Theory and Evidence

Examining the Impact of Model Age on Brand Perception in the Fashion Industry

by

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An honors thesis submitted in partial fulfillment of the requirements
for the degree of Bachelor of Science
in Business Administration
Undergraduate College
Leonard N. Stern School of Business
New York University

May 2018

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Abstract

This study examined the impact of both male and female model age on brand perception in the fashion industry. We hypothesized that older consumers are more likely to have a positive view of a brand if it is displayed by a model of a comparable age group, rather than the industry’s typical focus on much younger models. We also hypothesized that there may be a significant difference for this hypothesis between male and female models. Participants ($N = 260$) completed a study on “Fashion” on Amazon Mechanical Turk, viewing an image of a model wearing fashion clothing and following this ranked their level of agreement with statements pertaining to their perception of the clothing brand. Each participant was placed into one of eight conditions that dictated the type of model they saw, based on three factors: the model’s age (young versus older), gender (male versus female) and type of clothing they were wearing (trendy versus not trendy).

The study found that across males and females, older models create either a positive or negligible effect on brand perception scores, holding clothing type constant. In addition, male models overall face greater polarization in brand perception scores – the greatest combination of a high brand perception score for wearing trendy clothing but an extremely low score for wearing non-trendy clothing. Female models on the other hand escape such extreme reactions in brand perception overall, especially older female models. We believe that this could be explained by the theory of intersectional invisibility whereby the older female models “escape” criticism due to being non-prototypical members along both gender and age lines; as a result, viewers might be less critical of their appearance.

Surprisingly, the older male model in trendy clothing garnered the highest overall brand perception score and the young male model in non-trendy clothing yielded the lowest overall
brand perception score. We believe this also could be explained with the aforementioned theory of *intersectional invisibility* whereby the young male in non-trendy clothing does not experience the invisibility that the older models in particular experience, because they are a stereotypical member of a social group. Finally, a regression interaction analysis did not indicate a significant difference between any of the model conditions, taking into account the age of the participant.

The implications of our findings are discussed.
Acknowledgments

I would like to thank my thesis adviser, Professor Mike North, for his unwavering support throughout the Stern Honors thesis program. His insight was invaluable to my research and writing, particularly his deep knowledge of the academic literature on ageism. Professor North was also the first professor to introduce me to research through SPUR and pushed me to drive my interests and passions into this thesis. I am extremely grateful for his time, dedication and genuine interest in this research.

I would also like to thank Professor Marti Subrahmanyam for his commitment to the Stern Honors program and for exposing me to a wide array of distinguished faculty and research topics through the weekly honors seminars.

Lastly, I would like to thank my friends and family for helping me through the process of writing this thesis. I would not be here without their encouragement, love and support. I would particularly like to thank my Mum who both inspired the original idea to pursue this thesis topic and provided constant critique and feedback with regards to the design and conclusions of the study.
The US population is expected to be older and live longer than ever before. The number of Americans aged 65 and older is expected to more than double to over 98 million by 2060. The over 65 age group will compose nearly 24% of the total population, up from its current level of 15% (Mather, 2016). This ageing demographic will also control a majority of the wealth. The “Baby Boomers”, defined as those born between 1946-1964, will continue to be the wealthiest generation in the United States until at least 2030 (Srinivas and Goradia, 2015). Their share of net household wealth will peak at 50.2% by 2020 and decline to 44.5% by 2030. Moreover, the United States adult population 50 and older stands to inherit $15 trillion by 2030 (Boomager, 2012). In contrast, 75% of Millennials can afford to buy only what they need, not what they want (Phillips, 2016). In addition, 45% of them are not employed and 23% have student loans. In sum, there is a tremendous economic impetus to cater to a rapidly aging demographic.

Nevertheless, youthful beauty is the standard in the fashion industry, illustrated by extreme examples, such as 14-year-old Sofia Mechetner modeling at the Dior Spring 2016 fashion show (Sowray, 2015). However, this issue extends beyond the catwalk; for instance, advertising agencies often use women in their 20s acting as the TV spokesperson for anti-ageing creams (Brennan, 2017). The runway is designed as a platform to present a brand’s artwork, but it is also the place where the industry presents its ideals. Rather than using its platform to portray aging in a graceful and stylish manner, the industry seems to sweep it under the rug in favor of youth—a significant oversight, given that many of its primary consumers are older. In fact, most luxury ready-to-wear customers average over 45 years in age (Unity Marketing, 2015). Thus, it behooves the fashion industry, and the economy more broadly, to identify what barriers might exist to catering to the older demographic.
This thesis tackles this topic in a variety of ways. First, I offer some background on the state of the industry—namely, how a disconnect exists between its intended audience and its own leadership (both older) and its focus on youth. Next, I offer a brief overview of the state of the literature: specifically, how fashion largely overlooks older consumers in general, and how circumstances might differ between men and women in this regard. For instance, I examine whether consumers demonstrate a bias against one gender when an older model of that sex is used in fashion advertisements. I then present data exploring whether the age and gender of models affect consumer decisions and brand perception. Finally, I offer conclusions based on these findings for future research in the emergent area of age in fashion and consumer retail.

