“ETHNOMARKETING: Let’s face it; Ethnic similarity between the viewer and the model in the ad does not lead to more positive attitudes toward the (endorser in the) advertisement.”

Final Version
Content
Abstract .......................................................................................................................... 5
Introduction ...................................................................................................................... 6
Contribution .................................................................................................................... 7
  Marketing contribution ................................................................................................ 7
  Scientific contribution ............................................................................................... 7
Immigration in the United States ................................................................................ 8
Assimilation in the United States ................................................................................ 10
Immigration in the Europe; the Netherlands .............................................................. 11
  Multiculturalism in the Netherlands .................................................................... 12
Targeting and Similarity ............................................................................................. 15
  Targeting ................................................................................................................ 15
  Similarity ............................................................................................................... 16
  Similarity in Advertising ....................................................................................... 18
Social Adaptation Theory, Source Attractiveness Model and Source Credibility Model ...... 20
Ethnicity ....................................................................................................................... 21
  Ethnic Majorities and Minorities ..................................................................... 23
Physical Attractiveness ............................................................................................... 26
Theoretical framework ................................................................................................. 32
  Accommodation Theory ..................................................................................... 32
  Cultural Script Theory ......................................................................................... 32
  Distinctiveness Theory ....................................................................................... 32
  The Elaboration Likelihood Model .................................................................. 33
  The Heuristic–Systematic Persuasion Model .................................................... 33
  Identification Theory ......................................................................................... 34
  In-Group Bias Theory ....................................................................................... 34
  Polarized Appraisal Theory ............................................................................. 35
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implications</td>
<td>80</td>
</tr>
<tr>
<td>Limitations and Suggestion for Future Research</td>
<td>81</td>
</tr>
<tr>
<td>Reference List</td>
<td>84</td>
</tr>
<tr>
<td>Appendix A: Questionnaire</td>
<td>103</td>
</tr>
<tr>
<td>Appendix B: Advertisements</td>
<td>112</td>
</tr>
<tr>
<td>Image Sources</td>
<td>119</td>
</tr>
<tr>
<td>Appendix C: Bar graphs of Table 4</td>
<td>120</td>
</tr>
<tr>
<td>Appendix D: Results t-test, ANOVA and Pearson’s correlation</td>
<td>122</td>
</tr>
<tr>
<td>Appendix E: Results Regression</td>
<td>123</td>
</tr>
</tbody>
</table>
Abstract

The researcher manipulated the ethnicity of the female endorsers in advertisements for three different beauty products, while maintaining the other features of the ad the same. One hundred ninety Caucasian and Arab females evaluated the ads with the Caucasian or Arab endorser on the following; (1) ethnic similarity between the endorser and the viewer; (2) perceived similarity to the endorser; (3) ethnic identification with the endorser in the ad; (4) aspiration toward the endorser. Strength of the identification, the type of product used and the level of involvement within the product category can possibly strengthen the effects on the attitude toward the model, the ad and purchase intentions for the woman herself and as a gift for someone else. The findings indicate that overall, Caucasians respond more favorably to ads featuring Arab endorsers and Arabs respond more favorably to same-ethnicity endorsed ads than to Caucasian endorsed ads.

KEYWORDS Caucasian(s), Arab(s), globalization, advertising, multicultural, ethnicity, beauty products, similarity.
Introduction

There is advancement in world communication and transportation, which has given rise to a global economy, potentially moving people toward a homogenized identity. Ads for mass audiences have tended to use Caucasian models (Kinra, 1997), which is consistent with the melting-pot theory. This theory suggests that a process of acculturation, resulting from racial and cultural contacts between ethnic minority groups and the (host) society, eventually results in ethnic minorities becoming more Caucasian-like, thereby melting into the larger (host) society. An example is the finding of Isa and Kramer (2003) that the globalization of beauty and appearance ideals is becoming more prevalent across Asian cultures and continues to do so as American and European media content prolongs to infuse societies and cultures on a worldwide basis.

However, there is an opposing force to this global identity, as groups become more aware of their self or group identity on the basis of their ethnic background (Costa & Bamossy, 1995). Rossman (1994) argues that the trend is toward greater ethnic and cultural diversity. Culturally distinct segments cannot all be successfully targeted using the same marketing and advertising strategies, which succeeded when society was a uniform, Anglo-dominated market (Rossman, 1994; Berman, 1997; Kim & Kang, 2001).

As global populations become increasingly diverse and marketing efforts span countries and cultures, academics and marketers try to find a better understanding on how social context and individual characteristics jointly influence consumer response to marketing and advertising stimuli. It is difficult to standardize marketing and advertising across different markets (Geier, 1986; Hornik, 1980; Mueller, 1992).

Marketers are interested in understanding the perceptual process that operates within the consumer who is evaluating marketing stimuli. If the stimulus is an advertisement, the emphasis is on discovery of the cues the audience uses in evaluating the advertisement, the meaning assigned to these cues, and the total impression formed based on the combination of the number of available cues (Wackman, 1973). When consumers encounter an ad, their reaction to it depends on the meaning they assign to it, which in turn depends on characteristics of both the advertisement and the individual consumer (Levy, 1986; Scott,
Individuals viewing an advertisement that has not been designed to appeal to their market segment are likely to view the advertisement as distracting or irritating (Star, 1989), may feel ignored or neglected (Greco, 1989), or even become alienated or offended (Lipman, 1991).

The research is outlined as follows. First, the concepts of targeting and similarity in advertising are discussed, after that the concept of ethnicity is explained. Next, an extensive review of the theoretical frameworks and existing research regarding ethnicity and advertising is provided, followed by the justification for the hypotheses. Then, the survey methodology, models and the statistical results are discussed. Finally, conclusions, implications, study limitations, and future research opportunities are offered.

**Contribution**

A clear statement of the expected contribution to marketing theory and practice, as well as an explanation of the specific ways the proposed research will contribute to the extant literature is described below.

**Marketing contribution**

This research will lead to a better understanding of advertising preferences in a converging world. Using the results from this study, marketers can better adjust the provision of information and/or advertising to peoples liking, to target their customer either with an integrated approach or with a more segmented approach. The findings can influence the way women are portrayed in fashion magazines, and gives an indication as whether to use a similar or dissimilar (may be even admirable) endorser in advertisements to generate more sales.

**Scientific contribution**

A large part of the existing research is executed in the United States of America and focused on ethnic groups that are prevalent there; namely Caucasians, Blacks (African Americans), Hispanics and Asians. In Europe these particular ethnic groups are not as predominant because the countries in Europe have a different immigration history. A comparison between the United States and a European country (the Netherlands) is drawn below. This comparison shows the different immigration background and highlights why
research needs to be performed in the underexposed geographic area of Europe. Immigration has become a topic of global concern as there are 100 million international migrants worldwide (Suarez-Orozco, 1998).

**Immigration in the United States**

The United States original people are the Native Americans, then the Europeans and Mexicans came and conquered the land, following by importation of Black slaves to work on European dominated plantations. Later, people came from Central- and South-America and from Asia; more detail follows.

The United States counts 313,847,465 inhabitants (July 2012 estimate), (CIA The World Factbook, 2012). Its population is composed of Caucasians (79.96%), Blacks (12.85%), Asians (4.43%), Amerindians and Alaska natives (0.97%), native Hawaiian and other Pacific islanders (0.18%), and two or more races combined (1.61%) (July 2007 estimate), (CIA The World Factbook, 2012). Please note that a separate listing for Hispanics (15.1%) is not included because the US Census Bureau (2012) considers Hispanic to mean persons of Spanish/Hispanic/Latino origin living in the United States who may be of any race or ethnic group (Caucasian, Black, Asian, etc.). According to demographic projections, Americans of European descent will become a minority in the United States sometime during this century, and this shift has already occurred in some urban areas, notably Los Angeles and Miami. In other metropolitan areas, such as New York, Chicago, Houston, and San Diego, the transformation is well on its way (Massey, 1995).

The history of immigration in the United States is characterized by three stages. The “Classic Era” of mass European immigration (1901-1930), a long hiatus of limited movement (1931- 1970), and a new regime of large-scale non-European immigration. These stages correspond roughly with major shifts in US immigration policy. In 1924 the National Origins Act was passed, which imposed strict country quotas. This act took full effect in 1929. The 1965 amendments to the Immigration and Nationality Act, which revoked those quotas, took effect in 1968 (Massey, 1995).

In the Classic Era immigrants arrived from Germany, Ireland, England, Scotland, Wales, Scandinavia, Italy, Austro-Hungary, Poland, Czechoslovakia, Russia and the Baltic
States (Dinnerstein & Reimers, 1999). The composition of European immigrants shifted as time passed by from Northern and Western Europe to Southern and Eastern Europe.

Black Tuesday (the Stock Market Crash of October 29, 1929) and the following Great Depression caused mass unemployment in the United States, and the demand for immigrant workers evaporated. During the 1930s total immigration in the United States fell below one million for the first time since the 1830s.

As the post World War 2 economy expanded with aid from the Marshall Plan and the rate of growth increased, Germany, France, Britain, Belgium and the Netherlands not only stopped sending migrants abroad, they all became countries of immigration themselves, attracting large numbers of immigrants from Southern Europe and then, as these sources dried up, from the Balkans, Turkey, North Africa and Asia (Stalker, 1994). The era of mass European migration to the United States was finally and resolutely over.

With Eastern Europe cut off because of the Cold War, and Western Europe itself a magnet for immigration, the new demand for immigrant workers was met by Latin Americans, whose entry was unregulated under the quotas of the 1920s. From the Western Hemisphere, Mexicans, Colombians, Cubans, Dominicans and Puerto Ricans entered the United States to work as common laborers, building railroad tracks, mining, and working in agriculture and cotton plantations.

The 1965 Act lifted the bans on Asian immigration, enacted in 1882 and 1917. Loss of the Vietnam War and the subsequent collapse of the US-backed governments in Indochina caused a flow of immigrants from Asia. Military officers, government officials and US employees fearful of reprisals from the new communist authorities sought their refuge in the United States. The immigrants came from Vietnam, Korea, Taiwan, China, the Philippines and other Asian countries (Glazer, 1985).

Nowadays, most immigrants arrive from Japan, China, Mexico, Philippines, India, Vietnam, People’s Republic China, Dominican Republic, Cuba, Ukraine, Russia and Jamaica. So Asia, the Caribbean and Latin America are now the largest foundations for US immigrants (Massey, 1995). An interesting fact is that more black immigrants have come to the United
States in the last 50 years than in the entire period of slavery. This fact underwrites the current high level of immigration in the United States.

Assimilation in the United States

Once the history of immigration is described, one needs to know the situation in which these immigrants live in the US. Cultural assimilation is when a minority group gradually acquires customs and traits of the majority society’s norms and values. It is when the immigrants conform to the majority society’s norms and values. People tend to adopt over time some features to show that they belong to certain cultural groups (Simmel, 1923). Immigration inevitably leads to cultural changes, adjustments and accommodations among both new arrivals and native inhabitants (Ainslie, 1998). The question remains; How well are these new arrivals integrated in the US society?

Two structural conditions that are primarily responsible for the remarkable assimilation of European immigrants in the United States are the long hiatus in immigration and the economic boom that accompanied it. Furthermore, although European immigrants were relatively larger in number, they were scattered across more national-origin groups and languages, thereby reducing their salience for native Caucasian Americans and limiting the possibilities for linguistic segmentation in the US. For European immigrants during the Classic Era, the only practical lingua franca was English. So European immigrants are largely assimilated in the general US culture.

In contrast, this is not the case for non-European, mainly Hispanic immigrants. Because nearly 40% of the new immigrants speak the same language, Spanish becomes viable as a second language of daily life, creating the possibility of a bilingual society. The social and economic forces that produce assimilation operate slowly, while those promoting immigration work quickly; The rate at which ethnic culture is augmented by new arrivals from abroad will tend to exceed the rate at which new ethnic culture is created through. As a result, the character of ethnicity will be determined relatively more by immigrants and relatively less by later generations, shifting the balance of ethnic identity toward the language, culture, and ways of life of the sending society.
Immigration in Europe; the Netherlands

Immigration in Europe has started in the 20th century with immigrants from the colonies and from the countries surrounding Europe (North Africa, Arabia). Dutch recent immigrant history is not drastically different from neighboring Western European countries, and that is why in this research the Netherlands are used as an illustration of Western Europe and as a sample of a multicultural society for convenience reasons.

For reference; The Netherlands fit about 237 times in the United States by means of square kilometer surface. With a population of 16,730,632 (July 2012 estimate) (CIA the World Factbook, 2012) composed of Dutch (80.7%), European Union (5%), Indonesian (2.4%), Turkish (2.2%), Surinamese (2%), Moroccan (2%), Caribbean (0.8%), and other (4.8%) decent (2008 estimate), it is more densely populated than the United States. The presence of some of these ethnic groups, Indonesian (predominantly Moluccans), Surinamese and Antilleans, can be explained because of the Dutch colonial past. The patterns of population mobility still tend to reflect old lines of communication in cultural orientation (e.g. language), legal rights of entry and abode, and personal networks (Van Amersfoort & van Niekerk, 2006).

Because of the rapid economic growth after World War 2, which in the 1960s led to structural labor shortage, many Dutch companies sought foreign workers to do unskilled blue-collar work in the classic industries of textiles, shipbuilding and coal-mining. Initially they recruited these workers from Spain and Italy, and later from Yugoslavia and Greece. Since the mid-sixties, companies also got their staff from Turkey, Morocco and Tunisia. The government mediated in these recruitment activities and reached a recruitment agreement with Turkey in 1964 and with Morocco in 1969. The goal of the Dutch government was to obtain more control over the increasing flow of migrant workers. The migrants’ residence was seen as temporary, both by the authorities and by most migrants themselves. As a consequence, no efforts were made to promote their integration. On the contrary, the migrants were encouraged to retain their own cultural identity. This would help them reintegrate upon their return to their countries of origin (van Amersfoort, 1995).

Some temporary labor migrants returned to their home country after some years of work. However, most of them remained in the Netherlands, because of the generous program
of settlement and family reunion for guest workers. Most of the guest workers had few or no school attainments and were from undeveloped rural areas, and their lack of ‘cultural capital’ tied them to unskilled work in precisely those industries that declined in the 1970s, leaving them without job opportunities. The end of the Cold War led to a significant growth of Eastern European migrants as well as asylum seekers, some of whom later acquired refugee status.

The Dutch government considered the Netherlands to be ‘overpopulated’ and actively promoted emigration to, for instance, Canada. For a long time, in fact up to 1983, the government explicitly denied that there were immigrants in the Netherlands. The Dutch reluctance to admit that the Netherlands was (and is) a country of immigration has led to all kinds of symbolic measure, for instance in the avoidance of the word ‘immigrant’ in describing migrants to the Netherlands. Unlike many other immigration counties in Western Europe, citizenship is not generally considered as the primary distinguishing factor between migrants and the native population. Rather, ethnic origin tends to be more relevant in the public perception as a means of differentiating between “them” and “us”. Hence migrants are labeled ethnic minorities and can have dual citizenship (Entzinger, 2006).

The current population of the Netherlands and the prognosis for the period 2020-2050 by ethnicity is shown in Table 1.

Multiculturalism in the Netherlands

One cannot speak about assimilation in the Netherlands, as the Dutch government promoted adhering to ones original culture and traditions. The Netherlands can be better characterized as a multicultural society. This multiculturalism relates to communities containing multiple cultures. As a descriptive term, it usually refers to the simple fact of cultural diversity. Ramirez and Castaneda (1974) define multiculturalism as the ability to exhibit behavior and attitudes on extensive socialization and life experiences in two or more cultures; an ethnic group member can exist in two cultural worlds, adopting both value systems simultaneously.

There has not been a trend toward ghettoisation in the sense that immigrants of one particular ethnic background tend to flock together in specific neighborhoods, as, for
example, in certain American cities. The extensive social housing system in the Netherlands with its relatively ‘color blind’ distribution mechanisms has prevented this from occurring. Ethnic minorities in the Netherlands have the freedom to practice their own religion, and keep their own language and traditions. Plus, because they are distributed across multiple neighborhoods, they will interact with people of other ethnicities (Entzinger, 2006).

