). When the objects' appearance is familiar and can be assigned to an existing category, the individual is more likely to find the objects to be aesthetically pleasing. That is why consumers are more comfortable with what is familiar in terms of clothing selections (DeLong, 1998). Hence, objects possessing aesthetic properties that are consistent with the perceiver's cultural background tend to evoke positive responses. Conversely, objects possessing aesthetic properties that are inconsistent with the viewer's cultural background, and therefore unfamiliar, may be perceived less positively.

Although the appearance of the fashion apparel representing the cultural heritage of each Asian country is unique, Asian fashion apparel, as a whole, shares some characteristic aesthetic properties that differ from American fashion apparel. Asians then are more familiar with apparel that tends to be marked by asymmetrical lines and geometric shapes that do not follow the natural form of the human body (Percival, 2014). American apparel, on the other hand, tends to be symmetrical and possess a more natural silhouette with curved lines (Kim, 1989). Compared to American apparel, Asian apparel typically relies much more heavily on the use of fabrics with saturated colours and surface designs (Yu, Kim, Lee, & Hong, 2001). While Asian apparel is often described as dramatic and avant-garde (Kondo, 2014), American apparel is typically perceived to be casual and comfortable (Rantisi, 2004).

While previous researchers have found that individuals usually show a preference for products that are consistent with themselves in terms of culture (Takagi, Eckman, & Tremblay, 2012), the relationship between cultural origin and aesthetic preference is not a perfect one (Kaufman, Niu, Sexton, & Cole, 2010). Furthermore, cultural heritage does not faultlessly predict purchase intentions. That is to say, Americans do not always intend to purchase American apparel and Asians do not always intend to purchase Asian apparel (Fu, Koo, & Kim, 2014). Because the US fashion market, in particular, exemplifies a melting pot of individuals representing a variety of combinations of ethnicities and cultural backgrounds (Euromonitor, 2012), the degree to which a person residing in the US possesses an American or Asian aesthetic varies greatly based on the level of acculturation the person has experienced with respect to American culture (Phinney et al., 2001). Other factors, including personality characteristics (Fiore et al., 1996), may be better predictors of aesthetic preference than

culture alone. In fact, Govers and Schoormans (2005) showed that product personality influenced consumer preference through a congruence effect, meaning that people were attracted to products that were similar to them in terms of personality characteristics. For example, products described as 'friendly' and 'dependable', were most likely preferred by respondents who had similar personality traits with those products.

2.3. Self-concept, product concept, and congruence effect

Self-concept (Sirgy, 1982) is in general terms the perception of oneself. Despite certain authors have distinguished different dimensions in the self-concept (Malhotra, 1981; Sirgy, 1982), the present study defines self-concept as 'all ideas one has about himself' (Govers & Schoormans, 2005, p. 190) because it encompasses a totality that can be treated as a single construct (Govers & Schoormans, 2005; Malhotra, 1981).

Product concept, like self-concept, can also be treated as one single construct. Similar to Sirgy's (1982) product-image perception, *product concept* can be defined as the image perception an individual has about a product. Hsu, Chuang, and Chang (2000) recognised the importance of product semantics for measuring the subject's perception of product concepts. Similarly, Govers and Schoormans (2005) used the concept of product personality to represent Sirgy's product-image perception by proposing a differential scale for measuring product personality specifically for home products. They assumed that product personality exists when consumers describe products as having human personality characteristics. Since designed fashion products are manufactured cultural symbols where the protagonists are its creators (Kawamura, 2005), we can expect that the product concepts associated with the Asian and American designs should reflect some human personality characteristics of the creators or designers, when respondents evaluate the products. Therefore, designs from creators with different cultural backgrounds should have different product concepts.

When consumers encounter a product, they assess the product's concept and compare it to their own self-concept (Govers & Schoormans, 2005). In this way, an individual's self-concept beliefs interact with the individual's product-image (i.e. product-concept) perceptions about the corresponding product. When the self-concept is consistent with the product concept, a so-called *congruence effect* exists (Sirgy, 1982). The congruence effect has a powerful impact on consumer behaviour and has been used as the bases of theoretical frameworks in various studies (e.g. Ericksen & Sirgy, 1992). This preference

for products that are similar in terms of personality to themselves translates into a strong purchase motivation (Sirgy, 1982). For clothing behaviour in particular, the image of a certain outfit interacts with the self-concept and motivates the individual to prefer purchasing and wearing outfits that match his or her self-concept (Erickson & Sirgy, 1992).