**Hypocrisy in the Industry? A Contradiction Between (Older) Leadership and Targeted (Younger) Consumers**

Experts and leaders in the fashion industry tend to be much older than the models they use. For example, Grace Coddington, the editor of *American Vogue*, is in her 70s. Other editors of top fashion magazines are of similar age: Glenda Bailey, editor of *Harpers Bazaar* is 59, Stefano Tonchi, editor of *W* magazine is 58, and Graydon Carter, editor of *Vanity Fair*, is 67. Moreover, many of the top designers in the industry are older; for instance, Karl Lagerfeld is 82 and Giorgio Armani is 81. Nevertheless, most of fashion's most public faces – namely, the models on billboards and runways – are young.

Given the significant buying power and sheer size of the over-50 consumer group, it is not surprising that fashion marketers have begun to rethink their strategies to take advantage of this shift. For example, in 2015, fashion labels Céline and Saint Laurent put Joan Didion (78 at that time) and Joni Mitchell (69) in their spring advertisements (Kabas, 2015). Nevertheless,
does putting these older models at the forefront of advertising campaigns garner the positive consumer reaction that the industry would like to think it does?

Several mass-market retail brands have taken a more holistic stance than the aforementioned brands, to the issue. For instance, Zara, a popular women’s brand with 2,200 stores in 93 countries, launched an “Autumn/Winter 2017 Timeless Collection”, which featured several models over the age of 40 (Ekall, 2017). The brand interviewed the older models on their social media platforms to discuss the idea of age and how it defines a woman’s identity in the workplace and in the fashion industry (Zara YouTube, 2017). The designer also tied this notion to the collection itself, as the pieces were priced slightly higher than typical collections, made with higher quality materials and were marketed as “the pieces you will want to wear season after season” (Abarbanel, 2017).

**The Literature on Age in Fashion: A Largely Overlooked Issue**

With regards to academic literature and research, there have been several studies, both quantitative and qualitative, that have illustrated that in most fashion marketing tools older men and women are often mostly ignored (Clarke & Griffin, 2008; Twigg 2007; Lewis et al, 2009) and desexualized (McHugh, 2007). In fact, many studies found that the fashion advertising industry emphasizes the importance for older consumers to spend a significant amount of money on beauty products to hide their signs of ageing (Clarke & Griffin, 2008) and dressing in traditionally youthful clothing (Nam, Hamlin, Gang, Kam et al, 2007).

A content analysis on eight major fashion magazines from December 2007, (Lewis, Medvedev and Seponski, 2009) examined the number of images in each magazine that displayed older (40+) women and the attributes associated with their age, for instance wrinkles, grey hair. The study found that in each of the eight magazines, less than 10% of the content included
images of older women. This ranged from just 2.68% in Elle magazine to 9.02% in Essence magazine. In contrast, 9% to 23% of the magazine’s readership was over the age of 50. Moreover, nearly all magazines examined had half or more of their readership above the age of 35. Our study builds upon this narrative to understand how this disproportionate imagery affects brand perception across both men and women.

Do Older Consumers “Buy Old”?

Despite brands taking note and beginning to use older models in their collections, there has been very little research conducted on whether it has an effect on brand perception and consumer decision making. There are two competing hypotheses to explore. On the one hand, older models could face greater ageism and thus consumers could be less likely to identify and purchase from the brand. Alternatively, social identity theory could predict that older consumers want to see older models, or younger consumers might find it refreshing to see a brand use older models.

Many advertisers argue that the inclusion of greater numbers of older people in advertising would have an adverse effect on both younger and older consumers (Greco, Swayne and Johnson, 1989). Nevertheless, empirical evidence in support of this hypothesis is scarce and largely inconclusive. A “clear interaction between the age-orientation of a product and the age of model” has been found but there is “little evidence to support the hypothesis that the younger model is objectively better” than the older model (Rotfeld et al. 1982).