As a final note, none of the conditions known to play a role in initiating international migratory flows – wage differentials, market failures, labor market segmentation, globalization of the economy – is likely to end any time soon. Moreover, the forces that continue international movement – network formation, cumulative causation – help to ensure that these flows will prolong into the foreseeable future and is a continuing process.
<table>
<thead>
<tr>
<th>Period</th>
<th>Total Population</th>
<th>Immigrant</th>
<th>Total Western</th>
<th>Total Non-western</th>
<th>Africa</th>
<th>Asia</th>
<th>Latin America</th>
<th>Morocco</th>
<th>Turkey</th>
<th>Dutch Antilles and Aruba</th>
<th>Surinam</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>16654</td>
<td>3425</td>
<td>1525</td>
<td>1899</td>
<td>221</td>
<td>360</td>
<td>87</td>
<td>356</td>
<td>389</td>
<td>142</td>
<td>345</td>
</tr>
<tr>
<td>2020</td>
<td>17229</td>
<td>3932</td>
<td>1707</td>
<td>2225</td>
<td>259</td>
<td>463</td>
<td>118</td>
<td>414</td>
<td>431</td>
<td>171</td>
<td>368</td>
</tr>
<tr>
<td>2030</td>
<td>17688</td>
<td>4394</td>
<td>1848</td>
<td>2546</td>
<td>301</td>
<td>580</td>
<td>147</td>
<td>460</td>
<td>466</td>
<td>206</td>
<td>385</td>
</tr>
<tr>
<td>2040</td>
<td>17841</td>
<td>4798</td>
<td>1955</td>
<td>2843</td>
<td>346</td>
<td>707</td>
<td>176</td>
<td>494</td>
<td>491</td>
<td>239</td>
<td>391</td>
</tr>
<tr>
<td>2050</td>
<td>17782</td>
<td>5148</td>
<td>2059</td>
<td>3089</td>
<td>386</td>
<td>829</td>
<td>203</td>
<td>515</td>
<td>505</td>
<td>269</td>
<td>384</td>
</tr>
</tbody>
</table>

Table 1: Actual Population of the Netherlands (2011) and Prognosis for the Period 2020-2050 by Ethnicity in Thousands of People
(Source: CBS, 2012)
**Targeting and Similarity**

When there are so many different ethnic groups living together in one geographic area, as is the case in Europe, how can these customers be reached? The possibilities of targeting advertisements at specific groups of customers will be discussed. In addition, it is explained how targeting based on similarity between the source and the viewer may influence the outcome of this research.

**Targeting**

How can a multicultural society be reached with advertisements? Zhang and Gelb (1996) found that consumers respond more favorably to communications that are congruent with their culture and that those consumers reward advertisers who understand their culture and shape their advertisements to reflect its values. In order to create successful international advertisements, it is necessary to understand cultural differences (Keegan, 1996).

In addition to understanding the cultural differences that exist between different groups, it might be appealing to aim certain marketing communications at one specific group. The process of selecting a specific group of customers and focusing marketing communications at that group is called targeting. A target market therefore is a selected group of customers (Mullins, Walker, Boyd & Larréché, 2005).

There are three basic strategies to satisfy target markets: undifferentiated marketing (or mass marketing), differentiated marketing, and niche marketing. Mass marketing is an approach that presumes that a firm has one proposition for the entire market. The idea behind this strategy is to reach the largest number of people possible. Differentiated marketing holds a segmentation of the market in various groups and adjustment of the offer depending on the group that is targeted. Niche marketing is a strategy that entails careful selection of a niche market and offering a special proposition to that particular group of consumers (Mullins, et al. 2005).

When employing a differentiated marketing strategy, the nontarget market, the group for which the advertisement is not intended, might feel excluded and the associated negative reactions can have an effect on the evaluation of the offer. This reaction can differ from a
mere failure to achieve favorable target market effects to yielding unfavorable nontarget market effects (Aaker, Brumbaugh, & Grier, 2000). Research on persuasion effects proposes that any variable that leads individuals to make similarity judgments between themselves and an advertisement source (e.g. cultural orientation - Aaker & Williams, 1998), social class (William & Qualls, 1989) and ethnicity (Wooten, 1995) should impact the degree to which target and nontarget market effects occur. Target market effects can be both positive and negative, where positive target market effects bring across the advertising message more strongly to the targeted viewer (intended audience), and where negative target market effects cause negative evaluations of the advertisement (confusion, insult, etc.). If not only the targeted group sees the advertisement, for example advertising to youngsters but also the nontarget market viewers, older people, these people may feel left out, or be confused about the message. Negative nontarget market effects could be alienating the non-target group from the advertiser’s message and even brand.

Examining the reactions of targeted and nontargeted group members to advertising sheds insight on how to better deal with multiple segments in an increasingly diverse marketplace (Aaker et al., 2000). The marketers’ wish is to appeal to the growing multicultural market without alienating the dominant (Caucasian) market (Kamins, 1989). This research will contribute to the understanding of the differing reactions between targeted and nontargeted market members by examining each of the group’s reactions to advertising stimuli.

**Similarity**

Festinger’s theory of social comparison processes (1954) explains that people have a tendency to change one’s opinion to move it closer to the opinion of the referent. Three fundamental propositions of social comparison theory are:

1. People have a *drive* to evaluate their opinions and abilities.
2. In the absence of objective bases for comparison, this need can be satisfied by *social* comparison with other people.
3. Such comparisons will, when possible, be made with *similar* others.

Tajfel (1981) finds that the more personally meaningful the variable, the more likely that similarity with the source will be experienced. Persuasion research examining the effects
of source-recipient similarity has shown that recipients are more likely to be influenced by a persuasive message if they perceive it as coming from a source similar to themselves rather than dissimilar (Berscheid, 1966; Brock, 1965; Burnstein, Stotland, & Zander, 1961). When recipients perceive that the source possesses characteristics similar to their own, they begin to infer that the source will also share other characteristics, all of which lead to greater identification (Brock, 1965). Women making the comparison will attempt to find evidence of similarities and dissimilarities between herself and the target reference (Mussweiler, 2003). Age, occupation, and socioeconomic status (Katz, 1963), race similarity (Whittler, 1989), role congruence (Meyers-Levy, 1989), gender (Tom, Clark, Elmer, Grech, Masetti, Joseph, & Sandhar, 1992), labeling (Tepper, 1994), intensity of ethnic identification (Williams & Qualls, 1989), shared cultural knowledge (Brumbaugh, 1997), and ethnic salience (Deshpande & Stayman, 1994) all are denominators to infer similarity.

Neimeyer and Mitchell (1988) conclude that similar others are usually liked more and found more persuasive (Berscheid, 1966) than dissimilar others. Byrne and others have consistently found that attraction of a recipient to a stimulus person increases as the proportion of his or her reported attitudinal similarities to the subject increases (Byrne, 1961a, 1961b; Byrne, Clore, & Worchel, 1966; Byrne & Griffitt, 1966; Byrne, Griffitt, & Golightly, 1966; Byrne & London, 1966; Byrne & McGraw, 1964; Byrne & Nelson, 1965a, 1965b; Byrne, Nelson & Reeves, 1966; Byrne & Rhomey, 1965; Byrne & Wong, 1962; Sheffield & Byrne, 1967). As Kelman and Eagly (1965) put it “if P likes O, he also tends to like what O does, or believes, or owns; and if P dislikes O, he also tends to dislike whatever is integrally linked with O.” (p.63)

Source-recipient similarity is proposed to contribute to the effectiveness of advertising, because, according to Festinger’s (1954) social comparison theory, people have an innate need for evaluating their own opinions and abilities. In absence of objective bases for comparison, individuals are motivated to adjust their opinions and abilities to move it closer to a referent, if that person is similar to them. This referent can be a person they know, for example a family member, friend or co-worker, but it can also be an unknown person, who shares certain characteristics. This comportment could be used in advertising by using a spokesperson or endorser that has numerous similarities with the target market.
Similarity in Advertising

What can be derived from what is stated above is that individuals tend to agree with the preferences of the source, when they were perceived as being similar to themselves (Burnstein et al., 1961). When consumers are exposed to advertising that is consistent with a salient dimension of their self, they spontaneously self-reference the ad. Salient communicator cues (e.g., physical characteristics, nonverbal behavior, and voice quality) often attract attention to the communicator (Taylor & Fiske, 1978) and affect whether a person is remembered or not (McArthur, 1981). Salient cues lead to more favorable evaluations, attitudes and purchase intentions. Relating information to oneself heightens ad recall and can generate more favorable ad evaluations (Meyers-Levy & Peracchio, 1996; Krishnamurthy & Sujan, 1999). Consequently, ads are better remembered and better liked by viewers (consumers).

Individuals who are more likely to identify themselves with media characters (Huesman, Eron, Klein, Brice, & Fischer, 1983) and perceive themselves to be similar to media characters (Back, 1951; Brock, 1965; Burnstein et al., 1961; Stotland, Zander, & Natsoulas, 1961) are more influenced by media content in which those characters are portrayed. Studies have shown that high levels of similarity between the viewer of an ad and the characters featured in an ad increase the viewer’s belief that he or she is the intended audience for the ad, which in turn leads to liking of the media character (Byrne, 1961a; Byrne & Wong, 1962; Newcomb, 1961) and more positive attitudes about the ad and the product featured (Aaker et al., 2000). Using mocked-up fashion advertisements, Barry (2011) surveyed 3,000 women in the United Kingdom, the United States of America and Canada, "and the vast majority of women significantly increase purchase intentions when they see a model that reflects their age, size and race”.

Whereas Berscheid (1966) concluded that when the source and the viewer shared a similarity that was not relevant to the dimension upon which the influence attempt was made, the viewer did not perceive the source to be a suitable referent for that particular opinion and was little influenced.
When researching advertising effectiveness in a multicultural environment one should conform to the cultural values and norms of the target market in order to communicate successfully with the audience, and also to avoid triggering negative reactions toward a campaign (Boddewyn, 1982; Boote, 1982; Britt, 1987; Hite & Fraser, 1988). In this multicultural advertising context the source's ethnicity is a characteristic that may induce message recipients to infer similarity or dissimilarity (O'Guinn & Meyer, 1984; Whittler, 1991).
Social Adaptation Theory, Source Attractiveness Model and Source Credibility Model

In addition to similarity between a viewer and an endorser, there are other underlying psychological factors that influence the evaluation of a product and a communication.

An endorser’s physical attractiveness would be unimportant if the product the person is promoting already has a strong brand image or clearly observable benefits. However, if the product does not hold these observable advantages - and few products do - then various “irrelevant” cues, including a model’s attractiveness may become salient in influencing the consumer’s response to the product and the communication (Joseph, 1977). According to social adaptation theory, the adaptive significance of information will determine its impact. So an attractive female endorser may provide an effective source of information for a product, which is attractiveness related. To some consumers, the inclusion of the attractive endorser may indicate that use of that promoted product will also enhance their physical attractiveness, just as it did for the endorser, thus providing adaptive information. Thus, it would seem only logical that physical attractiveness of the endorser should facilitate persuasion. If a very attractive female claims to use a beauty product, that product may be assumed to be an element of why the endorser is so beautiful (Kahle, 1984; Kahle & Timmer, 1985).

In addition to the social adaptation theory, two source models suggest the importance of the selection of the endorser (source) in a communication. There is data, which indicates that attraction between endorser (communicator) and viewer increases the effectiveness of the communicator’s influence attempts (Schachter, Ellertson, McBride, & Gregory, 1951). McGuire (1985) proposes a model, the so called “source attractiveness model,” which contends that a message depends for its attractiveness on the "familiarity," "likability," and/or "similarity" of the source. The Hovland version of the model asserts that for its effectiveness, a message depends on the "expertness" and "trustworthiness" of the source (Hovland, Janis, & Kelley, 1953, p. 20; McGuire, 1969; Sternthal, Phillips, & Dholakia, 1978). This model is called the “source credibility model”. "High credibility" endorsers were found to be clearly more effective in producing attitude change than untrustworthy, "low credibility" endorsers (Kelman, 1965).
To conclude, the perception of the level of attraction and credibility of an endorser is very important to the selection of an endorser for marketing communications, because the consumer/viewer makes inferences about the product, based on the evaluation of the endorser’s attributes.

**Ethnicity**

One of the bases for a perception of similarity between a source and a viewer is similarity in race or ethnicity. Race, sex, and age are so called ‘primary’ or ‘primitive’ dimensions of person perception (Hamilton, Stroessner, & Driscoll, 1994; Messick & Mackie, 1989). Perceivers do encode the race of other people relatively effortlessly and rapidly (Cosmides, Tooby, & Kurzban, 2003; Ito & Urland, 2003; Montepare & Opeyo, 2002). This paragraph will provide an explanation of the terms “race” and “ethnicity,” and will describe the concept of ethnic identity.

**Race** is a social construct that classifies humans into large and distinct populations or groups by factors such as heritable phenotypic traits or geographic ancestry (Oxford Dictionary, 2012). Many social scientists have replaced the word race with the word "ethnicity" to refer to self-identifying groups based on beliefs concerning shared culture, language, ancestry and history. This author will hereafter use the term ethnicity to refer to the distinct heritage of groups of people, because of the negative connotations that are associated with the word “race.” These negative connotations are a result of the Second World War and because that term has been used to justify slavery, genocide, apartheid and discrimination.

An **ethnic group** (or **ethnicity**) is a group of people whose members identify with each other, through a common heritage, often consisting of a common language, a common culture (often including a shared religion) and an ideology that stresses common ancestry (Oxford Dictionary, 2012).

Max Weber (1961) describes ethnicity as a sense of common descent extending beyond kinship, political solidarity vis-a-vis other groups, common customs, language, religion, values, morality, and etiquette. For example, to call oneself Black, Caucasian or
Arab is to immediately invoke a clutch of linguistic, religious, cultural and ethnical features that are common within each ethnic group. Caucasian (or Caucasian), Black and Arab are broad ethnic categories that are termed “macro ethnicities”. This distinguishes them from smaller, more subjective ethnic features, often termed “micro ethnicity”, such as Dutch, Flemish, African-Americans, Turks, and Berbers.

This research will focus on the macro ethnicities Caucasians - a broad term denoting Caucasian people as an ethnic descent, especially those with fair skin - and Arabs, a broad term encompassing Islamic people from North-Africa, Turkey and the Middle-East with dark hair and an olive skin tone.

Ethnic identity is an enduring, underlying sense of connection to a social group (Tajfel, 1978). Tajfel (1981) extends this description by saying that ethnic identity is part of a person’s social identity and that part of one’s self-concept is derived from his or her membership in a social group (or groups) together with the value and emotional significance attached to that membership. Ethnic identity has been conceptualized as a complex construct including a commitment and sense of belonging to one’s ethnic group, positive evaluation of the group, interest in and knowledge about the group, and involvement in activities and traditions of the group (Phinney, 1990). Ethnic identity is a dynamic construct that changes over time and context and varies across individuals. Ethnic identity entails self-identification as an ethnic group member, a sense of belonging to this group, and favorable attitudes toward this group (Phinney, 1992).

The study of ethnic identity involves an emphasis on how group members themselves understand and interpret their own ethnicity (Phinney, 1996). In this tradition, an individual first identifies which ethnic group(s) s/he belongs to (what will be referred to as self-designated ethnicity) and then indicates how strongly s/he identifies with that group (what will be referred to as felt ethnicity) (Cohen, 1978; Stayman & Deshpande, 1989).

Strength of identification has been found to influence the amount of attention consumers give to information, the probability that consumers will purchase identity relevant products and the response of consumers to congruent identity actors in advertising (Deshpande, Hoyer, & Donthu, 1986; Ellis, McCullough, Wallendorf, & Tan, 1985;
The importance of strength of identification has been demonstrated across a variety of groups, including African Americans (Williams & Qualls, 1989), Asian Americans (Ellis et al., 1985), Hispanics (Deshpande et al., 1986; Saenz & Aguirre, 1991), and individuals of Jewish heritage (Hirschman, 1981).

To conclude, ethnic identity is an underlying sense of connection to a social group (Tajfel 1978), and its activation may stem from peoples’ ability to associate and identify with stimuli that pertain to their ethnicity (Aaker et al., 2000; Maldonado & Muehling 2006).