2.4. Attitudes, subjective norms, and purchase intention

In the TRA, Ajzen and Fishbein argued that a person's attitude towards an object influences the overall pattern of responses with respect to that object. This means that the person's intention is a function of his or her attitude towards performing the behaviour (Ajzen & Fishbein, 1977). In other words, when individuals have a positive attitude towards a particular garment, they should also have a positive intention to purchase this garment. In the case of consumers evaluating an American or Asian fashion design, the positive attitude that consumers have towards the product may be attributed to the congruence effect, which assumes that there is a perceived degree of congruency between the way they see themselves and the product. When there is a high degree of consistency between the consumers' self-concept and the design's product concept (i.e. self- and product-concept congruence), the consumers will be attracted to the fashion product (Govers & Schoormans, 2005; Hekkert & Leder, 2008). This attraction to the product will most likely translate into a positive evaluation of the product, or a positive attitude towards the American or Asian fashion design. Furthermore, when consumers have a positive attitude towards a product, they are likely to indicate an intention to purchase the product. Based on this rationale we expect that:

H1a: Self-and product-concept congruence for American design is positively related to attitude towards the American design.

H1b: Self-and product-concept congruence for Asian design is positively related to attitude towards the Asian design.

H2a: Attitude towards the American design is positively related to purchase intention of the American design.

H2b: Attitude towards the Asian design is positively related to purchase intention of the Asian design.

While attitudes are a powerful antecedent of behaviour, Ajzen and Fishbein (1977) acknowledge that attitude alone did not predict behavioural intention. A third construct, subjective norm, also influences the degree to which an individual is likely to engage in a

particular action. According to the TRA, subjective norm measures social influence. Because purchasing and wearing apparel is a social action, it is likely that consumers will take into account the opinions of significant others when deciding whether to perform the behaviour of purchasing apparel products (Reilly, Miller-Spillman, & Hunt-Hurst, 2012). Therefore, the third set of hypotheses was developed as follows:

H3a: Subjective norm for American design is positively related to purchase intention of American design.

H3b: Subjective norm for Asian design is positively related to purchase intention of Asian design.

The research framework behind the stated hypotheses is based on the congruence effect (Sirgy, 1982) and the TRA (Ajzen & Fishbein, 1977). The hypothesised relationships between the variables are depicted in Figure 1.

3. Method

A survey was used as the data collection technique. Upon receipt of Institutional Review Board approval, an online survey was conducted on Amazon's Mechanical Turk (www.mturk.com), which is a crowd sourcing Internet marketplace (Mason & Suri, 2012). Survey participants were randomly assigned to view pictures featuring apparel products for female consumers that were either Asian or American design. Female consumers who reside in the US were the focus of the present study due to the fact that females tend to be more interested in apparel and represent a larger target market than males (Behling, 1992). Pictures of the design were selected from ready-to-wear designer collections because they tend to reveal designers' aesthetics and brand leadership clearly (Fionda & Moore, 2009). The pictures of the designs were standardised with Photoshop by erasing backgrounds and excluding model heads. These pictures were selected by six female design experts (four Caucasian-Americans, one African-American, and one Asian-American) during a Focused Group Interview (FGI). The design experts have participated in multiple fashion shows within the community, have extensive experience in the field of fashion design, and represent a cross-section of the general US population in terms of cultural background. For the selection of the relevant visual stimuli for the survey, 12 designers with Asian and American cultural backgrounds were initially chosen. Four selection criteria were used to select them: (1) the designer should have relevant cultural/ethnic background; (2) the designer should have showed his or her own collection in New York Fashion Week because