On the contrary, a study on perceived age and attractiveness of models in cigarette advertisements, found that regardless of viewer age, younger models were judged as more attractive than older models (Mazis et al. 1992). In addition, a study on the use of older models or mention of senior citizen discount in consumer magazines found that there was no effect on
buyer intentions of younger persons for commoditized products, such as a photo processing service; however, produced a negative effect for value expressive services, such as a restaurant (Day & Stafford, 1997).

Moreover, older readers of fashion magazines are typically not as focused on the models' body shape and visual sexuality. For example, their facial expression or stance that is often the focus of modern fashion images used in advertising – as younger readers are (Crane, 2000). There are also significant differences in how older readers consume the fashion magazines. Older readers “tend to flip through the magazine”, taking less time examining each image compared to younger readers (Crane, 2000).

**Does Model Gender Have an Impact?**

This study also explores whether gender could moderate the effect on brand perception when older models are used in fashion advertising. It is unclear whether older male or older female models face greater ageism. There are two competing hypotheses. The first is based on *double jeopardy* theory, which assumes that “prejudices and discriminations against a minority group are worse when combined with prejudices against another disadvantaged group” (Krekula, 2007). Similarly, in Western culture the “double standards of ageing” between men and women are evident across society (Halliwell and Dittmar, 2003). “Socio-cultural constructions of femininity place considerable value on physical attractiveness and youth, and ageing moves women away from these cultural ideals…in contrast, constructions of masculinity emphasize competence, autonomy, power and self-control qualities that increase with age” (Halliwell and Dittmar, 2003). Hence, we could expect more discriminatory and stigmatized language to be used by the participants who view the older female model than participants who view the older male model because the older females experience two types of discrimination.
The second hypothesis, based on the theory of *intersectional invisibility*, predicts that older female models will escape ageism as compared to older male models. The theory explains how being a non-stereotypical member of a social group, for example being a black woman versus a black man, “results in an experience of social invisibility that people with intersecting identities should be more likely to experience compared to the more prototypical members of their social groups” (Purdie-Vaughns & Eibach, 2008). Hence, we could expect an older female will not experience the same level of prejudice that the older male will receive because she will experience “social invisibility” whereas the older male will not. Recently published work supports an intersectional invisibility perspective on age and gender intersectionality, such that older women “escape” prejudice relative to older men (Martin, North, & Phillips, 2018), but this was in broader social perception contexts. The current thesis explores this in the domain of fashion.

Prior studies that have found stark differences between the effect of fashion advertising on consumer behavior of older versus younger women. For example, a study that examined the impact of age and age related constructs on consumer decision making processes and behaviors found that age was positively correlated with stability of purchasing, for example brand loyalty, and negatively correlated to information gathering and processing (Evanschitzky and Woisetschläger, 2008).

In addition, prior studies have found that the perceptions of fashion are significantly different between young female consumers and older female consumers (Nam, Hamlin, Gam, Kang *et al.* 2007). This indicates that older women have different opinions of what could be considered “fashionable” in women’s clothing. Based on this finding we hypothesize that the brand perception score across older and younger female survey participants will be statistically
significant for a given fashion image.

**An Unresolved Question: Do Older Consumers aspire to be Young, or Gracefully Old?**

In addition, this thesis addresses whether older men and women are caught in a trap of “age and style being at odds”, or whether they would prefer to see a greater representation of their age. Prior work has focused on the perceptions of older women and found that many feel that “current advertising does not adequately cater for their needs” and “often dismiss advertising images as unrealistic or irrelevant to their lives” (Borland and Akram, 2007). In addition, a survey by the London College of Fashion found that 97% of women aged 40-89 want to see older models used in advertising (Mair, Carolyn and Cili, Soljana, 2016). Based on this finding we hypothesize that many women would prefer to see images that represent their age and corresponding physical characteristics. We hypothesize only a minority of older women desire the current “aspirational agelessness” that exists in marketing today.

With regards to older men, prior work has focused on exploring how the concept of masculinity is currently being portrayed with the current younger model status quo in advertising, particularly as to how it relates to the body, aesthetics, grooming and fashion. To this end, male consumers may not be affected purely by the age of the male model but also by the perceived masculinity. For instance, a content analysis of eight men’s lifestyle magazines based in Canada between 2004 and 2006 found that “magazines not only convey the message that appearance can be manipulated—but it should also be enhanced, and that men should engage in bodywork in order to attain the lifestyle they desire” (Ricciardelli, Clow and White, 2010). Based on this finding we hypothesize that if an older male model is viewed as more stereotypically masculine than a younger male model (or vice versa), this could increase the brand perception score.
Study Overview

To collect my data, I created two surveys. The first, *pilot study*, normed model attractiveness and outfit appeal. The second, *main study*, utilized the normed stimuli from the pilot study in order to test hypotheses concerning age, gender, and outfit appeal. Both studies utilized the online survey platform Qualtrics to design surveys, then distributed them to participants via Amazon Mechanical Turk, an online marketplace where people (workers) complete tasks such as completing a survey in return for a nominal monetary reward (based on the time taken to complete the survey, as well as difficulty level).