**Ethnic Majorities and Minorities**

One significant cue of similarity between a viewer and the endorser in an advertisement is ethnicity. This may be especially true for ethnic minorities for whom ethnicity is more salient. The ethnicity of an endorser in an advertisement may be instrumental in inducing ethnic minorities (e.g., Blacks) to assume similarity or dissimilarity (Whittler, 1989). As McGuire, McGuire, Child and Fujioka (1978) indicated, a Black woman in a large group of Caucasian women will be acutely aware of her ethnicity. However, when the same Black woman is included in a large group of Black men, her Blackness loses salience and she becomes more conscious of being a woman.

What can be derived from this is that as a given ethnic group becomes numerically more dominant in a social environment, ethnicity becomes progressively less salient in the self-concept of its members (McGuire et al., 1978). Research has shown that majority Caucasians are significantly less likely than minority Blacks and Hispanics to mention their ethnicity when asked to define themselves (McGuire et al., 1978; Phinney, 1992). The numerical rarity of a group of individuals is referred to as viewer distinctiveness (McGuire, 1984; McGuire, McGuire & Winton, 1979).

Baker and Patty (1992) found that both majority and minority viewers are likely to respond similarly to ads that depict majority endorsers because these tend to be viewed as representing more accurate and valid viewpoints relative to minority views. In contrast, appeals featuring minority sources tend to lead to more differing evaluations and less tacit
acceptance of the message (Nemeth, 1986) and may induce a more lasting change in attitude (Mackie, 1987).

Deshpande and Stayman (1994) found that numeric ethnic composition in a population influenced the salience of a person’s ethnicity and subsequently, the effectiveness of targeted advertisements. An advertisement targeted toward an ethnic minority group is viewed more favorably by members of that ethnic group when they were a minority of the population than when they made up a greater proportion of the population. Even though the targeted advertisement improved favorable target market effects among all members of an ethnic group, differences in the local demography reinforced that effect for individuals for whom ethnic group membership was particularly distinctive. They found that Hispanic-Americans living in Austin, Texas, USA (where they are an ethnic minority) were more likely to believe that a Hispanic spokesperson was trustworthy than those Hispanics living in San Antonio, Texas, USA (where they are an ethnic majority).

Similarly, Aaker and colleagues (2000) found that Blacks (a minority group) had more favorable attitudes toward an advertisement featuring Black characters than Caucasians (a majority group) had toward an ad featuring Caucasian characters. Little research has been done on advertisements featuring Arabs and/or Caucasians.

Advertising practices in Arab countries have been researched by different authors (Al-Makaty, Tubergen, Whitlow, & Boyd, 1996; Al-Olayan & Karande, 2000). Al-Olayan and Karande have researched differences in ad content between U.S. and Arabic magazine ads. Their research was conducted in twelve Middle Eastern countries (Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, U.A.E. and Yemen) and ten African countries (Algeria, Egypt, Eritrea, Djibouti, Libya, Mauritania, Morocco, Somalia, Sudan and Tunisia). Their findings are that the United States and the Arab countries are distinctive in terms of the role of religion (Luqmani, Yavas & Quraeshi, 1987), the level of individualism (Hofstede, 1980) and the cultural context (Hall, 1976).

The American value system (and most Western value systems) are based predominantly on Christian beliefs (Protestant and Catholic), and are more individualistic (Hofstede, 1980) and low-context (Hall, 1976). Arab cultural values are based on Islamic
religious beliefs and other factors such as the more collectivistic and high-context nature of Arabic society.

The Islamic law, *Shari‘a*, prescribes all that one should do (Coulson, 1964). The *Shari‘a* is a comprehensive set of laws encompassing the duties, morals and behavior of all Muslims in all areas of life, including commerce (Luqmani et al., 1987). It describes the values that Muslims should hold, such as individual freedom, truth, justice, honesty, social obligations, collective responsibility, the roles of men and women in society and the role of buying and selling. Although the *Shari‘a* does not explicitly address advertising, it is the Arab value system (influenced by the *Shari‘a*), together with the cultural factors of collectivism and the high cultural context, that influences advertising content.

Consistent with the above mentioned differences in the cultural value systems between the Western and the Arab world, one would expect that advertising practices are different in these two worlds. Although Al-Makaty et al. (1996) find that there is no single Islamic approach to advertising, generalizations can be made. Newspapers have been the basis of the Arabic media, but magazines are becoming more popular as advertising media, because the quality of Arab magazines has improved (Martin, 1998).

In addition, the way women are depicted in advertisements is of special importance in the Arab world. In general, people are less frequently depicted in Arabic magazine ads. In advertisements in which women are shown, they tend to be pictured when their presence relates to the advertised product; for product categories such as cosmetic and beauty products, or for household products such as food and cleaning products, they show models that are appropriately dressed, that is, wearing long dresses covering their body and a head covering that does not expose any hair (Al-Makaty et al., 1996; Dunkel, Davidson & Qurashi, 2009; Khan, 1995; Reece, 1996).
Physical Attractiveness

Physical attractiveness has been an important topic of research in social science (Bersheid & Walster, 1974) - including attitude change research. A physically attractive source facilitates attitude change toward issues, products, and ad-based evaluations (Caballero & Pride, 1984; Chaiken, 1979; Horai, Naccari, & Fatoullah, 1974; Joseph, 1982; Kahle & Homer, 1985; Kulka & Kessler, 1978; Mills & Aronson, 1965; Mills & Harvey, 1972; Petty & Cacioppo, 1980). The physical attractiveness of a model may only enhance both product- and ad-based evaluations if the characteristics of the product “match-up” (i.e. fit) with the image portrayed by the model (Baker & Churchill, 1977; Friedman & Friedman, 1979; Joseph, 1982; Kahle & Homer, 1985; Marshall, 1987; Peterson & Kerin, 1977; Sherman, 1982). The Beauty Match-Up Hypothesis proposes that a persuasive advertisement presents a good Gestalt: A model whose type of beauty and associated image matches with the paired product. This will provide a coherent message, which, if consistent with the consumers’ desired self-image, will enhance acceptance of the advertisement (Zinkhan & Hong, 1991).

When physical attractiveness leads to more positive evaluations, it is called the “what is beautiful is good” syndrome (Dion, Berscheid, & Walster, 1972). Physical attractiveness has been found, for instance:

a) To be the only determinant of liking and subsequent dating of computer determined dance partners (Brisin & Lewis, 1968; Horai et al., 1974; Joseph, 1977; Snyder & Rothbart, 1971; Walster, Aronson, Abrahams, & Rottman, 1973);

b) To positively affect the evaluation of a person’s personality by others, who are not acquainted with the person (Dion et al., 1972; Miller, 1970);

c) To influence the popularity of a person and influence preferential treatment (Adams, 1982; Bull & Rumsey, 1988; Dion, 1981, 1986; Dion et al., 1972; Feingold, 1990; Langlois, 1986; Patzer, 1985);

d) To influence teachers’ attitude about the performance of students (Clifford & Walster, 1973; Landy & Sigall, 1974); and

e) To affect judgments of guilt and length of sentence in simulated criminal cases (Efran, 1974; Izzett & Leginski, 1973; Sigall & Ostrove, 1975).
When looking at a visual stimulus of an individual, people will readily associate socially desirable traits (strength, sexual warmth, sensitivity, kindness, poise, modesty, social competence, intellectual competence, concern for others, integrity and better character) with attractive individuals, and negative personality aspects with unattractive individuals (Dion et al., 1972; Eagly, Ashmore, Makhijani, & Longo, 1991). As congruity theory (Osgood & Tannenbaum, 1955) might predict, if a person has a positive attitude toward a communicator, he or she will also evaluate that communicator’s message in positive terms. Advertisers and marketers have relied on the use of attractive individuals in advertisements to draw attention to their products and goods (Solomon, Ashmore, & Longo, 1992). This is supposed to increase the effectiveness of an ad either because of the increased perceived credibility of the communicator, and thus his persuasibility, or because of the “halo effect” which increases the credibility and acceptance of the message itself. Baker and Churchill (1977) confirmed that receivers make more favorable evaluations of the ad and Smith and Engel (1968) found more favorable evaluation of the product being advertised when attractive models are used in the advertisement.

The results of Simons, Berkowitz and Moyer (1970) demonstrate an "attractiveness" effect for brand attitude, showing that the use of an attractive spokesperson has a positive effect on brand attitude and purchase intentions (and brand beliefs for the cologne). However, the research did not find a "match-up" effect based on physical attractiveness. The presumed reason for expecting a "match-up" effect is that an attractive endorser fits with (is relevant to) a product used to enhance one's attractiveness. Baker and Churchill (1977) have tested attractive versus unattractive models for beauty products, and the authors find that attractiveness may achieve greater saliency when associated with a personal care product, which is consistent with the “match-up” hypothesis (Caballero & Pride, 1984).

The downside of using attractive models is that they are perceived more negatively than unattractive people in one respect: They are thought to be vainer and less modest (Eagly et al., 1991). And the “what-is-beautiful-is-good” effect should become smaller as the amount of other information about targets increases. For an excellent review of physical attractiveness literature, see Berscheid and Walster (1974).

Isa and Kramer (2003) argue that the judgment of another’s attractiveness can be made within 10 seconds because an individual’s judgment of another is largely based on aesthetics.
However, physical attractiveness has not been an easy variable to define since it was commonly believed that if beauty is in the eye of the beholder, few would agree on what is beautiful. However, the theory of sexual selection suggests several possible explanations for the development of universal standards of physical attractiveness in humans. Evidence from social psychology suggests that both average proportions and (in females) juvenile facial traits are indeed more attractive. Using facial photographs from three populations (Brazil, Paraguayan Indians, United States), rated by members of the same three populations, plus Russians and Venezuelan Indians, Jones and Hill (1993) show that age, average features, and feminine/juvenile features all play a role in facial attractiveness for all viewers. Urdy (1965) confirms the importance of age as a determinant of universal beauty.

Fitness-related evolutionary theories (human mate selection, good genes) posit that morphological characteristics such as attractiveness are honest indicators of fitness, health, quality, and reproductive value, and, therefore, that attractiveness is important in human interactions (Barber, 1995). Because humans base their judgment of attractiveness on clues to health and reproductive fitness, perceivers both within and across cultures should consistently detect and recognize attractiveness, suggesting a possibly universal standard by which attractiveness is evaluated.

Research has traditionally analyzed Anglo-Saxon definitions of beauty, or one that is beautiful, blond, young, slim, tall, virginal, and upper-class (Patton, 2006). Others have found high cross-cultural agreement in the attractiveness rating of faces of different ethnicities (Cunningham, Roberts, Wu, Barbee, & Druen, 1995; Jones, 1996). This suggests that “if different people can agree on which faces are attractive and which are not when judging faces of varying ethnic background, then . . . people everywhere are using similar criteria in their judgments” (Eisenthal, Dror, & Ruppin, 2006, p. 120). These analyses seriously question the common assumption that attractiveness evaluations are culturally unique and merely represent media-induced standards (Langlois, Kalakanis, Rubenstein, Larson, Hallam, & Smoot, 2000).

Beauty is a culturally normative status characteristic that is much more severely applied to women than to men (Baker, 1984; Collins, 1990). Whereas women derive their social worth from their attractiveness, men are valued by the amount of status they have. Physical attraction research has mainly focused on female beauty and the ideals associated
with it. These beauty ideals usually include phenotypical traits such as Caucasianness and Western-European features (Lakoff & Scherr, 1984; Patton, 2006; Wolf, 1991). The tendency to portray women across cultures in the Classic beauty type (blonde/light hair, WASPishly (White Anglo-Saxon Protestant) appearance, Nordic (Aryan) facial features,) (Englis, Solomon, & Ashmore, 1994) indicates that certain aspects of beauty are more or less universal and shared by Eastern and Western cultures (Frith, Shaw, & Cheng, 2005). An example can be found in the research of Hall (1995), where on a Black college campus, the ideals of beauty remain focused on Caucasian/Western traits such as light skin and long, naturally straight hair.

Stice and Shaw (1994) argue that a socio-cultural female ideal is ‘communicated’ to women, with mass media being ‘one of the strongest transmitters of this pressure’ (p. 289). Along with the media, friends (Paxton, Schultz, Wertheim, & Muir, 1999) and family members and peers (Stice, 1998) contribute to the creation of the beauty ideal. Isa and Kramer (2003) suggest that the media are largely responsible for creating a ‘collective psyche’ (p. 42) relating to ideal beauty and attractiveness because it is through the depiction of beauty in fashion and entertainment magazines and through the narrow representation of beauty that viewers’ perceptions and beliefs are formed.

Richins (1991) has shown in her research that females, after being exposed to advertisements featuring thin, attractive models/endorsers, experienced less satisfaction with their own physical appearance and body. However, other researchers have provided the contrary evidence that exposure to thin and attractive models in advertisements can lead to self enhancement and more positive self-evaluations, than exposure to round, average next door models (Smeesters & Mandel, 2006).

The globalization of beauty and appearance ideals is becoming more prevalent across Asian cultures (Isa & Kramer, 2003) and continues to do so as Western media content infuses societies and cultures on a worldwide basis. Park (2007) argued that a majority of local South Korean studies in dieting and body image have reported that pursuing ideal body images enables women to achieve social recognition in a male-dominant society. What used to be considered a traditional image of beauty in South Korea, being average or even overweight in size because it represented abundance, has changed over the last few decades due to what
some are calling the ‘Westernization’ of the country (Jung & Lee, 2006). In South Korea, industrialization and modernization have occurred simultaneously along with the adoption of Western cultural values and norms (Park, 2007) similar to Japan (Kramer, 2003). Along with adoption of the Western cultural values and norm emanate the Westernized beauty ideals.

In addition to a Western body image, South Korean women desire to have facial appearances similar to Caucasian women. This has led to increases in plastic surgery over the last several decades (Rainwater-McClure, Reed, & Kramer, 2003). As it relates specifically to individuals from Asian countries, the authors write that the beauty ideal for Asian women is internalized in relation to the Western eyelid and further write that one of the main reasons Asian women undergo these procedures is for the purpose of making their appearance more like ‘mainstream America’ (p. 227). The authors found that exposure to US media are responsible for this convergence of thought on ideal appearance. Cunningham et al, (1995) argue that exposure to Western media did not influence attractiveness ratings for recently arrived native Asian and Hispanic students and Caucasian Americans, when rating the attractiveness of Asian, Hispanic, Black, and Caucasian photographed women. Asians, Hispanics, and Caucasians were equally influenced by many facial features, but Blacks and Caucasians varied in judging bodies. Arabs have been an underexposed ethnicity in these researches.

Other writers suggest that ethnic groups have different standards for judging attractiveness (Wolf, 1991). Cultural variations in self-care ideals and grooming elaborations, such as body shape, scarification, and decoration (Liggett, 1974) and changes across history in desired body weight, cosmetics, hair color, and apparel style (Jackson, 1992), illustrate the relativity of some aspects of beauty. In this context, Darwin's (1871) finding that "it is certainly not true that there is in the mind of man any universal standard of beauty with respect to the human body" (p. 666) seems quite reasonable and his vision that different cultures presumably have very dissimilar standards of beauty supports the assertion that “beauty is in the eye of the beholder.”

**Esthetic ethnocentrism** is a term that can be used to describe that beauty is to be largely cultural but partly based upon the “ethnic” average for facial features. A female whose facial features approximate the average (mean) with respect to nose, chin, forehead, lips, eyes,
etcetera, including proportionality and position for her “race” (read: ethnicity) would be considered beautiful according to this formulation (Martin, 1964). According to the previous statement, there are numerous cultural interpretations of female beauty and these can vary over time (Langois et al., 2000).

Ideally, for advertising messages to be resonant with a target audience, marketing theory holds that advertisements would need to reflect the social values and cultural norms of a given society (Belk, Bryce, & Pollay, 1985; Belk & Pollay, 1985; Cheng, 1994; Frith & Sengupta, 1991; Lin, 1993; Mueller, 1987). Consequently ads offer a unique opportunity to study the construction of beauty in a culture because advertisers are notorious for promoting a “beauty ideal” (Greer, 1999). An example of esthetic ethnocentrism can be found in Frith and Mueller’s (2003) research; they showed that in conservative Asian countries like Indonesia and Malaysia, Caucasian women are used in lingerie ads as it would be improper for a local woman to be shown partially undressed.
Theoretical framework

Nine theoretical frameworks have been used in the existing literature to explain the effects of ethnic identity in advertising. Each framework, which offers distinctive explanatory power, may be summarized as follows:

**Accommodation Theory**

The first psychological theory that is discussed in this thesis, the Accommodation Theory (Byrne, 1971) proposes that people generally like other people who have similar traits. This suggests that Black viewers will respond more favorably to ads that use same-ethnicity Black endorsers. In addition, it suggests that as person A becomes more similar to person B, the likelihood that B will favorably evaluate A will increase (Holland & Gentry, 1997; Koslow, Shamdasani, & Touchstone, 1994).