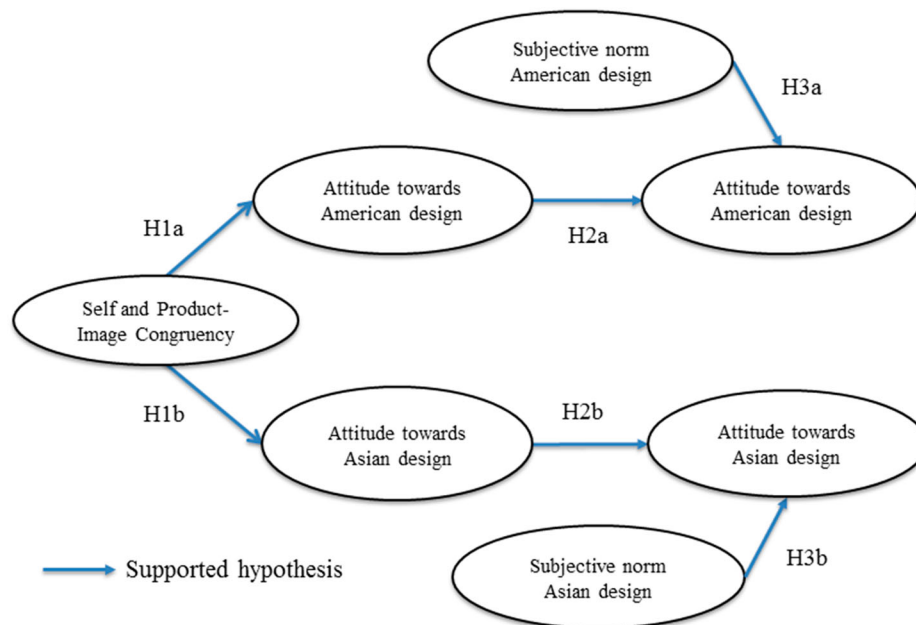


Figure 1. Research framework.

New York is considered as a fashion capital in the global market; (3) his or her collection images should have been uploaded to Style.com and Vogue.com, which are considered to be representative fashion resource database websites; and (4) the designer should have been recognised with more than one design award for his or her work. Next, 20 pictures (10 Asian and 10 American designs) were randomly selected from the designers' collections presented for Fall/Winter 2014 in New York. Researchers conducted the FGI for one hour in order to select the visual stimuli that best represented the American and Asian fashion design aesthetic.

Besides the selection of the stimuli, the informal discussion with FGI participants also helped with understanding differences in perception between Asian and American designs. After selecting the visual stimuli for the study, the design experts were asked: *What are the differences between collections from American and Asian designers?* The FGI participants described American designers with a non-Asian cultural background as sharing certain aesthetics, characterised by being 'wearable', 'practical', and having a 'gendered style'. They also mentioned that aesthetics shared among Asian-American designers can be described by 'avant-garde', 'geometric', 'structured', 'androgynous', 'abstract silhouette', and 'geometric shapes'.

The stimuli for the survey consisted on six pictures that represented the American (three pictures) and Asian (three pictures) fashion designs, grouped in two sets. Survey participants were randomly assigned to view one of two picture sets: (1) one American design

and two Asian designs and (2) two American designs and one Asian design. By doing so, the survey allowed participants to be exposed to both American and Asian designs. Participants viewed one picture at a time, and the order of the pictures was randomised to reduce order effects (Govers & Schoormans, 2005). Additionally, price information was omitted so preferences were based on the aesthetic characteristics of the design rather than the price (Govers & Schoormans, 2005). After viewing each picture, participants were asked to assess the featured product's concept using Malhotra's (1981) scale, which contained 15 adjective pairs on a semantic-differential scale. Participants next completed a four-item, seven-point Likert-type scale to assess their attitudes towards the product (Aaker, Kumar, & Day, 1995), a three-item, seven-point Likert-type purchase intention measure (Aaker et al., 1995), and a three-item, seven-point Likert-type scale to assess subjective norm (Aaker et al., 1995). After the evaluation of each of the three pictures provided, participants then responded to Malhotra's (1981) self-concept scale. This scale contained the same 15 adjective pairs as the product concept scale. Self-concept was assessed after the variables related to the product were assessed to avoid increasing participants' awareness of their self-concept prior to evaluating the product-concept (Graeff, 1996). Demographic questions used categorical items.

As seen in Table 1, the sample consisted of 199 usable responses from American female respondents with an average age of 31.6 ranging between 18 and 60 years old. The most common ethnicity was Euro American/

Table 1. Respondent characteristics.

Respondent characteristics	N	%	Mode
Demographics			
<i>Gender</i>			Female
Male	0		
Female	199	100.0	
<i>Age</i>			21–30 years
18–20 years	13	6.5	
21–30 years	102	51.3	
31–40 years	53	26.6	
41–50 years	18	9.0	
51–60 years	9	4.5	
Over 60 years	3	1.5	
<i>Ethnicity</i>			Euro American/ Caucasian
Euro American/Caucasian	89	44.7	
Asian/Pacific Island	79	39.7	
Other (African American, Hispanic, other)	31	15.6	
<i>Income</i>			\$10–\$25,000
Under \$10,000	47	23.6	
\$10–\$25,000	49	24.6	
\$25–\$40,000	41	20.6	
\$40–\$60,000	25	12.6	
\$60–\$80,000	19	9.5	
\$80–\$100,000	10	5.0	
\$150–\$200,000	3	1.5	
Over \$200,000	1	.5	

Caucasian ($n = 89$, 44.7%), followed by Asian/Pacific Island ($n = 79$, 39.7%). The majority reported an annual income of \$10,000–\$25,000 ($n = 96$, 48.2%), followed by \$25,000–\$60,000 ($n = 66$, 33.2%), and \$60,000–\$80,000 ($n = 19$, 9.5%).