Pilot Study

Participants

Participants for the pilot study were 150 Amazon Mechanical Turk workers (77 male, 73 female), all based in the United States across a range of states. Participants chose to take the survey based on the description provided on the platform and participated for a monetary reward of 0.70 cents. Participants ranged in age from 21 to 68 ($M = 34.5$, $SD = 10.5$). The ethnic distribution of the participants was 85% Caucasian, 7% Asian, 4% African American, 1% American Indian/Alaskan Native, and 4% identified themselves as “Other.”

Procedure

The pilot survey was conducted to ensure that the outfits used in the main study would be matched across genders for their level of trendiness. The pilot survey consisted of 20 images, followed by a set of statements and a matrix to rank level of agreement with the statement. The statements were; “this outfit is trendy”, “this outfit is cool” and “I want to buy this outfit”. The 20 images each consisted of a model wearing a particular fashion outfit, however the model’s face was cropped out of the image so all that could be seen was the body and clothing. Of the 20
images, 10 were considered stereotypically “trendy” clothing and the other 10 were considered “frumpy” or “un-trendy” clothing. Of the 10 trendy outfits and 10 un-trendy outfits, half were female outfits and half were male outfits. (See Appendix I, II, III and IV for visual illustrations). Each participant was randomly assigned to answer questions on 5 of the 20 outfits.

**Results**

Using the pilot study data, the scores of the three statements were summed into one composite “trendy score” for each corresponding outfit. Based on the mean and standard deviations of the outfit’s trendy score, the outfits were matched between genders for their level of trendiness. The resulting normed outfits comprised matched pairs (see Appendix V). Per this procedure, mean differences across genders (male versus female) and trendiness (trendy versus non-trendy) are negligible, demonstrating a near perfect match. These respective outfits were then used for the main study for the corresponding conditions.

**Model faces: Norming for attractiveness and perceived age**

In addition to matching the outfits for the main study, we used a data set of 171 European faces to match the model’s faces for perceived age and level of attractiveness across genders and age groups (Lindenberger, Ebner, & Riediger, 2009). For each of the 171 younger (n=58), middle-aged (n=56) and older (n=57) women and men, the database provided two pictures for five different emotions. The participants were Caucasian individuals, both genders, and of ages ranging from 19 to 80 years old. Additional normed data was collected on all neutral pictures of all participants for perceived age and perceived attractiveness (scale of 1-5). Using this additional data, we calculated the mean of the perceived age and attractiveness scores of the neutral faces and then matched the faces across genders for both age groups. See Appendix VI
and VII for the matched faces selected and their corresponding perceived ages and attractiveness score.

As the final step, I used Photoshop software (Adobe Creative Suite, 2017) to attach normed faces and outfits. This procedure produced eight different face-outfit combinations (gender male vs. female; age older vs. young; outfit trendy vs. non-trendy) for use in the main study). This meant that when comparing within a given gender, for a given outfit type, the only difference was the model’s face; all other factors such as their stance, body shape, height, the background remained the same. Please see Appendix VIII though to XV for a visual illustration of this.

**Main Study**

*Participants (Main Study)*

Participants for the main study were 260 Amazon Mechanical Turk workers (136 females, 124 males), all based in the United States across a range of states and geographies. Participants chose to take the survey based on the description provided on the platform and participated for a monetary reward of 0.80 cents. Participants ranged in age from 19 to 82 ($M = 34.9$, $SD = 11.1$). The ethnic distribution of the participants was 78.7% Caucasian, 6.6% Asian, 9.7% African American, 1.6% American Indian/Alaskan Native, and 3.5% identified themselves as “Other.”

*Procedure: Main Study*

The main study survey consisted of eight images (see Appendix VIII through XV), followed by a set of statements and a response matrix to rate level of agreement with the statement. Each participant was placed into one of eight possible randomized states, which dictated the type of image they saw in the survey. All images consisted of a model wearing
particular fashion clothing. The different states affected the model’s age (young or older), gender (male or female) and whether the clothing they wear is trendy or not trendy. Any combination of these three variables were used to dictate the image the participant saw. As previously mentioned, all eight outfits were used from the pilot survey to ensure they were matched between genders for their level of trendiness.