**Cultural Script Theory**

Cultural Script Theory (Triandis, Marin, Lisansky, & Betancourt, 1984) emphasizes the representation of cultural themes and values distinct to an ethnic group, through social communication. This theory suggests that the use of specific ethnic themes, such as language, cultural objects or traditions will appeal to ethnic group targeted, which will lead to a more positive evaluation of the social communication (advertisement) (Caudle, 1982).

**Distinctiveness Theory**

The third theory, Distinctiveness Theory (McGuire, 1984), suggests that a person’s own distinctive traits (e.g., African American, red-headed, left-handed) will be more salient to him or her than more prevalent traits (e.g., Caucasian, brunette, right-handed) possessed by other people in his or her environment (McGuire et al., 1978). The theory predicts that ethnicity will be more salient for people whose ethnic group is part of a numeric minority in a social environment than it will be for members of an ethnic majority in a particular social environment.

More specifically, Distinctiveness Theory implies that the lower the proportion of minority group members in the overall population, the more likely that ethnically targeted stimuli (such as the use of an ethnic spokesperson in an ad) will be effective (Grier &
Deshpande, 2001). Distinctiveness results in a heightened sensitivity to targeting efforts, more identification with and trust of a similar source, and increased favorability toward the advertisement and brand (Aaker et al., 2000; Deshpande & Stayman, 1994; Forehand & Deshpande, 2001; Grier & Brumbaugh, 1999; Wooten, 1995).

The Elaboration Likelihood Model

The Elaboration Likelihood Model (Cacioppo & Petty, 1980; Petty & Cacioppo, 1996) suggests that attitudinal responses stem from central route (i.e., high elaboration) or peripheral route (i.e., low elaboration) processing of stimuli. In order for the stimuli to be centrally processed, a person must have both the ability and motivation to do so. The quality of the arguments is assessed within the central route, whereas environmental characteristics of the message, like the perceived credibility of the source, the attractiveness of the source, or the catchy slogan are considered within the peripheral route. Obviously, processing within the central route requires a higher neurological investment from the processor, where evaluations are integrated into the belief system, while responses that stem from the peripheral route require a lower investment because individuals use preexisting ideas and superficial qualities in their evaluations.

Resulting from this, Black viewers may peripherally assess an ad for a Black product when a Black endorser is used, and may centrally assess an ad for a Black product when a Caucasian actor is used.

Social categorization theory expands the Elaboration Likelihood Model’s explanation of model’s ethnicity in advertising messages. This theory supposes that individuals assign objects to groups and apply cognitions and affect (e.g., beliefs and attitudes) associated with that group to an individual object. Whittler and colleagues found that a model’s ethnicity may function as a peripheral cue in an advertising setting (Whittler, 1989; Whittler & DiMeo, 1991).

The Heuristic–Systematic Persuasion Model

The Heuristic–Systematic Persuasion Model (Chaiken, 1980) posits that message credibility is evaluated either heuristically (by casual evaluation) or systematically (by
scrutinized evaluation). For example, Black viewers may systematically evaluate ads embedded with Black cues because they trust an ethnically resonant source.

**Identification Theory**

Identification Theory (Kelman, 1961) suggests that during an interaction individuals examine their similarity with environmental sources and then make similarity judgments. The similar character causes the viewer to make a connection between the self and the character pictured in an ad, and to adopt the attitude of the character because of the shared quality that makes them similar. This is called a favorable similarity effect, which occurs when viewers prefer ads showing models that are similar to them over ads containing models that are different from them. This effect can also be classified as a favorable target market effect.

This may lead to Black viewers identifying more with ads that use Black actors rather than Caucasian actors (Hovland & Weis, 1951). For example, Individuals who are more likely to identify with television characters are more affected by the media content in which those characters are engaged (Huesman et al., 1983).

In addition, identification applies to situations wherein individuals imitate the attitudes or behavior of another person because they aspire to be like that person. This process is the basis for referent power (Assael, 1984), and has been hypothesized to be strongly related to affective characteristics such as likability, credibility and attractiveness of the endorser.

**In-Group Bias Theory**

In-Group Bias Theory (Brewer, 1979) proposes that people tend to evaluate members of their own group (the “in-group”) more favorably than those of other groups (the “out-group”). Following this reasoning, Caucasians should evaluate Caucasian endorsers more favorably in ads with Caucasian and Black actors. However, In-Group Bias Theory does not imply a disfavor toward out-group members (Fiske & Taylor, 1991). Both LeVine and Campbell (1972) and Sumner (1906) suggest that following the views of ethnocentrism, it is likely that the strength of people's negative reactions to an out-group is much weaker than the strength of their positive reactions to the in-group.
The strength of this positive effect is variable within the group. One reason for this variability is individual differences in strength of ethnic identification (Deshpande et al., 1986). The significance of strength of ethnic identification as a determinant of individual differences in consumer marketplace behavior has been demonstrated in the marketing literature (Deshpande et al., 1986; Donthu & Cherian, 1992; Hirschman, 1981; Webster, 1994).

Strong ethnic identifiers should display attitudes and behaviors that are consistent with the core cultural values (e.g., customs, language, dress, foods, religion, product use, and media use) of their ethnic group, which should thereby lead to a preference for advertisements and other media that depict these cultural values. In contrast, consumers with weak ethnic identities should display attitudes and behaviors that are less consistent with traditional cultural values and closer to those of the dominant majority culture. Compared to strong ethnic identifiers, weak ethnic identifiers should demonstrate less of a preference for advertisements and other media that depict their cultural values (Appiah, 2001a; Donthu & Cherian, 1992; Geng, 1997; Webster 1990, 1991; Whittler, 1989; Williams & Qualls, 1989).

Strong identifiers are more likely to show a positive bias than weak identifiers and it is even possible that weak identifiers may wish to disassociate themselves from their own group and therefore respond negatively to other in-group members.

**Polarized Appraisal Theory**

Polarized Appraisal Theory (Linville, 1982; Linville & Jones, 1980) suggests that in-group members will evaluate out-group stimuli more extremely than in-group stimuli. This would lead to the prediction that Caucasians would view ads depicting Black endorsers with positive characteristics (e.g., Bill Cosby, Will Smith) more positively than ads with Caucasian endorsers with similar characteristics. In opposition, Caucasians would view Black endorsers who are perceived to have negative characteristics (e.g., O.J. Simpson, Dr. Murray) more unfavorably than their Caucasian counterparts.
Social Identity Theory

The last theory, Social Identity Theory (Tajfel & Turner, 1985), posits that people assign themselves to certain social categories (e.g. Black ethnic group) and that an individual’s self-concept stems from their social identities and self-identities. In turn, these identities contribute to self-image and satisfaction. Therefore, ads with embedded ethnic cues allow viewers in the targeted ethnic group to differentiate themselves from others, which reinforces their self-identity and uniqueness (Tajfel, 1978, 1981).

Table 2 captures the nine theories on which previous studies on advertising and ethnicity are grounded on: Accommodation Theory, Cultural Script Theory, Distinctiveness Theory, Elaboration Likelihood Model, Heuristic-Systematic Persuasion Model, Identification Theory, In-Group Bias Theory, Polarized Appraisal Theory, and Social Identity Theory.

Table 2: Previously Used Theoretical Frameworks for Advertising and Ethnicity Studies

<table>
<thead>
<tr>
<th>Theory</th>
<th>Brief Description/Definition</th>
<th>Application to Ethnicity and Advertising</th>
<th>Explanatory Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>If person X becomes more analogous to person Y, then it is more probable that person Y will like person X (i.e. people tend to like other people with similar traits).</td>
<td>Blacks will respond favorably to an ad (e.g. more positive A_{AD}, A_{B}, and P_{I_{B}}) with streetwise verbiage because they attribute the use of this dialect to the advertiser’s respect and compassion for Black culture.</td>
<td>Identification with resonant ethnic endorsers in ads.</td>
</tr>
<tr>
<td>(Byrne, 1971)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Script</td>
<td>Social communication (e.g. ads) that portray and/or communicate cultural themes/values common to a unique group.</td>
<td>Because ads can convey the cultural values of ethnic groups, members of ethnic groups may be more responsive to ads that reflect the cultural values of their scripts.</td>
<td>Positive attitudes toward ads with resonant cultural scripts.</td>
</tr>
<tr>
<td>(Triandis et al., 1984)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distinctiveness</td>
<td>A person’s distinctive traits are more salient to him/her than the more common traits of other people in his/her environment.</td>
<td>Relative to ethnic-majority Caucadians in Beverly Hills, ethnic-minority Blacks living in Beverly Hills are more likely to trust a Black endorser in an ad.</td>
<td>Responses of minority ethnic groups to ads with resonant ethnic cues.</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>Elaboration</td>
<td>Attitude formation and change follow one of two routes. Central route processes require considerable thought and high elaboration; peripheral route processes lead to message assessment without thorough examination.</td>
<td>Peripheral or central processing of an ad message is influenced by the ad endorsers and viewers ethnicity (e.g., Black viewers may peripherally (centrally) examine an ad for a Black product when a Black (Caucasan) endorser is used).</td>
<td>Some ethnic cues in ads, depending on the viewer’s ethnicity, may encourage central or peripheral message examination.</td>
</tr>
<tr>
<td>Likelihood Model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petty &amp; Cacioppo, 1996</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heuristic</td>
<td>Message credence is assessed either heuristically (i.e., message claims assessed casually, as basic decision rules based on previous experiences are used) or systematically (i.e., message claims scrutinized carefully).</td>
<td>When exposed to an ad embedded with Black (Caucasan) cues, Black viewers may systematically (heuristically) examine the message because they (dis)trust an ethnically (dis)similar source.</td>
<td>Heuristic or systematic evaluations, stemming from embedded ethic cues, used to assess credibility of ethnically resonant ads.</td>
</tr>
<tr>
<td>Systematic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persuasion Model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaiken, 1980</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td>People consider their degree of similarity with sources (during interactions) and then make similarity judgments.</td>
<td>Consumers will identify more with ads that show an endorser of similar ethnicity than with ads that show an endorser of dissimilar ethnicity.</td>
<td>Ethnic consumers who more strongly identify with resonant ethnic endorsers in an ad also identify more strongly with that ad.</td>
</tr>
<tr>
<td>Kelman, 1961</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theory</td>
<td>Definition</td>
<td>Example</td>
<td>Implications</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>In-Group Bias (Brewer, 1979)</td>
<td>Bias toward a person in a similar social group shown favoritism toward in-group members rather than resentment toward out-group members.</td>
<td>Blacks (Caucasians) will evaluate Black (Caucasian) endorsers in ads more favorably than Caucasian (Black) endorsers in ads.</td>
<td>Identification with resonant endorsers in ads.</td>
</tr>
<tr>
<td>Polarized Appraisal (Linville &amp; Jones, 1980)</td>
<td>Because cognitive schemas are more elaborate for in-group members than out-group members, out-group members are less likely to fit these schemes when being assessed; thus, in-group evaluations are less extreme.</td>
<td>Caucasians will exaggerate the positive characteristics of a positive Black role model in an ad; thus, Caucasians will evaluate a Black endorser more favorably than a Caucasian endorser of similar character.</td>
<td>Responses of one ethnic group to ad endorsers of other ethnic groups.</td>
</tr>
<tr>
<td>Social Identity Theory (Tajfel &amp; Turner, 1985)</td>
<td>People assign themselves to social categories, and their identity stems from their social group.</td>
<td>Ads with embedded ethnic cues allow viewers in the targeted ethnic group to differentiate themselves from others, and reinforce their identity.</td>
<td>Identification with resonant endorsers in ads.</td>
</tr>
</tbody>
</table>

$A_{AD} = \text{attitude toward the ad}$; $A_B = \text{attitude toward the brand}$; $A_M = \text{attitude toward the model}$; $P_{IB} = \text{intentions to buy the advertised brand}$
Literature Background

Following the psychological theories in the previous chapter, consumers who are in a minority ethnic situation (for whom ethnic background should be more salient), are more likely to identify with a spokesperson of their own ethnic group. The ethnicity of a model in an advertisement may be particularly helpful in inducing ethnic minorities (e.g., Blacks/Moroccans) to infer similarity or dissimilarity (Aaker et al., 1997; Deshpande & Stayman, 1994; Whittler, 1989).

There are two approaches to design an advertisement: “integrated” and “segregated” advertising, where with integrated advertising multiple ethnicities are included in consumer advertising. There are varying degrees of integration; the number and role of people of different ethnicities may change. A good example of integrated advertising is the Benetton ads. Segregated advertisements show only people of one ethnicity (Whittler, 1991).

Research examining the impact of integrated and segregated advertising on consumer evaluations is limited in scope and most of the studies were conducted more than 40 years ago in the southern regions of the United States of America. (Barban, 1969; Barban & Cundiff, 1964; Solomon, Bush, & Hair, 1976; Stafford, Birdwell, & Van Tassel, 1970; Syzbillo & Jacoby, 1974), raising question as to whether the results are still valid. The results of the research on the effectiveness of ethnicity-based targeted advertising on consumer product evaluations, attitudes toward the advertisement and purchase intentions fall into three broad categories; Same ethnicity preference, other ethnicity preference and no difference in preferences.

First, it was found that Caucasian consumers evaluate advertisements with Caucasian models more favorably than they do ads with Black models (Cagley & Cardozo, 1970; Kerin, 1979; Schlinger & Plummer, 1972; Whittler & DiMeo, 1991). For example, Kerin (1979) found that in evaluating print ads, Caucasians associated better product quality with Caucasian features of the model instead of Black features. Subsequent research replicated this effect and showed that similarity and identification with similar race/ethnicity source drove this effect (Simpson, Snuggs, Christiansen & Simples, 2000; Whittler, 1989). More recent research has begun to explore the moderating influences of cognitive processing (Whittler,
distinctiveness (Aaker et al., 2000; Deshpande & Stayman, 1994; Forehand & Deshpande, 2001; Grier & Brumbaugh, 1999; Grier & Deshpande, 2001), racial identification (Appiah, 2001a), and argument strength (Whittler & Spira, 2002), on viewers’ ability to identify with same-ethnicity endorsers shown in ads.

Research examining Caucasian consumers’ attitudes, intentions, and purchasing behavior has shown positive (Barban, 1969; Guest, 1970; Schlinger & Plummer, 1972), neutral (Barban & Cundiff, 1964; Bush, Gwinner, & Solomon, 1974; Solomon et al., 1976) and negative reactions (Block, 1972; Cagley & Cardozo, 1970; Muse, 1971; Stafford et al., 1970; Whittler & DiMeo, 1991) to exposure to Black models in promotional material. One explanation might be derived from Phinney (1992), who showed that minority group members consistently place higher importance on their ethnic identity than majority Caucasians. Because majority Caucasian viewers are less concerned with and less conscious of ethnicity, the model’s ethnicity does not seem to matter to Caucasians (Whittler, 1989). To illustrate the abovementioned, McGuire and his colleagues (1978) reported that of the majority Caucasian students in an American grade school, only 1% spontaneously mentioned their ethnicity in describing themselves, whereas 14% of the minority Hispanic and 17% of the minority Black students did so. What may be more important to Caucasian audiences is their ability to understand, relate to, and perceive similarities with Black media models in areas that are not just skin deep (e.g., role, values, dress, and lifestyle). This is shown in studies that demonstrate that Caucasian individuals respond just as favorably to ads with Black models as they do to ads with Caucasian models (Bush, Hair, & Solomon, 1979; Pitts, Whalen, O’Keefe & Murray, 1989; Schlinger & Plummer, 1972; Whittler, 1989).