4. Results

Prior to hypotheses testing, a manipulation check was performed to ensure that the participants did perceive the American and Asian designs differently (Table 2). All 15 adjective-pair scores were significantly different when comparing the assessments of the American vs. Asian designs. The average of the mean scores obtained for each adjective pair for the American designs was compared to the average of the mean scores obtained for each adjective pair for the Asian designs using paired samples t -tests. All p -values were less than .01, suggesting that the participants did perceive the American designs differently than the Asian designs featured in the photographs. Based on the product-concept adjectives that obtained the highest mean scores, the adjectives that best describe the American designs are: comfortable, simple, calm, delicate, and organised. The adjectives that best describe the Asian designs are: liberal, indulgent, colourful, vain, and contemporary. Based on these differences, the product photos selected with the help of the FGI participants were appropriate for the survey.

The constructs of subjective norm (American and Asian design), attitude (towards American and Asian

Table 2. Adjective pair means and standard deviations for designs.

Pair adjective	Design	Mean	SD	t	Sig. (two-tailed)
1. Rugged–delicate	American	4.98 ^a	1.43	4.93	.000
	Asian	4.37	1.39		
2. Excitable–calm	American	5.02 ^a	1.44	9.38	.000
	Asian	3.55 ^a	1.70		
3. Uncomfortable–comfortable	American	5.44 ^a	1.26	8.77	.000
	Asian	4.25	1.62		
4. Dominating–submissive	American	4.77	1.27	9.37	.000
	Asian	3.53	1.61		
5. Thrifty–indulgent	American	4.00	1.42	–5.13	.000
	Asian	4.75 ^a	1.53		
6. Pleasant–unpleasant	American	3.12	1.59	–6.07	.000
	Asian	4.01	1.66		
7. Contemporary–non-contemporary	American	3.89	1.61	2.58	.010
	Asian	3.42 ^a	1.77		
8. Organised–unorganised	American	3.07 ^a	1.44	–5.76	.000
	Asian	3.86	1.62		
9. Rational–emotional	American	3.39	1.35	–5.51	.000
	Asian	4.18	1.50		
10. Youthful–mature	American	4.28	1.74	3.93	.000
	Asian	3.68	1.51		
11. Formal–informal	American	4.05	1.44	–2.68	.008
	Asian	4.40	1.53		
12. Orthodox–liberal	American	3.78	1.44	–7.41	.000
	Asian	4.79 ^a	1.39		
13. Complex–simple	American	5.07 ^a	1.34	11.41	.000
	Asian	3.49	1.63		
14. Colourless–colourful	American	3.45	1.74	–6.91	.000
	Asian	4.52 ^a	1.39		
15. Modest–vain	American	3.14	1.50	–10.52	.000
	Asian	4.52 ^a	1.39		

^aLowest and highest scores.

design), purchase intention (towards American and Asian design), and product concept (American and Asian design) displayed acceptable reliability of over 0.60 (Downing, 2004). Self-concept displayed a lower level of reliability (Cronbach's $\alpha = .543$); yet, this level was between the normal limits based on the original scale's reliability values that ranged between .50 and .70 (Malhotra, 1981). Thus, all constructs were retained for hypotheses testing.

Regression analysis was used to test H1a, H1b, H2a, H2b, and H3a, and H3b. To create the self- and product-concept congruence variable for the regression analyses to test H1a and H1b, the difference between participants' assessments of their self-concept and product concept was calculated as suggested by Malhotra (1981). First, the average of each participant's mean ratings on each of the 15 adjective pairs for the three designs was calculated. Next, each participant's mean ratings on each of the 15 adjective pairs for the product concept was subtracted from her ratings on each of the 15 corresponding adjective pairs for her self-concept. In order to make higher congruence (more similitude) have higher scores, the number 6 was deducted from the

Table 3. Hypotheses testing for H1a and b, H2a and b, and H3a and b: results of regression analysis.