After viewing the respective image, the participant ranked their level of agreement using a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree), with the following six statements; “I identify with this brand”, “I would purchase clothing from this brand”, “I am a target consumer for this brand”, “I would feel confident wearing clothing from this brand”, “I would feel comfortable walking into this brand’s store to shop” and “I have a positive view of this brand”. In addition, the participant was asked to answer the following questions; “how would you describe this brand to someone who has not seen this image?” and “describe the characteristics of someone who would buy clothing from this brand.” The goal of these questions was to test brand perception and how much age plays into this. Of particular interest was to test if there was any difference across genders; that is, whether people are more or less receptive to seeing trendy clothing being modeled by older men versus older women.

**Moderator Variables**

There are four major moderator variables in this study: extent of ageist prejudice, sexist prejudice, weight prejudice and knowledge of fashion. We expected that these individual-difference variables might moderate main effects in the data, such that participants high or low in these constructs might differ from one another in their perceptions of the various models. To account for this, several posttest measures were used. Participants’ sexist attitudes were measured using the “Hostile and Benevolent Sexism” scale (Glick and Fiske, 1996). The scale
comprises 21 items such as “Women are too easily offended” and “Women seek power by gaining control over men”. Respondents used a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). Participants’ ageist attitudes were measured using the Succession, Consumption, and Identity ageism scale (North & Fiske, 2013). The scale comprises 20 items such as “Older people are often a burden on families” and “If it weren’t for older people opposed to changing the way things are, we could probably progress much more rapidly as a society”. Respondents also used a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Participants’ knowledge of fashion was measured using the “Product Involvement and Knowledge” scale (O’Cass, 2004) and the “Fashion Clothing Knowledge” scale (Flynn and Goldsmith, 1999). The scale comprises 16 items such as “I feel I know a lot about fashion clothing” and “Fashion clothing means a lot to me”. Participants’ weight prejudice was measured using an “Implicit and Explicit Weight Prejudice” scale (Brochu, Gawronski and Esses, 2011). The scale comprised 11 items such as “Discrimination against overweight people is not a problem”. For both scales respondents used a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). In addition to these scales, participants were also asked some demographic information about themselves at the end of the survey including, household income, age, sex and ethnicity.

Main Study Results

Preliminary Analysis

A reliability analysis on the six numerical measures collected was used to test overall brand perception. All six measures were collected from the participant using a 7-point scale, ranging from 1 (strongly disagree) to 7 (strongly agree), meaning the higher each score was, the higher the overall brand perception score. The reliability analysis yielded a Cronbach’s alpha of
0.96, suggesting high reliability. Thus, all subsequent analyses aggregated the six items into one overall composite dependent variable of interest.

3-way ANOVA

A 3-way (gender x age x trendiness) univariate analysis of variance (ANOVA), was used to compare the mean differences between groups that were split on independent variables - the age (young versus older), gender (male versus female) and clothing type (trendy versus not trendy) of the model the participant saw. This was to understand if there was a three-way interaction between the three independent variables on the dependent variable (the composite brand perception score). However, the three-way interaction between the age, gender and type of clothing of the model on the composite brand perception score was non-significant, $F(1, 258) = 0.29, p = .59$.

One-way ANOVA on all eight conditions

Nevertheless, I ran a follow-up, one-way ANOVA to determine whether there were any statistically significant differences between the means of the brand perception scores of each of the eight conditions that participants were placed into, determined by the model they saw. This was because I had a theoretically motivated reason to believe that differences might emerge between the eight experimental conditions. The one-way ANOVA demonstrated that there was indeed a significant difference between the eight conditions in the composite brand perception scores they yielded, $F(7, 258) = 2.49, p = .02$. This effect held, controlling for the four key moderator variables of interest.\(^1\)\(^2\) Thus, follow-up analyses explored what might be driving this significant mean difference.\(^3\)
I re-ran the one-way ANOVA, entering participant gender as a covariate. Gender emerged as a significant covariate, so follow-up analyses unpacked the potential effect of participant gender (see below).

2-way ANOVAs

To examine this significant effect in greater detail, I ran two 2-way ANOVAs, splitting the data file by age (older versus young) and exploring whether a two-way gender x trendiness interaction emerged among older and younger models, respectively (see Appendix X).