Other researchers have found that targeted advertising on the basis of membership in the dominant culture is likely to be ineffective. Ads targeted at ethnic minorities frequently break through to majority consumers and they are likely to prompt critical or negative responses (Grier & Brumbaugh, 1999). This confirms the fear of many companies that the use of minority actors will somehow cause majority Caucasian consumers to have an unfavorable evaluation of the advertised product, and will alienate majority consumers; the so-called “Backlash effect”. (Barban, 1969; Bush et al., 1979; Cagley & Cardoza, 1970; Guest, 1970; Harris, 1989; Qualls & Moore, 1990; Stafford et al., 1970). Some researchers have argued that using Black actors in ads is a waste of time and money because advertising messages
distributed to Caucasian consumers would effectively capture Black consumers (Askey, 1995; Gadsden, 1985).

Second, research suggests that Black consumers respond more positively to ads with Black models than they do to those featuring Caucasian models (Appiah, 2001a, 2001b; Barban, 1969; Barban & Cundiff, 1964; Choudhury & Schmid, 1974; Kerin, 1979; Koslow et al., 1994; Schlinger & Plummer, 1972; Szybillo & Jacoby, 1974; Tolley & Goett, 1971; Whittler, 1989, 1991; Williams, Qualls, & Grier, 1995). For instance, Kerin (1979) found that in evaluating print advertisements, Blacks associated better quality with Negroid features as opposed to Caucasian features. When Black models were included in ads, Black consumers were better able to recall the advertisement's content, and had more positive evaluations of the advertisement and the models (Green, 1999; Schlinger & Plummer, 1972; Szybillo & Jacoby, 1974; Whittler, 1991).

Another possibility is that advertisements featuring Black actors might have a negative effect on Black consumers. One explanation comes from Grier and Cobbs (1969); they found that a Black man “identified with his oppressor psychologically in an attempt to escape from his hopeless position. From his new psychologically ‘Caucasian’ position, he turns on Black people with aggression and hostility” (p. 167). Another explanation can be that Black consumers have moved up the socioeconomic ladder, and have similar responses to their Anglo counterparts. They should not automatically be viewed as having lost strong ethnic identity, the assumption is that as middle-class Blacks move up the socioeconomic ladder, they become more integrated or assimilated into mainstream American cultural, and subsequently move away from the Black cultural value system (Williams & Qualls, 1989).

When companies do use Black models to endorse products, they are used primarily in Black media (Kern-Foxworth, 1994). When Blacks appear in general market ads, they appear primarily for short time periods, in minor and background roles (Greenberg & Brand, 1994), in racially/ethnically integrated groups, and in nontreating or subordinate positions (Wilkes & Valencia, 1989).

Strong Black ethnic identifiers generally have more positive evaluations of advertisements that feature African-Americans in ethnically targeted media and placed in
positions of dominance, whereas weak Black ethnic identifiers have more positive evaluations of ads that feature Caucasians in positions of dominance and of those ads that are placed in nontargeted media (Green, 1999).

Conversely, several studies have found no difference in consumer ad evaluations when either Black models or Caucasian models were used (Bush et al., 1974; Solomon et al., 1976; Stafford et al., 1970; Whittler, 1989; Whittler & DiMeo, 1991; Williams et al., 1995). For example, the results of Bush et al. (1974) indicate that Caucasian consumers purchased equally from all experimental point-of-purchase displays of bath soap regardless of the treatment condition. The authors stated that there are no differences in the sales responses of Caucasian consumers to promotional materials utilizing (1) all Caucasian models, (2) all Black models, or (3) Caucasian and Black models (integrated). In addition, this experiment found that neither age nor sex of Caucasian consumers was related to their sales responses under any of the treatment conditions. Guest (1970) found no difference between Black and Caucasian models used in advertisements when viewed by Caucasian subjects even when social deference was manipulated. Additionally, Tolley and Goett (1972) found that attitudes of Caucasians toward newspaper ads were the same for ads containing either Black or Caucasian models. Barban (1969) found that for a segregated ad, Caucasians and Blacks responded similarly to a sample of typical cigarette advertisements, regardless whether the advertisement contained Black or Caucasian models. But when a single advertisement was integrated and contained both Caucasians and a Black, reactions diffused. It was not a matter of Blacks ‘liking’ such advertisements and Caucasians not; rather it was a situation in which Blacks judged the stimulus as favorable, whereas Caucasians were more neutral.

To summarize, these research results do not lead to a definitive conclusion regarding the effect of targeted advertising on consumer product evaluations. One reason for the lack of a consensus among previous studies is the different focus of the research question. The variation in the findings is due largely to the diversity in methods used, including emotional response through pupil dilation (Stafford et al., 1970), attitudes and purchase intentions (Schlinger & Plummer, 1972), sales (Solomon et al., 1976), and likeability (Whittler & DiMeo, 1991). Also, some researchers tested television ads whereas others tested print ads.
Whereas the previous research was predominantly centered around majority Caucasians and minority Blacks, other racial/ethnic minorities have also been topic of research. **Hispanics** seek out (Stevenson & McIntyre, 1995) and are better persuaded by Hispanic models (Deshpande et al., 1986; Webster, 1992, 1994) and more ethnic salient ads (Dimofte, Forehand & Deshpande, 2004). However, Deshpande and his colleagues (1986) found there appears to be more similarity between Weak Hispanic Identifiers and Anglos (particularly in terms of a lesser preference for prestige and ethnically advertised brands) than between the Strong and Weak Hispanic Identifiers.

Sierra, Hyman and Torres (2009) find that based on a model’s apparent ethnicity, subjects who can identify ethnically with the model, are more likely to purchase the brand (via more positive attitude toward the Advertisement and Brand, irrespective of whether the subject is Caucasian, Black or Hispanic.

**Asian** Americans prefer to see ads that feature characters with whom they can identify, especially when they are primed and a numeric minority (Forehand, Deshpande & Reed, 2002), despite beliefs that they can be reached with mainstream messages and characters (Rossman, 1994). Lee, Fernandez and Martin (2004) find that Asians, who are exposed to ads with models with Asian ethnicity, spontaneously self-reference the ad, which leads to more positive attitudes toward the model and the ad, plus stronger buying intentions of the brand as well as a more positive evaluation of the advertised brand. Another research by Martin, Lee and Yang in 2004 confirms these finding.

In addition, Chang (2008) found that Chinese individuals show an "in-group bias" by rating products with Chinese brand names, as opposed to English brand names, higher on brand friendliness, brand trust, self-brand connections, and brand liking. When advertisers want to increase the perceived quality of the product, they can use Western models and English brand names to enhance the perceived globalness of the brand and to encourage participants to infer that the product originates from a developed Western country.

No research was available written in the English language that discusses target and nontarget market effects for majority or minority Arabs. Table 3 presents a summary of major research studies that have addressed ethnic targeted advertising.
However, much of the research on target marketing was conducted when the use of non-Caucasian actors in advertising was very unusual. Current advertising has increased the use of non-Caucasian actors to the point that some minorities are actually over-represented in advertising relative to their composition in the general population (Taylor & Stern, 1997; Wilkes & Valencia, 1989). As a result, in today’s multicultural environment, ads that once garnered attention through their use of non-Caucasian actors may no longer do so.

On top of that, Whittler and DiMeo (1991) suggest that today's younger Caucasians and Blacks have more opportunity for interaction with one another than adult Caucasians and Blacks. Thus, younger people may be more willing to accept individuals of different races, and perceive targeted advertising differently. Furthermore, African-American consumers are becoming more mainstream (Askey, 1995; Gadsden, 1985) so effects of targeted advertising might have altered from the time when the majority of the research was performed (1960-1970) to nowadays. Globalization of world markets and the accessibility of more sophisticated communications technologies are major drivers of change for social and cultural transformations. Globalization is making the world more accessible, travel is easier, so this increases consumers’ awareness of other fashions and ethnicities. The more sophisticated communication technologies have provided people with greater access to more ideas and influences from other cultures and societies. For example, satellite television and the internet provide access to fashion, sports, films and music from any country around the world. Consequently consumers have a broader and more sophisticated appreciation of popular cultures in other countries. This greater awareness affects individuals' tastes and impacts on the demand for particular products and fashions.

These large changes over the last decades and the lack of targeted advertising research on ethnic identity for Arabs are two reasons to examine this in more detail in this research.
### Table 3: Summary of Existing Literature

<table>
<thead>
<tr>
<th>Article</th>
<th>Research Question</th>
<th>Overall Theory</th>
<th>Ethnicity</th>
<th>Stimuli</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muse (1971)</td>
<td>How are ads with only Black models perceived by Caucasian audiences?</td>
<td>No frame-work used</td>
<td>Blacks, Caucasians</td>
<td>Print ads for cigarettes, vodka, napkins, beer</td>
<td>Ads with only Black models do not affect Caucasian consumers’ perceptions of ad effectiveness or appeal</td>
</tr>
<tr>
<td>Bush, Gwinner, and Solomon (1974)</td>
<td>How do Caucasian consumers respond to Black models in in-store promotional materials?</td>
<td>No frame-work used</td>
<td>Blacks, Caucasians</td>
<td>End-of-aisle, POP displays with either all Black, all Caucasian, or mix of Black and Caucasian models</td>
<td>Caucasians respond similarly to point-of-purchase (POP) displays with all Black models, all Caucasian models, or a mix of Black and Caucasian models</td>
</tr>
<tr>
<td>Deshpande, Hoyer, and Donthu (1986)</td>
<td>Do different groups of Hispanics differ in their ethnic identification?</td>
<td>No frame-work used</td>
<td>Hispanics</td>
<td>None; mail questionnaire</td>
<td>Relative to weak Hispanic identifiers, strong Hispanic identifiers more likely (1) to use Spanish language media, (2) to have more positive attitudes toward advertising, and (3) to purchase products advertised to Hispanics</td>
</tr>
</tbody>
</table>
| Pitts, Whalen, O’Keefe, and Murray, (1989) | How do Blacks and Caucasians respond to TV ads with cultural/ethnic cues?        | No frame-work used | Blacks      | Four 60-second TV ads targeted at Blacks                                | • Relative to Caucasians, Blacks respond more favorably to TV ads with Black actors  
• Compared to Blacks, Caucasians fail to notice some cultural values (e.g., belonging, self-fulfillment, accomplishment) depicted in commercials                                                                 |
| Whittler (1989)                 | Do race of ad actor and viewers’ racial attitudes affect ad evaluations?          | No framework used | Blacks, Caucasians | Full-color storyboard ads with a Black actor and a Caucasian actor       | • Caucasians (Blacks) identify more with Caucasian (Black) actors than Black (Caucasian) actors  
• Blacks (Caucasians) are more likely to buy advertised brand and evaluate ads with a Black (Caucasian) actor more favorably  
• Caucasians do not react negatively to Black actors in ads                                                                                                                                 |
| Webster (1992)                  | Do Hispanic groups categorized by sub-cultural ethnic identification search differently for ad information? | No framework used | n/a         | None; administered questionnaire                                         | • Hispanics more willing to search media with which they ethnically identify  
• Relative to non-Spanish-speaking Hispanics, Spanish-speaking Hispanics influenced less by brochure ads and magazine ads                                                                                     |
<p>| Roslow and Nicholls (1996)       | Are Hispanics more persuaded by Spanish- or English-language TV ads?             | No framework used | Hispanics    | Spanish-language and English language TV ads                            | Hispanics more persuaded by Spanish-language TV ads embedded in Spanish-language TV programs than by analogous English-language TV ads embedded in English-language TV programs                                                  |</p>
<table>
<thead>
<tr>
<th>Authors</th>
<th>Research Question</th>
<th>Methodology</th>
<th>Target Group(s)</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Dimofte, Forehand, and Deshpande (2004) | Can ad targeting incongruent with existing identity cues affect the salience of self-identification and responses of target consumers? | No framework used | Hispanics, Caucasians    | Two TV ads with a Hispanic actor; one ad with English voice-over, and one ad with Spanish voice-over and English subtitles   *
|                         |                                                                                   |             |                          | • Unusual voice-over/subtitling augments ethnic self-awareness and increases ad recall  
|                         |                                                                                   |             |                          | • Ad schema congruity moderates the effect of target market affiliation on $A_{AB}$ and attitude toward spokesperson                                                                                       |
| Williams and Qualls (1989) | Do middle class Blacks and Caucasians respond differently to ads featuring celebrity endorsers? | Cultural script | Blacks                   | TV ads featuring celebrity endorsers                                                                                                             *
|                         |                                                                                   |             |                          | • Strong and weak Black identifiers respond similarly to ads with celebrity endorsers  
|                         |                                                                                   |             |                          | • Strong Black identifiers and Caucasians hold similar favorable attitudes toward ads with celebrity endorsers                                                                                           |
| Deshpande and Stayman (1994) | Do majority and minority group members respond differently to radio ads with Caucasian or Hispanic-named spokespersons? | Distinctiveness | Hispanics, Caucasians   | Radio-script ads with either a Caucasian or Hispanic-named spokesperson                                                                                                                                  *
|                         |                                                                                   |             |                          | Relative to majority group members, minority group members more likely (1) to deem their ethnicity important, and (2) to trust spokespersons of similar ethnicity, which induces more positive $A_B$                       |
| Grier and Brumbaugh (1999) | What meanings do targeted and nontargeted groups derive from ads?                 | Distinctiveness | Blacks, Caucasians, gay/lesbian | Ad brochure that mimics magazine ads                                                                                                          *
|                         |                                                                                   |             |                          | Relative to non-targeted groups, targeted groups (1) view ads more positively, and (2) better understand cultural cues in ads                                                                     |
| Aaker, Brumbaugh, and Grier (2000) | What effect do ads targeted at one audience have on non-targeted audiences?        | Distinctiveness | Blacks, Caucasians, gay/lesbian | Pamphlet of color print ad targeting Blacks, Caucasians, or gay/lesbians                                                                                                                                *
|                         |                                                                                   |             |                          | • Relative to targeted group, nontargeted groups' view ads less positively  
|                         |                                                                                   |             |                          | • When targeting cues absent, viewer distinctiveness alone unrelated to $A_{AB}$  
|                         |                                                                                   |             |                          | • Felt similarity and felt targetedness mediate $A_{AB}$ for intended targets                                                                                                                         |
| Forehand and Deshpande (2001) | Does ethnic self-awareness affect consumers' responses to targeted ads?            | Distinctiveness | Asians, Caucasians      | Series of TV and print ads                                                                                                                     *
|                         |                                                                                   |             |                          | When ethnic cues are analogous to one's self-concept, they increase the rate at which people mention their ethnicity in self-descriptions, leading to more favorable responses to a same-ethnicity spokesperson and ads targeting their ethnicity |
| Grier and Deshpande (2001) | Does social and numeric status of consumers affect ad effectiveness?              | Distinctiveness | Blacks, Caucasians       | One print ad with either a Black or Caucasian spokesperson                                                                                       *
|                         |                                                                                   |             |                          | • Using social dimensions to target ads may be effective even when targeted group is a numeric majority  
<p>|                         |                                                                                   |             |                          | • Greater (lesser) ethnic salience due to minority (majority) status leads to more (less) positive $A_B$                                                                                           |</p>
<table>
<thead>
<tr>
<th>Study</th>
<th>Research Questions</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forehand, Deshpande, and Reed (2002)</td>
<td>How do ethnic primes and social distinctiveness affect identity salience and responses to targeted ads?</td>
<td>Distinctiveness</td>
<td>Across both experiments, Asians (Caucasians) responded more favorably (negatively) to an Asian spokesperson and Asian-related ads when they were both primed and socially distinctive (i.e., numeric minority group in a social environment)</td>
</tr>
<tr>
<td>Lee, Fernandez, and Martin (2002)</td>
<td>How do ethnic minority models in ads affect the evaluations of ethnic minority and ethnic majority consumers?</td>
<td>Distinctiveness</td>
<td>Consumers exposed to ads consistent with their ethnicity, spontaneously self-reference the ad, which leads to (a) more positive attitudes toward the ad and the model depicted in the ad, (b) stronger intentions to buy the advertised brand, and (c) more favorable impressions of the advertised brand</td>
</tr>
<tr>
<td>Martin, Lee, and Yang (2004)</td>
<td>Does consumer self-referencing mediate the effect of ethnicity on ad/brand-related attitudes and intentions to buy the advertised brand?</td>
<td>Distinctiveness</td>
<td>Self-referencing mediates ethnicity effects on (a) A_AD and (b) P_B</td>
</tr>
<tr>
<td>Appiah (2001b)</td>
<td>Does strength of ethnic identity affect Black and Caucasian adolescents' responses to print ads with models of different races?</td>
<td>Distinctiveness/Identification</td>
<td>Relative to weak Black identifiers, strong Black identifiers see themselves as more similar to and identify more strongly with Black characters in ads</td>
</tr>
<tr>
<td>Appiah (2001a)</td>
<td>How do adolescents of different ethnicities respond to ads with Black or Caucasian actors?</td>
<td>Distinctiveness/Identification</td>
<td>Blacks more influenced by ethnicity of ad actor than ethnic cues in ad</td>
</tr>
<tr>
<td>Koslow, Shamdasani, and Touchstone (1994)</td>
<td>How do Hispanics respond to ethnic language in ads?</td>
<td>Accommodation</td>
<td>Spanish-language ads enhance Hispanics' beliefs about advertiser's sensitivity to Hispanic culture, which boosts Hispanics' A_AD</td>
</tr>
<tr>
<td>Reference</td>
<td>Question</td>
<td>Methodology</td>
<td>Participants</td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Green (1999)</td>
<td>Are ethnic identity, media placement, and race of ad actor(s) related to Blacks' A&lt;sub&gt;AD&lt;/sub&gt; and PI&lt;sub&gt;B&lt;/sub&gt;?</td>
<td>Accommodation/in-Group bias</td>
<td>Blacks, Caucasians</td>
</tr>
<tr>
<td>Qualls and Moore (1990)</td>
<td>Does race affect Blacks' and Caucasians' ad evaluations?</td>
<td>In-group bias/ polarized appraisal</td>
<td>Blacks, Caucasians</td>
</tr>
<tr>
<td>Sierra, Hyman, and Torres (2009)</td>
<td>What effect does ethnic identification with print ads, created by the model's apparent ethnicity, have on A&lt;sub&gt;AD&lt;/sub&gt;, A&lt;sub&gt;B&lt;/sub&gt;, A&lt;sub&gt;M&lt;/sub&gt;, and PI&lt;sub&gt;B&lt;/sub&gt;?</td>
<td>Social Identity</td>
<td>Caucasians, Blacks, Hispanics</td>
</tr>
<tr>
<td>Whittler and DiMeo (1991)</td>
<td>What effect does viewer's prejudice have on simple decision rules when examining ad effectiveness?</td>
<td>Heuristic-Systematic Persuasion Model</td>
<td>Blacks, Caucasians</td>
</tr>
<tr>
<td>Whittler and Spira (2002)</td>
<td>What effect does ethnicity in advertising have on viewer message processing and does it function as a peripheral cue?</td>
<td>Elaboration Likelihood Model</td>
<td>Blacks, Caucasians</td>
</tr>
</tbody>
</table>