H	Result of hypotheses testing	Independent variable	R-square ^a	β	Stand. beta (β)	t-value	F-value	p-value
H1a	Supported	Self-and product-concept congruence for American design	.93	.93	.97	51.81	2684.98	.00
H1b	Supported	Self-and product-concept congruence for Asian design	.89	.77	.94	39.86	1588.90	.00
H2a	Supported	Attitude towards American design	.91	.95	.96	45.91	2108.22	.00
H2b	Supported	Attitude towards Asian design	.93	.84	.96	50.82	2583.23	.00
H3a	Supported	Subjective norm for American design	.94	.92	.97	57.99	3362.99	.00
H3b	Supported	Subjective norm for Asian design	.97	1.01	.98	77.87	6064.50	.00

Notes: DV (Dependent variable) for H1a: Attitude towards American design. DV for H1b: Attitude towards Asian design. DV for H2a and H3a: Purchase intention for American design. DV for H2b and H3b: Purchase intention for Asian design.

^aFor regression through the origin (the no-intercept model), R-square measures the proportion of the variability in the dependent variable about the origin explained by regression.

absolute value of the number obtained after subtracting each participant's product concept adjective ratings from her corresponding self-concept adjective ratings. This is based on Malhotra (1981), whose research indicated that the number 6 scored the lowest test-retest reliability for actual and social self-concept. Finally, the average of the 15 individual values associated with the difference between participants' self-concept and product concept was calculated. This number represents the self- and product-concept congruence variable and was used to test the first set of hypotheses.

H1a predicted that participants' attitude towards the American designs would be more positive as the degree of self- and product-concept congruence for the American designs increased. A regression model was created for those participants who viewed the American designs. The results indicated that self-and product-concept congruence for American design was positively related to attitude towards American design ($\beta = .97$, $p < .01$) (Table 3). Thus, H1a was supported. Table 2 also presents a summary of the results of all hypotheses tests.

H1b examined the relationship between participants' self- and product-concept congruence for the Asian designs and participants' attitude towards the Asian designs. A regression model was created for those participants who viewed the Asian designs. The results indicated that self-and product-concept congruence for Asian design was positively related to attitude towards Asian design ($\beta = .94$, $p < .01$). Like H1a, H1b was also supported. A regression model was also created to test H2a and H2b. The attitudes of the participants who viewed the American designs were positively related to their intention to purchase the American design ($\beta = .96$, $p < .01$). For H2b, participants' attitude towards the Asian designs they viewed on the questionnaire was positively related to their intention to purchase those Asian designs ($\beta = .96$, $p < .01$). Therefore, both H2a and H2b were supported. Hypotheses 3a and 3b examined the relationship between subjective norm and purchase intention. The regression model created to test H3a indicated that, for those participants who

viewed the American designs, subjective norm was positively related to purchase intention ($\beta = .97$, $p < .01$). Thus, H3a was supported. Additionally, for those participants who viewed the Asian designs, subjective norm was positively related to their intention to purchase the Asian designs ($\beta = .98$, $p < .01$), supporting H3b.

Post hoc analysis using analysis of variance (ANOVA) additionally revealed that the subjective norm for both American and Asian design is the highest when the ethnic group evaluating is the Asian/Pacific Island ($M_{\text{Asian/Pacific Island}} > M_{\text{Other}} > M_{\text{Euro American/Caucasian}}$). For the US participants who viewed the American designs, the ANOVA results were significant for the American designs ($F_{(2, 196)} = 13.67$, $p < .01$). Compared to participants of non-Asian descent ($M_{\text{Euro American/Caucasian}} = 3.52$, $M_{\text{Other}} = 3.59$), the influence of subjective norm on the purchase intentions of the US participants of Asian descent ($M_{\text{Asian/Pacific Island}} = 4.56$) was significantly greater. Furthermore, the same pattern was displayed for the Asian designs ($F_{(2, 196)} = 8.90$, $p < .01$). The impact of subjective norm on the purchase intention of US participants of Asian descent ($M_{\text{Asian/Pacific Island}} = 5.14$) was significantly greater than its influence on the purchase intention of others ($M_{\text{Euro American/Caucasian}} = 4.12$, $M_{\text{Other}} = 4.57$).