Among older models, the two-way (gender x trendiness) interaction was not significant, \( F(1, 134) = 1.86; p = .18 \). This suggested that the effect of trendiness did not differ by gender among older models. However, pairwise comparisons told a different story; please see below.

Meanwhile, among younger models, the two-way (gender x trendiness) interaction was also non-significant, \( F < 1, p = .49 \). This also suggested that the effect of trendiness did not differ by gender among younger models. However, again, pairwise comparisons told a different story; see below.

Pairwise t-tests

Despite non-significant two-by-two interactions, I ran post-hoc, follow-up pairwise t-tests examining whether significant differences emerged between conditions in greater depth. To this end, I conducted every possible pairwise, between-condition test.

Among older models, a significant effect of trendiness emerged for male models, such that the trendy older male (\( M = 4.06, SD = 1.76 \)) was rated significantly higher than the non-trendy older male (\( M = 3.10, SD = 2.15 \)), mean difference = 1.05, \( t(69) = 1.93; p = .06 \).

However, no significant difference emerged between these two versions of the older female model (trendy \( M = 3.67, SD = 1.61 \); non-trendy \( M = 3.65, SD = 2.16 \)), mean difference = 0.02, \( t(62) = 0.04; p = .97 \).
Among younger models, a significant effect of trendiness emerged among both male models and female models; however, this difference was more pronounced among male models. For young male models, the trendy model was rated as significantly higher ($M = 3.6, SD = 1.49$) than the non-trendy model ($M = 2.42; SD = 1.62$), mean difference = 1.18, $t(51) = 2.72; p = .01$.

For young females, the trendy model was rated as significantly higher ($M = 3.99, SD = 1.39$) than the non-trendy model ($M = 3.25, SD = 2.21$), mean difference = 0.74, $t(68) = 1.68; p = .01$.

**Fixed contrast tests**

These analyses indicated a particularly noticeable difference in the (low) mean score of the younger, non-trendy male ($M = 2.42; SD = 1.62$), compared to all other seven conditions, and also a particularly notable (high) score for the older, trendy male ($M = 4.06, SD = 1.76$). Thus, I conducted two more ANOVAs with fixed contrasts (Rosenthal et al., 2000), testing for significant differences between these individual cells (i.e., young-male-non-trendy model, older-male-trendy model) relative to the other seven conditions.

The first contrast test weighted the young male non-trendy model as -7, and the other seven cells +1. This yielded a significant test, $t(250) = 3.22; p = .001$. The second test weighted the older-male-trendy model as +7, whereas the other conditions -1. This yielded a marginally significant difference; $t(250) = 1.77; p = .08$. Thus, both tests indicated that these two cells were significantly different from the others in brand perception score.

**Effect of participant gender**

Given that participant gender emerged as a significant covariate (see above), I decided to re-run the omnibus two-way ANOVA with model condition and participant gender as predictors. This analysis resulted again in a significant main effect of condition $F(7, 258) = 2.55, p = .02$ and a significant main effect of participant gender, $F(1, 258) = 6.41, p = .01$, driven by a pattern of
females ($M = 3.16, \text{SD} = 1.84$) giving lower brand perception scores to all models than males ($M = 3.78, \text{SD} = 1.90$), $t(256)=2.61, p=.01$. However, the model condition x participant gender interaction was not significant $F < 1, p=.45$.\textsuperscript{4}

**Discussion**

Overall it seems that older female models create the least variance in brand perception scores, regardless of whether they wear trendy or non-trendy clothing. As previously mentioned, when independent t-tests were conducted comparing brand perception scores across models of the same age and gender but with differing clothing type, all t-tests were statistically significant, apart from the older female model in trendy clothing ($M = 3.67, \text{SD} = 1.61$) and the older female model in non-trendy clothing ($M = 3.65, \text{SD} = 2.16; p = .97$). This could indicate that using older female models in fashion advertisements creates the least “risk” with regards to the audience’s brand perception. This could be explained by the theory of intersectional invisibility whereby the older female models “escape” criticism due to being non-prototypical members along both gender and age lines; as a result, viewers might be less critical of their appearance.

In contrast, the most significant outlier in brand perception scores across the eight model conditions was the young male model in non-trendy clothing. This model generated a significantly lower mean brand perception score of 2.42 (Appendix IX). It appears that the young male model is statistically “punished” to a greater degree by viewers when wearing non-trendy clothing compared with an older male model, a young female model or an older female model. This could be explained with the aforementioned theory of intersectional invisibility whereby the young male in non-trendy clothing does not experience the invisibility that the older models in particular experience, because they are not part of a non-stereotypical member of a social group, especially with regards to the typical model demographic. This means that participants are more
likely to be critical of the younger male model in non-trendy clothing, resulting in a lower brand perception score.