<sup>a</sup> general theoretical framework that grounded study, <sup>b</sup> ethnicity depicted in the test ads, <sup>c</sup>ads or commercials that participants read or viewed

A<sub>AD</sub> = attitude toward the ad; A<sub>B</sub> = attitude toward the brand; A<sub>M</sub> = attitude toward the model; PI<sub>B</sub> = intentions to buy the advertised brand
Research Question and Hypotheses

The existing literature finds mixed results for source-recipient ethnic similarity leading to more positive evaluations of advertising stimuli. So it is not clear whether globalization has led to ads with Caucasian (beautiful) endorses working for people with another ethnicity. Therefore it needs to be researched whether Caucasian endorsed ads could be easily transferred to other regions with a different ethnic majority. So the question remains; with the increasing diversification of people, would the same ad work for all ethnicities?

The theory of targeting contradicts a standardized approach to advertising. Different theories claim that advertisements need to be adjusted to fit the different needs of ethnic groups. So, what’s the case for people of Caucasian and Arabic decent? Do they like a same-ethnicity endorser better than one of a different ethnicity? Or would one of the two models be evaluated positively by both ethnic groups? This leads to the main question:

“If the viewer and the endorser in the ad are ethnically similar, does this lead to more positive attitudes toward the (endorser in the) advertisement?”

Literature suggests that $A_{AD}$ (Attitude toward the ADvertisement) has a positive effect on $A_B$ (Attitude toward the Brand), which in turn, has a positive effect on $PI_B$ (Purchase Intentions of the Brand), i.e., $A_{AD} \rightarrow A_B \rightarrow PI_B$ (Brown & Stayman, 1992; MacKenzie & Lutz, 1989). This is extended in the current research by supposing that $A_M$ (Attitude toward the Model) has a positive effect on $A_{AD}$, i.e., $A_M \rightarrow A_{AD} \rightarrow A_B \rightarrow PI_B$. $A_B$ is omitted, because a fictitious brand is used in this research. So it is hypothesized that $A_M \rightarrow A_{AD} \rightarrow PI_B$.

Similar others are usually liked more and found more persuasive than dissimilar others (Berscheid, 1966; Kelman, 1961; Neimeyer & Mitchell, 1988; Whittler, 1991). So when there is source-recipient similarity in ethnical background, the viewer will be more positive about the model. So it is supposed that:
H1a: The more (less) a viewer is ethnically similar to the endorser in the advertisement, the more (less) positive are that person's attitudes toward the endorser.

H1b: The more (less) a viewer is ethnically similar to the endorser in the advertisement, the more (less) positive are that person's attitudes toward the ad.

H1c: The more (less) a viewer is ethnically similar to the endorser in the advertisement, the more (less) likely is that person's to purchase the product.

However, similarity may not be based on ethnic background solely, but on other dimensions as well, such as overall lifestyle, personality, appearance and basic values (McKirnan, Smith, & Hamayan, 1983; Whittler, 1989). As Aaker and his colleagues (1999) find, both felt similarity to an ethnic endorser and the perception of being targeted by an advertisement are important factors of consumer response to ethnic advertising. Therefore, the perception of source-recipient similarity might have a greater effect on attitudes toward the model.

H2a: The more (less) a viewer perceives to be similar to the endorser in the advertisement, the more (less) positive are that person's attitudes toward the endorser.

H2b: The more (less) a viewer perceives to be similar to the endorser in the advertisement, the more (less) positive are that person's attitudes toward the ad.

H2c: The more (less) a viewer perceives to be similar to the endorser in the advertisement, the more (less) likely is that person's to purchase the product.

Both hypotheses 1 and 2 involve some recognition of the match between the source/endorser’s characteristics and the viewer/consumer's characteristics.
The level of identification with an ethnic group will differ between its members. Some will not identify with their ethnic group at all, because they have different values (i.e. due to upbringing, current residence, or education), while others live and breathe the cultural values of their ethnic group and feel very affiliated with that group. This difference in affiliation with the ethnic group will lead to a difference in the evaluation of its members, in this case the endorser in the ad (Kelman & Eagly, 1965; Aaker et al., 2000).

**H3a:** The more (less) a viewer identifies ethnically with the endorser in the advertisement, the more (less) positive are that person's attitudes toward the endorser.

**H3b:** The more (less) a viewer identifies ethnically with the endorser in the advertisement, the more (less) positive are that person's attitudes toward the ad.

**H3c:** The more (less) a viewer identifies ethnically with the endorser in the advertisement, the more (less) likely is that person's to purchase the product.

In addition to (ethnic) similarities, there are some dissimilarities between the endorser and the viewer. Often, the endorser is very beautiful or made very beautiful using make-up or Photoshop techniques. If the viewer looks up to the model and admires her, this aspiration effect might contribute to liking of the model and the ad and might lead to a higher inclination to purchase the product. To sum up:

**H4a:** The more (less) a viewer aspires to be like the endorser in the advertisement, the more (less) positive are that person’s attitudes toward the endorser.

**H4b:** The more (less) a viewer aspires to be like the endorser in the advertisement, the more (less) positive are that person’s attitudes toward the ad.

**H4c:** The more (less) a viewer aspires to be like the endorser in the advertisement, the more (less) likely is that person's to purchase the product.
Strength of ethnic identification is a determinant of individual differences in consumer behavior (Deshpande et al., 1986; Donthu & Cherian, 1992; Green, 1999; Hirschman, 1981; Webster, 1994). The stronger one identifies with his or her ethnic identity, the more important the associated cultural values of this ethnic group are, and the more susceptible this person is to messages from members of the same ethnic group. For that reason, it is hypothesized that:

H5: The person’s attitudes toward the endorser and toward the ad are moderated by the strength of the ethnic identification of the viewer. The higher (lower) the strength of ethnic identification, the more (less) it will enlarge the effect of the attitudes toward the endorser and the ad and the greater (smaller) the willingness to purchase the product.

Stafford et al. (1970) hypothesized a more adverse reaction to Black models from Caucasian consumers when the product being promoted was "personal" rather than "non-personal," and Muse's (1971) findings supported this hypothesis. However, Stafford and colleagues found no significant differences for a "personally-related" product, namely lipstick. For foundation, a skin color-based and ethnicity related product, attitudes and purchase intentions are influenced significantly by the interaction between strength of ethnic identification and the ethnic composition of the ad. For perfume ads, attitudes are influenced by that interaction, but the effect of the factors is not significant enough to influence purchase intentions for perfume. The authors conclude that for ethnicity neutral products, the ethnicity of the model may not be the most important factor in making purchasing decisions, whereas for ethnicity related products, the ethnicity of the model is very significant.

So it is hypothesized that;

H6: The person’s attitudes toward the model and toward the ad are moderated by the type of the product. The more (less) related the product is to ethnicity, the more (less) it will influence the effect of the attitudes toward the model and the ad and the greater (smaller) the willingness to purchase the product.
Level of involvement (with the product) is supposed to determine whether consumers process advertising stimuli via the central route or the peripheral route (Petty & Cacioppo, 1980; Petty, Cacioppo, & Schumann, 1983). High levels of involvement encourage processing via the central route and more lasting changes in the schemata. Therefore it is supposed that:

**H7: The person’s attitudes toward the model and toward the ad and the intention to purchase are moderated by the level of involvement of the person with the products in the category. The more (less) involved the person is in the category, the more (less) it will influence the effect of the attitudes toward the model and the ad and the greater (smaller) the willingness to purchase the product.**

Figure 1 is a visual representation of all the hypotheses described above.

![Figure 1: Conceptual Model](image)
Method

Overview and experimental design

The experimental design involved two treatment variables, specifically, a 2 (ethnicity of the model: Arab, Caucasian) X 3 (ethnicity-relatedness of the product: related, semi-related, unrelated) between-subjects factorial design with participants randomly assigned to one of the six experimental conditions with as near an equal number as possible in each condition. So six study conditions exist; Caucasian model/ethnicity-related product, Caucasian model/semi ethnicity-related product, Caucasian model/ethnicity-unrelated product, Arab model/ethnicity-related product, Arab model/semi ethnicity-related product, and Arab model/ethnicity-unrelated product.

Participants

279 Participants filled out the questionnaire, only 202 were valid; the others are disregarded because they are incomplete or filled out by males. 123 Participants (64.7%) are Caucasian, 67 (35.3%) are Arabs and 12 are of other ethnicities, and are therefore excluded from the sample which leads to a final sample size of 190 participants. All 190 remaining participants were female, and females were selected because beauty products are used to determine differences in ethnicity-relatedness of the products. In addition, skin color data needed to be collected using the indication of matching foundation colors. This excluded males from this research. Sample sizes were too small to narrow down to majority and minority ethnic groups (i.e. Arabs living in a Western country and Caucasians living in the Arab world).

Procedure

Data was gathered using an online survey tool and offline by distributing hardcopy versions of the survey by the experimenter. Please refer to Appendix A for a copy of the survey. Online, participants were recruited using social networks and online ethnic discussion forums. Additionally, the experiment consisted of hardcopy questionnaires, which were distributed in two locations of the University of Istanbul in Turkey and the Hogeschool van Amsterdam and Erasmus University Rotterdam in the Netherlands.

Participants were handed a booklet that contained one of the 6 versions of the test advertisement and the questionnaire. Each participant was instructed initially to carefully view the advertisement for a period of 15 seconds. However, this was not timed by the experimenter or the online program. Next participants could proceed with the questionnaire. At the end, participants could fill in their e-mail address to enter the draw for a € 50 gift certificate of a large perfumery.
Lastly participants had the possibility to fill out their thoughts on the purpose of the study. Only 3 of the 190 participants correctly established the goal of this research, but due to the very small number they remain in the sample.

**Stimuli**

The researcher has selected print media, because it allows almost unlimited message length and processing time, both of which are confined in the broadcast media by set exposure durations (Abernethy & Franke, 1996). Six different standalone full-page, full color vertical print advertisements were created to correspond with each of the experimental conditions. Each advertisement had identical layout and spacing. That is, each ad contained a headline in the upper left corner naming the brand “Glamorous” in a golden font, and in the bottom left corner is indicated that it is a new product that is available in stores as of that moment. The headline and text at the bottom of the page are of the same size and font type in all six versions. Each ad contained two primary visual images. The first was that of the model positioned in the center of the main copy, and the second was that of the product placed at the bottom right of the advertisement. Each model was depicted from the shoulders up, without any jewelry and care was taken to ensure that the pictures used were of identical size. The Arab and Caucasian model were similar in appearance, including facial expressions (see Appendix B for samples of the ads). The Caucasian and Arab model received comparable mean attractiveness and intelligence ratings in the pretest. These advertisements were identical except for the ethnicity of the endorser.

Female endorsers are used because attractiveness is more important, from a cultural argument, for females than males, so agreement about the attractiveness of females should be greater than agreement about males. In addition evaluation of females should be more differential than males (Hatfield & Sprecher, 1986; Jackson, 1992). Other reasons for the selection of female model are; beauty products are the products to be advertised and information is needed on skin color, measured by choice of foundation, and that is only common for females. Only the face of the female models is depicted to avoid body size becoming a determinant in the evaluation of the model, and the pretest showed the models were deemed appropriate for Arab viewers, in terms of facial coverage.

The researcher selected unknown models to minimize the opportunity for unintended spurious confounds, which can occur when selecting celebrities (Till & Busler, 2000). Other types
of endorsers can be the typical consumer, the expert or the company president (Friedman & Friedman, 1979; Friedman, Termini, & Washington, 1976).

Use of a familiar brand name for the beauty product was rejected since it was thought that a preconception bias would be introduced. One of the following three personal care products was depicted on the advertisement: compact powder, an ethnicity-related product; mascara, a semi ethnicity-related product; and perfume, an ethnicity-unrelated product.

**Measures**

**Pretest**

A focus group consisting of women of diverse ethnicities was held to select the most similar models out of 10 preselected possibilities. During this session, the attractiveness of the models was evaluated, as well as the quality of the print advertisements. Predispositions toward the print advertisements were discussed to be able to select the two final models.

**Independent Variables**

In addition to the ethnicity of the viewer and the manipulation of the type of product advertised, the measurement instrument collected information on six other independent variables: (1) ethnic similarity to the endorser; (2) perceived similarity to the endorser; (3) identification with the endorser; (4) aspiration to be like the endorser; (5) strength of ethnic identification; and (6) level of involvement with the product category.

**Ethnic Similarity/Match (H1)**

Researchers assess ethnicity in two ways: self-designated ethnicity – identifying oneself as belonging to an ethnic group – and felt ethnicity – how strongly one identifies with an ethnic group. Participants were asked to self-report on the ethnic group to which they belonged.

Ethnicity of the viewer is composed using the following factors: Nationality, country of residence, mother tongue and self-designated ethnicity. On the basis of the before mentioned criteria all participants were classified into one of the following 2 categories: Caucasian or Arab. These classifications were executed by the author and an independent academic colleague individually. All differences in classification were settled using arguments. Ethnic similarity or an ethnic match between the ethnicity of the viewer and the ethnicity of the model exists for 100 participants (52,6%). Ethnic similarity and thus an ethnic match is valid when the viewer and the model in the advertisement have the same macro ethnicity.
Perceived similarity (H2)

Participants rated their degree of similarity to the model in the advertisement in terms of overall lifestyle, personality, cultural background, appearance, and basic values on a seven-point Likert scale ranging from strongly agree (one) to strongly disagree (seven) (McKirnan et al., 1983; Whittler, 1989). A perceived similarity scale was created by averaging the mean scores from each of those five scales (α = .86). The alpha coefficient computed here estimates internal consistency. When the coefficient alphas for scales approach or exceed the recommended levels of .80, this indicates a great deal of internal consistency in the measures (Nunally, 1978). This is the case for the perceived similarity scale. The composed perceived similarity scale runs from 1.6 to 7. The mean score on this scale is 4.61 and the standard deviation is 1.16.