5. Discussion

The researchers explored the influence of the self- and product-concept congruence effect on apparel purchase behaviour while taking into account consumers' attitudes and subjective norms. Overall, the congruence effect is a valid measure for establishing intention to purchase. Results suggested that US females differentiate Asian from American designs. Those consumers whose self-concept is consistent with the product-image will be likely to have a positive attitude towards that product and, consequently, to purchase that product. In this way, the results from the current study support the previous work of Malhotra (1981) and Ajzen and Fishbein (1977).

Based on the supporting literature on product concept, when respondents evaluated the American and Asian designs, American design was mainly associated with adjectives such as comfortable, simple, calm, delicate, and organised. Similarly, the FGI participants used adjectives like wearable, practical, and gendered style. By contrast, Asian designs were best described as liberal, indulgent, colourful, vain, and contemporary. The FGI participants associated the Asian design with avant-garde, geometric, structured, and androgynous. In general, the product concept of the American design is perceived as traditional, comfortable, and calm, while the Asian design is perceived as contemporary, liberal, and colourful. These descriptions are consistent with previously published descriptions of American and Asian fashion design (Kim, 1989; Kondo, 2014; Percival, 2014; Rantisi, 2004; Yu et al., 2001). This suggests that US consumers' perceptions of Asian and American fashion design are fairly well established. Additionally, this finding bodes well for Asian-American designers who wish to grow their businesses in the US. Because Asian designs are unique and different from American designs, the Asian designs are likely to satisfy US individuals' desire for multicultural products (Euromonitor, 2012).

In relation to H1a and b, results indicate that respondents who displayed a higher degree of congruence were more likely to have positive attitudes towards the design, regardless if the design represented Asian or American design. In other words, respondents were prone to like designs that were more similar to them. This finding is consistent with previous studies such as Govers and Schoormans (2005) and Hsu et al. (2000). Findings related to attitude and purchase intent in H2a and b suggested that a positive attitude positively influenced the purchase intent regardless of the design. Similarly, the findings related to H3a and b demonstrated that subjective norm positively influenced the purchase intentions of participants for both design types. The findings related to the second and third set of hypotheses are consistent with the robust TRA model and multiple research findings.

6. Conclusion

We explored the congruence effect specifically for measuring the aesthetic property of product expression and association in apparel products. Findings provide valuable information for understanding apparel behaviour from an academic as well as managerial perspective. For the academic implications, the research findings extended our understanding of why consumers are aesthetically attracted to apparel designs. Malhotra's

(1981) scale for measuring the congruence effect was applied in a new context as it has been frequently used in studies of other topics such as travel behaviour (e.g. Ekinci & Hosany, 2006), retail environments (e.g. Sirgy, Grewal, & Mangleburg, 2000), and brand loyalty (e.g. Kressmann et al., 2006), among many others.

Managerial implications suggest that designers with Asian cultural heritage, including both Asian and Asian-American designers, could target US consumers by designing communication efforts to appeal to those consumers who share personality characteristics with Asian designs. Adjectives that reflect the product-concept while best describing Asian design could help designers and brands better promote Asian designs. Those adjectives could be used as the base of advertising campaigns that aim to connect certain US consumers with Asian design characteristics and increase purchase intention. Furthermore, given the importance of social influences on the purchase intentions, particularly among US consumers of Asian descent, perhaps marketing campaigns could feature groups of individuals rather than single wearers. In this way, the collectivistic values representative of the Asian designers' cultural background (Lee et al., 2007; Parker, Hermans, & Schaefer, 2004) may actually benefit their business in the US.

The current study is predicated in several assumptions. While evidence suggests that Asian-American designers incorporate aspects of their Asian cultural heritage into their designs (Tu, 2011), the degree to which they do so undoubtedly varies. Our study also assumes that the Asian-American designer whose name is on the label is actually the individual designing the apparel. It may actually be the case that a team of designers is working on the collections for each season, as the team approach is often used to develop designs for luxury labels (Fionda & Moore, 2009). Despite the ethnically diverse sample, results show a demographic that is not representative of the general US population mainly because of income level. This needs to be taken into account for the interpretations as it may imply that these women are not the ideal customers of highly priced designer clothing. Nevertheless, respondents may be the ideal customer for affordable to middle-range fashion options, including fast fashion and discount retailers. Research findings should also be interpreted taking into account Gould's (1993) concerns about self-disclosure and self-awareness problems that could be present when measuring self-concept in consumer behaviour. Discrepancies between the actual and ideal self-concepts may be mitigated in future studies by using Malhotra's (1981) scale that incorporates all three dimensions: The ideal, actual, and social self.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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