In addition, male models overall face greater polarization in brand perception scores – they receive the greatest reward for wearing trendy clothing but also the greatest punishment for wearing non-trendy clothing. This is illustrated in the high mean difference in brand perception scores, (Appendix X) between the young male trendy and young male not-trendy \((M = 1.17)\), and the older male trendy and older male not-trendy \((M = 0.96)\). On the other hand, the female models escape this high variance in reactions overall, especially older female models \((M = 0.02)\), resulting in smaller variance in brand perception scores.

Moreover, the preliminary analysis indicates that the current reluctance to use older models may not be justified for many brands. Across the board, there is not a statistically significant difference in brand perception scores, across older and younger models, holding gender and clothing type constant. In fact, the brand perception scores of older models, holding all else constant, are either slightly higher or extremely similar compared to younger models (Appendix IX). This is particularly the case when the model is wearing trendy clothing. As previously mentioned, the older male model in trendy clothing yielded the highest overall mean brand perception score compared with the seven other models \((M = 4.06, SD = 1.76)\). This score was also marginally significant compared with all conditions, \(F(7, 250) =2.50, p =.08\).

Finally, we hypothesized that participant age would have a significant main effect on brand perception scores, especially depending on the age of the model viewed. For instance, based on social identity theory we would expect that an older participant would give higher brand perception scores to older models than younger models, holding clothing type and gender constant. Nevertheless, a regression interaction analysis did not indicate a significant difference
between any of the conditions, taking into account the age of the participant. This further emphasizes the idea that the reluctance to use older models may not be justified for brands as, even when controlling for the participants age, there is still no statistically significant difference in brand perception scores, across older and younger models, holding gender and clothing type constant. This supports the aforementioned theory of intersectional invisibility, as regardless of the participant’s age their stereotype of the older generation is a male. Thus, the older females experience the invisibility, yielding overall higher brand perception scores than the older males, holding clothing type constant.

**Limitations**

One limitation of the study is the type of models used in the images that participants saw. All models were Caucasian and had perceived ages of either early 20’s or early 50’s. Expanding the age ranges to examine the impact of brand perception of models between 60 to 70 years old as well as 30 to 40 years old could provide greater insight into whether the theory of intersectional invisibility explains the lower variance in female brand perception scores, as well as the significantly high brand perception score of the older male model. Equally, future studies could include models of different ethnicities which would provide insight into whether these findings apply exclusively to Caucasian models. For instance, this could provide evidence as to whether Hispanic and African American female models also experience low variance in brand perception scores regardless of age.

In addition, all models in the study were either wearing stereotypically trendy clothing or stereotypically untrendy clothing, a binary measure. Due to the subjective and constantly evolving nature of fashion clothing, it would be interesting to expand this measure of the model’s clothing. For instance, in this study, the only sign of the age of the model was their face, as the
clothing in most of the outfits covered up all other parts of the body. Future studies may include factors such as formality and seasonality of the clothing to explain whether brand perception scores are effected by the participants’ ability and extent to which they can see the models’ signs of ageing.

Practical relevance

The findings of this study could be extremely useful for fashion retailers and especially those that have a large e-commerce business. For instance, if it is the case that older consumers are more likely to buy a product if it is modeled by someone of their age range compared to the younger models currently being used in the industry, this could have significant effects on potential revenue. There could be revenue that many retailers are missing out on because of this age bias. With the rise in AI technology, this could be easily fixed by the system identifying the user’s age and then altering the image of the models on the website accordingly. It could also have a huge impact on the modelling industry as it would enable modelling to be a more sustainable career as a model’s value would not be cut off suddenly at a certain age.

Recently there have been several movements to raise awareness of the importance of incorporating greater diversity of age in fashion campaigns. For instance, at London’s Fashion Week in February 2017 a group of the industry’s most iconic older models staged protests against ageism on the catwalk (Holt, 2017). In addition, there have also been a significant number of small ecommerce fashion brands and social media marketing campaigns emerging purposefully targeting consumers over the age of 40 (Kay, 2017). Hence, the findings of this study may provide not only an ethical but commercially justified reason to include greater diversity of model age in advertisements for the brands that have publically accused of a lack of
age diversity and equally a strong data point for the protestors and the brands raising awareness of the issue.