Identification (H3)

Participants were asked to indicate whether they identified with the model in the advertisement on a seven-point Likert scale ranging from strongly agree (one) to strongly disagree (seven). Participants indicated whether they thought the advertisement was intended for them (Aaker et al., 2000) on a 7-point Likert scale ranging from strongly agree (1) to strongly disagree (7). An identification scale was created by averaging the mean scores from the two scales (α = .82). The composed identification scale runs from 1.5 to 7. The mean score is 4.18 and the standard deviation is 1.44.

Aspiration (H4)

In addition, participants were asked to indicate whether they admired the model in the advertisement on a seven-point Likert scale ranging from strongly agree (one) to strongly disagree (seven). Participants indicated whether they aspired to be like the model in the advertisement on a 7-point Likert scale ranging from strongly agree (1) to strongly disagree (7). An aspiration scale was created by averaging the mean scores from the two scales (α = .80). The composed aspiration scale runs from 1 to 7. The mean score is 4.71 and the standard deviation is 1.41 from the mean.

The moderating variables are discussed next.

Strength of Identification (H5)

Felt ethnicity (strength of identification) was measured using a seven point Likert scale, where 1 represents complete identification with the self-reported ethnic group and 7 “not at all”. Mean score for this variable is 2.99 and the standard deviation equals 1.42.
Type of Product (H6)

The type of product is a manipulation displayed in the advertising. The degree of ethnicity relatedness of the product is different. When the beauty product is related to the inherent features or appearances of the different ethnicities, such as skin color, it is ethnicity related (compact powder). Perfume is unrelated to someone’s appearance (ethnicity), and mascara is a semi ethnicity-related personal product. 60 participants (31.6%), have seen the ad where perfume was advertised, 65 (34.2%) have seen the ad with mascara and 65 (34.2%) have reviewed the advertisement with the compact powder.

Level of involvement (H7)

Level of involvement is measured by beauty product usage and buying behaviors in the product category. Beauty products are defined as cosmetics, fragrances, skincare products and hair care products. For beauty product usage, participants indicated how often they use perfume, mascara, foundation/compact powder and lipstick/lip gloss on a 7 point Likert scale ranging from never (1) to daily (7). A beauty product usage scale was created by averaging the mean scores from the four scales (α = .77). The composed beauty product usage scale runs from 1.25 to 7. The mean score is 5.01 and the standard deviation is 1.73.

Participants were also asked to indicate their average spending per month in Euros and in number of products bought within the category, which is used as an alternative variable to measure level of involvement in the category. Beauty product spend varies from €0 to €175 per month. The mean is €32.12 and the standard deviation is €26.72. The number of beauty products bought per month varies from 0 to 20 pieces. The mean score is 3.27 and the standard deviation is 2.61. Factor analysis yields one factor, however reliability analysis shows these three variables cannot be combined into one because of low internal consistency (α=.23) and thus level of involvement will be treated as three separate variables from this point onwards: beauty product usage, beauty product spending per month in Euros and number of beauty products bought per month.

Dependent Variables

The three dependent variables are: (a) attitude toward the model; (b) attitude toward the advertisement; and (c+d) purchase intentions.

Attitude toward Model (AM)

Attitude toward the model is determined by McGuire’s (1969) concept of source valence, which suggests that the nature of a given communication source will determine its credibility and
attractiveness as perceived by consumers. Factors which have been indicated to affect the effectiveness of a endorser influence attempts are credibility, expertise and (interpersonal) attraction (French & Raven, 1959; Tedeschi, 1972). Miller’s (1970) findings have big implications in terms of source credibility. Miller finds that if physically attractive endorsers are perceived to have an internal locus of control, they may also be perceived as individuals who are not easily influenced or manipulated by others. In addition they are perceived as individuals whose opinions originate from independent thinking and personal convictions, all qualities which signify greater source credibility.

Joseph (1977) finds when the source was expert, her physical attractiveness made little difference in terms of participants’ preferences; however, when she was inexpert, participants agreed more with the high attractive source than with the medium or low attractive source. So it seems that when objective or task-related source characteristics (e.g. expertise) are weak, participants resort to irrelevant cues (such as physical attractiveness) to form opinions. For beauty products or cosmetics this might be even more interlinked; perhaps a physically attractive model endorsing cosmetics or beauty products provides a more obvious match-up for consumers, although one could also argue that the attractive model is more "expert" in cosmetics/beauty products (given their attractiveness) than an unattractive model.

So all three; Attractiveness, credibility/trustworthiness and expertise are factors to take into account when assessing the attitude toward the model (A_M) in the advertisement. Ohanian (1990) developed a 15-item semantic differential scale to measure perceived expertise, trustworthiness, and attractiveness based on the Source-Credibility model of Hovland and associates (1953) and the Source-Attractiveness model developed by McGuire (1985). The participants ratings were made on 7-point scales, the ends of which were labeled by polar opposites (i.e., exiting-dull).

Attractiveness of the model was measured using the following 5 criteria: Attractive—Unattractive, Classy—Not Classy, Beautiful—Ugly, Elegant—Plain, Sexy—Not sexy. Trustworthiness of the model was measured using these 5 criteria: Dependable—Undependable, Honest—Dishonest, Reliable—Unreliable, Sincere—Insincere, Trustworthy—Untrustworthy. And Expertise was measured using the next 5 criteria: Expert—Not an expert, Experienced—Inexperienced, Knowledgeable—Unknowledgeable, Qualified—Unqualified, Skilled-Unskilled.

Cronbach’s alpha reliability coefficients for the three scales were similar to those reported in other studies, all above 0.80, thus indicating a great deal of internal consistency among the
measures; Attractiveness (5 items; $\alpha = .84$), trustworthiness (5 items; $\alpha = .84$), and expertise (5 items; $\alpha = .92$). The combined attitude toward the model ($A_M$) was found to be highly reliable (15 items; $\alpha = .90$). This scale runs from 1 to 6.27 with a mean of 3.37 and a standard deviation of 0.82, where a lower score on the scale means a more positive evaluation of the model.

**Attitude toward the advertisement ($A_{AD}$)**

Participants were asked to provide their attitude toward the advertisement using six, 7-point semantic differential scales: likable/unlikable, attractive/unattractive, appealing/unappealing, good/bad, interesting/uninteresting, for me/not for me. These scales have been used successfully in other character race studies and have shown strong evidence of reliability (Bush et al., 1979; Deshpande & Stayman, 1994; Gardner, 1985; Green, 1999; Osgood, Suci, & Tannenbaum, 1957; Smith & Swinyard, 1983). There is a lot of internal consistency among this measure attitude toward the ad ($\alpha = .82$). The scores on this measure range from 1 to 6.33 and mean score for attitude toward the ad equals 3.72 with a standard deviation of 1.03. Here again a lower score on the scale represents a more positive evaluation of the advertisement.

**Purchase intentions ($PI_b$)**

Purchase intentions are measured using the factors whether the participant would buy the product for herself or as a gift for someone else. The items were evaluated on 7-point scales: 1 (completely disagree) to 7 (completely agree). There is not enough internal consistency between the two ($\alpha = .62$) to combine them, so these will be separate measures; Purchase intentions for the self ($PI_S$) and purchase intentions as a gift ($PI_G$). $PI_S$ report a mean score of 4.17 and a standard deviation of 1.72 and $PI_G$ reports a mean of 4.27 with a standard deviation of 1.66. A higher score on both purchase intention scales mean a greater likelihood of purchase.

**Control Variables**

**Demographic variables**

Considerable demographic data were collected from each respondent: **age, gender, individual income, level of education and rural/urban living situation**.

**Age**

Age ranges from 17-65 years old. Mean age is around 28 years, with a standard deviation of 10-and-a-half years.
Gender

All 190 participants are female. Males were excluded from the experiment because of the type of products advertised.

Individual Income

The monthly level of individual income is reported; 88 participants (46,3%) state their income is less than €1000, or the local equivalent thereof. 15 (7,9%) Individuals say they earn between €1001 and €1500, and 19 (10%) earn between €1501 and €2000 monthly. 20 (10,5%) Participants earn a monthly income between the brackets of €2001 to €2500, 21 (11,1%) between €2501 and €3000, and 15 (7,9%) between €3001 and €4000. 12 Participants earn more than €4000 per month, of which 7 (3,7%) have an income between €4001 and €5000 and 5 (2,6%) have an income above €5001 per month.

Level of Education

The highest level of education is reported; 18 participants (9,5%) claim to have attended high school as the highest level of education they attained, 27 (14,2%) college (or equivalent vocational training), most (139 participants, representing 73,2% of the sample) have been enrolled in university, and 6 (3,2%) reported to have another type of education as the highest level, not being primary/elementary school, as not one participant reported this category to be the highest level of education enjoyed.

Rural/urban living situation

147 participants (77,4%) live in an urban area, and all others live in a rural area (43 participants, 22,6%).

Objective facial similarity

Within people of the same ethnicity, there are differences in appearance. Not all Caucasians look the same; There are people with red hair, green eyes and a very fair skin, people with blonde hair, blue eyes and light skin, people with dark hair, dark eyes and olive skin and other combinations. To control for these differences in appearance within an ethnic group, a more objective factor is created. The factor objective facial similarity is composed using skin color, hair color and eye color, where the Caucasian model was characterized as having blonde hair, fair skin and blue eyes the Arab female model was characterized as having dark hair, olive skin and dark eyes. Hair color and eye color are self-reported by the participants and skin-color is derived from asking the respondents what foundation-color would suit their skin best. This factor is generated by two researchers individually, differences were resolved using argumentation.
If the facial appearance of the participant is similar to that of the model in the ad, they obtain 1 point per similar feature, if not 3 points will be added to the score. So the minimum score on this variable is 3 (very similar facial appearance-wise) and max score is 9 (very dissimilar facial appearance-wise). So facial similarity ranges from 3 to 9, where with a score of 3, the viewer is very similar to the model (n=54, 28.4%), a score of 5 indicates that viewer is mildly similar (n=50, 26.3%), a score of 7 indicates that the viewer is mildly dissimilar to the endorser (n=67, 35.3%) and a score of 9 indicates strong facial dissimilarity between the viewer and the endorser (n=19, 10%).

Ethnicity Model

93 Participants (48.9%) have seen an advertisement with a Caucasian model, all others (n=97, 51.1%) an advertisement with an Arab model.
Models

5 Types of regression models have been created per dependent variable to assess the validity of the model in Figure 1 on page 53.

**Model 1: H1-H4 + control variables**

Model 1 represents the variables of Hypotheses 1 to 4, extended with the control variables. Model 1a concerns AM. Model 1b AD, Model 1c PIS and Model 1d PIG.

Model 1:

\[
A_M/A_{AD}/P_{IS}/P_{IG} =
\]

\[
B + \beta_{ethnic\ match} + \beta_{perceived\ similarity} + \beta_{identification} + \beta_{aspiration} + \beta_{age}
\]

\[
+ \beta_{income} + \beta_{education} + \beta_{living\ situation} + \beta_{facial\ similarity}
\]

\[
+ \beta_{ethnicity\ model} + \beta_{ethnicity\ viewer} + SE
\]

**Model 2: H1-H4 + control variables + H5-H7**

Model 2 represents the variables of Hypotheses 1 to 4, extended with the control variables, and the effect of the variables of Hypotheses 5, 6 and 7. Model 2a concerns AM. Model 2b measures AD. Model 2c PIS and Model 2d PIG.

Model 2:

\[
A_M/A_{AD}/P_{IS}/P_{IG} =
\]

\[
B + \beta_{ethnic\ match} + \beta_{perceived\ similarity} + \beta_{identification} + \beta_{aspiration} + \beta_{age}
\]

\[
+ \beta_{income} + \beta_{education} + \beta_{living\ situation} + \beta_{facial\ similarity}
\]

\[
+ \beta_{ethnicity\ model} + \beta_{ethnicity\ viewer}
\]

\[
+ \beta_{strength\ of\ ethnic\ identification} + \beta_{product\ type}
\]

\[
+ \beta_{level\ of\ involvement} + SE
\]
Model 3: H1-H4 + control variables + H5 + interactions (H1-H4)*H5

Model 3 represents the variables of Hypotheses 1 to 4, extended with the control variables, and the effect of the variables of H5 plus the interactions of H1 to H4 with H5.

Model 3a concerns $A_M$, Model 3b measures $A_{AD}$, Model 3c $P_I S$ and Model 3d $P_I G$.

Model 3:

$A_M/A_{AD}/P_I S/P_I G = \frac{B + \beta \text{ethnic match} + \beta \text{perceived similarity} + \beta \text{identification} + \beta \text{aspiration} + \beta \text{age}}{\beta \text{income} + \beta \text{education} + \beta \text{living situation} + \beta \text{facial similarity} + \beta \text{ethnicity model} + \beta \text{ethnicity viewer} + \beta \text{strength of ethnic identification} + \beta (\text{ethnic match} \times \text{strength of ethnic identification}) + \beta (\text{perceived similarity} \times \text{strength of ethnic identification}) + \beta \text{(identification} \times \text{strength of ethnic identification}) + \beta (\text{aspiration} \times \text{strength of ethnic identification}) + SE}$

Model 4: H1-H4 + control variables + H6 + interactions (H1-H4)*H6

Model 4 represents the variables of Hypotheses 1 to 4, extended with the control variables, and the effect of the variables of H6 plus the interactions of H1 to H4 with H6.

Model 4a concerns $A_M$, Model 4b measures $A_{AD}$, Model 4c $P_I S$ and Model 4d $P_I G$.

Model 4:

$A_M/A_{AD}/P_I S/P_I G = \frac{B + \beta \text{ethnic match} + \beta \text{perceived similarity} + \beta \text{identification} + \beta \text{aspiration} + \beta \text{age}}{\beta \text{income} + \beta \text{education} + \beta \text{living situation} + \beta \text{facial similarity} + \beta \text{ethnicity model} + \beta \text{ethnicity viewer} + \beta \text{product type} + \beta (\text{ethnic match} \times \text{product type}) + \beta (\text{perceived similarity} \times \text{product type}) + \beta \text{(identification} \times \text{product type}) + \beta \text{(aspiration} \times \text{product type}) + SE}$
**Model 5: H1-H4 + control variables + H7 + interactions (H1-H4)*H7**

Model 5 represents the variables of Hypotheses 1 to 4, extended with the control variables, and the effect of the variables of H7 plus the interactions of H1 to H4 with H7.

Model 5a concerns $A_M$, Model 5b measures $A_{AD}$, Model 5c $P_{IS}$ and Model 5d $P_{IG}$.

**Model 5:**

$$A_M/A_{AD}/P_{IS}/P_{IG} =$$

$$B + \beta_{ethnic\ match} + \beta_{perceived\ similarity} + \beta_{identification} + \beta_{aspiration} + \beta_{age} + \beta_{income} + \beta_{education} + \beta_{living\ situation} + \beta_{facial\ similarity} + \beta_{ethnicity\ model} + \beta_{ethnicity\ viewer} + \beta_{beauty\ product\ usage} + \beta(ethnic\ match \ast \text{beauty\ product\ usage}) + \beta(\text{perceived\ similarity} \ast \text{beauty\ product\ usage}) + \beta(\text{identification} \ast \text{beauty\ product\ usage}) + \beta(\text{aspiration} \ast \text{beauty\ product\ usage}) + \beta(ethnic\ match \ast \text{beauty\ product\ spend}) + \beta(\text{perceived\ similarity} \ast \text{beauty\ product\ spend}) + \beta(\text{identification} \ast \text{beauty\ product\ spend}) + \beta(\text{aspiration} \ast \text{beauty\ product\ spend}) + \beta_{beauty\ product\ number\ bought} + \beta(ethnic\ match \ast \text{beauty\ product\ number\ bought}) + \beta(\text{perceived\ similarity} \ast \text{beauty\ product\ number\ bought}) + \beta(\text{identification} \ast \text{beauty\ product\ number\ bought}) + \beta(\text{aspiration} \ast \text{beauty\ product\ number\ bought}) + SE$$
Results

The effects of the ethnic match between the model in the advertisement and the viewer and type of beauty product used in the advertisement were examined on attitude toward the model ($A_M$), on attitude toward the ad ($A_{AD}$), on purchase intentions for the person herself ($PI_S$) and as a gift for someone else ($PI_G$) in a two factor (model type) by three (type of product) by two (viewer type) analysis of variance, as depicted in Figure 2 below.