**Conclusion**

Despite the limitations of the study, we believe that we have expounded previous research on the effects of using older models in fashion advertisements, which historically has been a largely overlooked issue. By incorporating images of both young and older male models, this study has expanded the scope of existing literature which has predominantly focused on the impact of older female models. The study has also shown how using older models in advertisements has either a negligible or positive effect on audience brand perception scores, holding gender and clothing type of the model constant. This has built upon the largely inconclusive existing research on whether using older models has an effect on brand perception and consumer decision making. In particular, it has provided support for intersectional invisibility theory on age and gender intersectionality, such that older female models “escape” prejudice relative to older male models, yielding less variance in brand perception scores.
Appendix

I. Pilot Survey: Non-Trendy Female outfits

II. Pilot Survey: Non-Trendy Male outfits
III. Pilot Survey: Trendy Female outfits

IV. Pilot Survey: Trendy Male outfits
V. Matched Outfits

Trendy Male ($M = 4.07, SD = 1.00$)  
Trendy Female ($M = 3.98, SD = 1.20$)

Non-Trendy Male ($M = 1.64, SD = 1.56$)  
Non-Trendy Female ($M = 1.56, SD = 0.80$)
VI. Matched Faces (OLDER)

![Matched Faces (OLDER)](image)

**Perceived Age**
- Male: 52
- Female: 51

**Attractive Score**
- Male: 2.85
- Female: 2.83

VII. Matched Faces (YOUNG)

![Matched Faces (YOUNG)](image)

**Perceived Age**
- Male: 23
- Female: 26

**Attractive Score**
- Male: 3.27
- Female: 3.38
VIII. Main Survey: Older Male Not-Trendy Model

IX. Main Survey: Young Male Not-Trendy Model
X. Main Survey: Young Female Not-Trendy Model

XI. Main Survey: Older Female Not-Trendy Model
XII. Main Survey: Older Male Trendy Model

XIII. Main Survey: Young Male Trendy Model
XIV. Main Survey: Older Female Trendy Model

XV. Main Survey: Young Female Trendy Model
IX. One-way ANOVA with all eight conditions

Model Condition

Error bars: +/- 1 SE
X. Mean Brand Perception Scores (Older versus Young Models)

**Older Models**

- **Mean Difference** = 0.96
- **Mean Difference** = 0.02

<table>
<thead>
<tr>
<th>Model Gender</th>
<th>Trendy</th>
<th>Not-Trendy</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>4.06</td>
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<tr>
<td>Female</td>
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<td>3.65</td>
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</tbody>
</table>

Error bars: +/− 1 SE

**Young Models**

- **Mean Difference** = 1.17
- **Mean Difference** = 0.74

<table>
<thead>
<tr>
<th>Model Gender</th>
<th>Trendy</th>
<th>Not-Trendy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3.59</td>
<td>2.42</td>
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<tr>
<td>Female</td>
<td>3.99</td>
<td>3.25</td>
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</tbody>
</table>

Error bars: +/− 1 SE
Footnotes

1 The one-way ANOVA with all eight conditions remains significant, even when controlling for all 4 moderators; ageism, sexism, sizeism and knowledge of fashion, $F(7,258)=2.81, p=.008$. Thus, for parsimony’s sake all subsequent analyses did not take these into account.

2 No major pattern of interest emerged when treating the four main control variables as potential moderators. Therefore, and for parsimony’s sake, I do not report these effects in this thesis.

3 We hypothesized that the participant’s age would have an effect on the brand perception score they gave, particularly depending on the age of the model they saw. For instance, we expected that, the older the participant, the higher the brand perception score they would give to older models. To test this, a regression interaction analysis was conducted to test if the participant age had an effect on the brand perception score, depending on the age, gender and type of clothing of the model. These tests did not indicate a significant difference between any of the conditions, taking into account the age of the participant. For instance, there was no statistical difference in brand perception score between models in trendy clothing and models not in trendy clothing, depending on how old the participant was, $F < 1, p = .49$. Surprisingly there was also no statistical difference in brand perception score between young models and older models, taking into account how old the participant was, $F < 1, p = .50$. Finally, there was a marginal statistical significance in brand perception scores between male and female models, taking into account how old the participant was, $F(3, 250) = 1.90, p = .18$, resulting in older participants giving higher brand perception scores to the male models.
For exploratory purposes, I explored whether participant gender moderated any of the four key pairwise comparisons of interest (older male trendy versus not trendy, older female trendy versus not trendy, young male trendy versus not trendy and young female trendy versus not trendy). However participant gender did not significantly moderate any of these effects, all $p$s > .18.
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