<table>
<thead>
<tr>
<th>Type of Product</th>
<th>Model</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Caucasian Model</td>
<td>Arab Viewer</td>
<td>Caucasian Viewer</td>
<td>Arab Viewer</td>
<td>Caucasian Viewer</td>
</tr>
<tr>
<td>Ethnicity Unrelated Product</td>
<td>Arab Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity Semi-related Product</td>
<td>Arab Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity Related Product</td>
<td>Arab Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian Model</td>
<td>Arab Viewer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian Viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Research conditions for the dependent variables

The means and standard deviations for all experimental cells for all three product categories and overall means and standard deviations are reported in Table 4.

Findings generally suggest that for ads depicting perfume, the ethnicity unrelated product, Caucasian viewers evaluate the Arab endorser significantly more positively than the Caucasian endorser ($t (38) = 1.984, p = .054$). For the ad depicting the Arab endorser, Arab viewers display somewhat significantly more positive attitudes toward the ad than the Caucasian viewers ($t (30) = 1.897, p = .067$). In addition, Arab viewers are less likely than their Caucasian counterparts to purchase the product for themselves for both the ad with the Caucasian model ($t (13) = 2.619, p = .021$) as the Arab model ($t (25) = 2.426, p = .023$). Likewise Arab viewers are less likely than Caucasians to purchase the advertised item as a gift for both the ad with the Caucasian model ($t (31) = 3.781, p = .001$) as the ad with the Arab model ($t (31) = 2.137, p = .041$). For the dependent variables other than $A_M$ no significant differences have been found between the mean scores of
Caucasian viewers for both ad models. For Arab viewers findings reveal no significant differences in $A_M$, $A_{AD}$, $P_{IS}$, and $P_{IG}$ when comparing the means for the two perfume ads, differing in ethnicity of the endorser. Additionally, no significant differences are found between Caucasian and Arab viewers for both ads.

Mean scores in Table 4 suggest that with the evaluation of ads featuring mascara, the Caucasian viewers mean scores show no significant differences between the two mascara ads. When evaluating the advertisement with the Caucasian endorser, Arab viewers are less likely than Caucasians to buy the advertised product for themselves ($t (31) = 1.821, p = .078$) and the same applies to the advertisement featuring the Arab endorser ($t (30) = 3.783, p = .001$). The gift purchasing likelihood is significantly lower for Arab viewers than for Caucasian viewers for the ad depicting the Arab endorser ($t (30) = 2.791, p = .009$). For the four dependent variables no significant differences have been found between the mean scores of only Caucasian viewers for both ad models. The findings for only Arab viewers reveal no significant differences in $A_M$, $A_{AD}$, $P_{IS}$, and $P_{IG}$ when comparing the means for the two mascara ads, differing in ethnicity of the endorser. Additionally, no significant differences are found between Caucasian and Arab viewers for both ads than those mentioned above.

For compact powder ads, depicting the product that is highly related to skin color and thus to ethnicity, Arab viewers display somewhat significantly more positive attitudes toward the ad than the Caucasian viewers ($t (30) = 2.236, p = .033$) for the ad depicting the Arab endorser. In addition, Arab viewers are less likely than their Caucasian counterparts to purchase the product for themselves for both the ad with the Caucasian model ($t (31) = 2.492, p = .018$) as the Arab model ($t (30) = 4.695, p = .023$). Likewise Arab viewers are less likely than Caucasians to purchase the advertised item as a gift for both the ad with the Caucasian model ($t (31) = 3.263, p = .003$) as the ad with the Arab model ($t (31) = 3.220, p = .003$). For the four dependent variables no significant differences have been found between the mean scores of only Caucasian viewers for both ad models. The findings for only Arab viewers reveal no significant differences in $A_M$, $A_{AD}$, $P_{IS}$, and $P_{IG}$ when comparing the means for the two compact powder ads, differing in ethnicity of the endorser. Additionally, no significant differences are found between Caucasian and Arab viewers for both ads than those mentioned above.
Table 4:
Mean and Standard Deviation for Dependent Measures*

<table>
<thead>
<tr>
<th>Ethnicity Unrelated (Perfume)</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward Model</td>
<td>3.49 ± 0.59</td>
<td>3.33 ± 0.91</td>
<td>3.09 ± 0.66</td>
<td>3.09 ± 1.15</td>
</tr>
<tr>
<td>Attitude toward Ad</td>
<td>3.69 ± 1.00</td>
<td>3.22 ± 0.83</td>
<td>3.93 ± 1.05</td>
<td>3.13 ± 1.23</td>
</tr>
<tr>
<td>Purchase Intentions Self</td>
<td>5.18 ± 1.24</td>
<td>3.30 ± 2.06</td>
<td>5.09 ± 1.51</td>
<td>3.00 ± 1.33</td>
</tr>
<tr>
<td>Purchase Intentions Gift</td>
<td>4.00 ± 1.58</td>
<td>2.60 ± 1.17</td>
<td>4.04 ± 1.30</td>
<td>2.90 ± 1.66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity Related (Mascara)</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward Model</td>
<td>3.45 ± 0.66</td>
<td>3.87 ± 1.03</td>
<td>3.37 ± 0.64</td>
<td>3.21 ± 0.96</td>
</tr>
<tr>
<td>Attitude toward Ad</td>
<td>3.84 ± 1.07</td>
<td>3.74 ± 1.14</td>
<td>3.93 ± 0.96</td>
<td>3.38 ± 0.89</td>
</tr>
<tr>
<td>Purchase Intentions Self</td>
<td>4.32 ± 1.56</td>
<td>3.27 ± 1.56</td>
<td>4.35 ± 1.53</td>
<td>2.67 ± 0.99</td>
</tr>
<tr>
<td>Purchase Intentions Gift</td>
<td>4.32 ± 1.64</td>
<td>4.09 ± 1.22</td>
<td>5.00 ± 1.41</td>
<td>3.50 ± 1.57</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity Related (Compact Powder)</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward Model</td>
<td>3.45 ± 0.75</td>
<td>3.69 ± 1.52</td>
<td>3.37 ± 0.59</td>
<td>3.16 ± 0.86</td>
</tr>
<tr>
<td>Attitude toward Ad</td>
<td>3.87 ± 1.07</td>
<td>3.65 ± 1.05</td>
<td>4.10 ± 0.96</td>
<td>3.37 ± 0.88</td>
</tr>
<tr>
<td>Purchase Intentions Self</td>
<td>4.96 ± 1.68</td>
<td>3.22 ± 2.05</td>
<td>4.94 ± 1.44</td>
<td>2.87 ± 0.99</td>
</tr>
<tr>
<td>Purchase Intentions Gift</td>
<td>5.67 ± 1.30</td>
<td>3.89 ± 1.62</td>
<td>5.24 ± 1.56</td>
<td>3.53 ± 1.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Irrespective of Product Type</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
<th>Caucasian Viewer</th>
<th>Arab Viewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward Model</td>
<td>3.46 ± 0.67</td>
<td>3.63 ± 1.15</td>
<td>3.26 ± 0.64</td>
<td>3.15 ± 0.95</td>
</tr>
<tr>
<td>Attitude toward Ad</td>
<td>3.81 ± 1.04</td>
<td>3.54 ± 1.01</td>
<td>3.98 ± 0.98</td>
<td>3.31 ± 0.97</td>
</tr>
<tr>
<td>Purchase Intentions Self</td>
<td>4.79 ± 1.55</td>
<td>3.27 ± 1.82</td>
<td>4.80 ± 1.51</td>
<td>2.84 ± 1.07</td>
</tr>
<tr>
<td>Purchase Intentions Gift</td>
<td>4.75 ± 1.66</td>
<td>3.53 ± 1.46</td>
<td>4.70 ± 1.49</td>
<td>3.35 ± 1.51</td>
</tr>
</tbody>
</table>

* All measures are averages of 7 point scales, with lower mean scores on A_M and A_AD indicating more positive attitudes and higher mean scores on PI_S and PI_G greater purchase intentions

Overall scores tell that Caucasian viewers only have a slightly higher mean score for attitude toward the model for the same-ethnicity model (t (121) = 1.684, p = .095), indicating a more positive evaluation of the Arab endorser. Arab viewers only have a slightly higher mean score for attitude toward the Caucasian model (t (65) = 1.876, p = .065), indicating a more positive evaluation of the Arab endorser. As for the perfume and compact powder ad, overall findings reiterate that Arab viewers display somewhat significantly more positive attitudes toward the ad than the Caucasian viewers (t (95) = 3.295, p = .001) for the ad depicting the Arab endorser. In
addition, as is the case for all the ads, Arab viewers are less likely than their Caucasian counterparts to purchase the product for themselves for both the ad with the Caucasian model \((t(91) = 4.202, p = .000)\) as the Arab model \((t(95) = 6.924, p = .000)\). Congruent with the findings for the perfume and compact powder ads, Arab viewers are less likely than Caucasians to purchase the advertised item as a gift, for the Caucasian endorsed ad \((t(91) = 3.428, p = .001)\) and congruent with all three type of product ads with the Arab endorser, Arab viewers are less likely than Caucasians to purchase the advertised item as a gift \((t(31) = 4.309, p = .000)\). Please refer to Figure 9 until 16 in Appendix C to see the results of Table 4 in a graphical manner (bar charts).

The sample sizes in this research are relatively small. In order to make inferences on the effect of the measures on the dependent variables, the researcher has executed additional G*Power post hoc power analysis for the t-tests (Faul, Erdfelder, Lang, & Buchner, 2007). A one-tailed test was selected and 0.05 was entered as the \(\alpha\) error probability. Power refers to the probability that the tests that are performed have found a statistically significant difference, when such a difference actually exists. In other words, power is the probability that the null hypothesis will be rejected when it should be (and thus avoid a Type II error). Power should reflect values of 0.8 or greater; that is, the researcher should have an 80% or greater chance of finding a statistically significant difference when there actually is one. The effect size \(d\) was determined and is displayed in Table 5 for all the t-tests that were ran and the corresponding powers \((1-\beta \text{ err prob})\) are also shown in Table 5 in the column next to the effect size \(d\). Cohen (1988) classifies an effect size below 0.1 a trivial effect, an effect between 0.1 and 0.3, a small effect, between 0.3 and 0.5, a moderate effect, and when it is larger than 0.5, a large difference effect.
### Table 5: Post-hoc Power test results

<table>
<thead>
<tr>
<th>Ethnicity Unrelated (Perfume)</th>
<th>Caucasian Model</th>
<th>Arab Model</th>
<th>Caucasian Viewer (1), Arab Viewer (2)</th>
<th>Caucasian Viewer (1), Arab Viewer (2)</th>
<th>Caucasian Model (1), Arab Model (2)</th>
<th>Caucasian Model (1), Arab Model (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
</tr>
<tr>
<td><strong>Group 1</strong></td>
<td><strong>n=17</strong></td>
<td><strong>Group 2</strong></td>
<td><strong>n=10</strong></td>
<td><strong>Group 1</strong></td>
<td><strong>n=23</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Attitude toward Model</td>
<td>.21</td>
<td>.13</td>
<td>.00</td>
<td>.05</td>
<td>.64</td>
<td>.62</td>
</tr>
<tr>
<td>Attitude towards Ad</td>
<td>.51</td>
<td>.35</td>
<td>.70</td>
<td>.56</td>
<td>.23</td>
<td>.18</td>
</tr>
<tr>
<td>Purchase Intentions Self</td>
<td>1.11</td>
<td>.85</td>
<td>1.47</td>
<td>.98</td>
<td>.07</td>
<td>.07</td>
</tr>
<tr>
<td>Purchase Intentions Gift</td>
<td>1.01</td>
<td>.79</td>
<td>.76</td>
<td>.63</td>
<td>.03</td>
<td>.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semi-Ethnicity Related (Mascara)</th>
<th>Caucasian Model</th>
<th>Arab Model</th>
<th>Caucasian Viewer (1), Arab Viewer (2)</th>
<th>Caucasian Viewer (1), Arab Viewer (2)</th>
<th>Caucasian Model (1), Arab Model (2)</th>
<th>Caucasian Model (1), Arab Model (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
</tr>
<tr>
<td><strong>Group 1</strong></td>
<td><strong>n=22</strong></td>
<td><strong>Group 2</strong></td>
<td><strong>n=11</strong></td>
<td><strong>Group 1</strong></td>
<td><strong>n=20</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Attitude toward Model</td>
<td>.49</td>
<td>.36</td>
<td>.20</td>
<td>.13</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>Attitude toward Ad</td>
<td>.09</td>
<td>.08</td>
<td>.59</td>
<td>.48</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Purchase Intentions Self</td>
<td>.67</td>
<td>.55</td>
<td>1.30</td>
<td>.97</td>
<td>.02</td>
<td>.06</td>
</tr>
<tr>
<td>Purchase Intentions Gift</td>
<td>.16</td>
<td>.11</td>
<td>.10</td>
<td>.85</td>
<td>.44</td>
<td>.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity Related (Compact Powder)</th>
<th>Caucasian Model</th>
<th>Arab Model</th>
<th>Caucasian Viewer (1), Arab Viewer (2)</th>
<th>Caucasian Viewer (1), Arab Viewer (2)</th>
<th>Caucasian Model (1), Arab Model (2)</th>
<th>Caucasian Model (1), Arab Model (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
<td><strong>Power (1-β err prob)</strong></td>
<td><strong>Effect Size d</strong></td>
</tr>
<tr>
<td><strong>Group 1</strong></td>
<td><strong>n=24</strong></td>
<td><strong>Group 2</strong></td>
<td><strong>n=9</strong></td>
<td><strong>Group 1</strong></td>
<td><strong>n=18</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Attitude toward Model</td>
<td>.20</td>
<td>.13</td>
<td>.28</td>
<td>.20</td>
<td>.12</td>
<td>.10</td>
</tr>
<tr>
<td>Attitude toward Ad</td>
<td>.21</td>
<td>.13</td>
<td>.79</td>
<td>.70</td>
<td>.23</td>
<td>.17</td>
</tr>
<tr>
<td>Purchase Intentions Self</td>
<td>.93</td>
<td>.75</td>
<td>1.67</td>
<td>1.00</td>
<td>.01</td>
<td>.05</td>
</tr>
<tr>
<td>Purchase Intentions Gift</td>
<td>1.21</td>
<td>.92</td>
<td>1.15</td>
<td>.94</td>
<td>.30</td>
<td>.24</td>
</tr>
</tbody>
</table>
Test of Hypotheses

First, t-tests, one-way independent between participants analyses of variance (ANOVA) and Pearson’s correlation were used to test the seven hypotheses individually for the entire sample. As the sample is sufficiently large (n>30) the central limit theorem holds and the researcher found no reasons to question normal distribution, so normality is assumed for the independent measures and equal variances are assumed. The effect sizes that are reported are following the classification Cohen (1988) has made in his research. Only significant results are reported in the text, please refer to Table 6, in Appendix D for all test results.

H1. T-tests were used to test the hypotheses that the more a viewer is ethnically similar to the endorser, the more positive the attitudes and the higher the likelihood of purchase are. T-test results yield no significant effects for any of the dependent variables.

H2. The expectation was that the more a viewer perceives herself to be similar to the endorser in the ad, the more positive the attitudes and purchase intentions. Pearson’s correlation yielded significant medium effects for 3 dependent measures; AM, r = .370, AAD, r = .383, and PI_S, r = .317 (all one-tailed ps < .000). The results for PI_G can be said to show a small effect: r = .140, p (one-tailed) = .027. This means that there is a significant relationship between perceived similarity and AM, AAD, PI_S and PI_G.

H3. These hypotheses suppose that more feelings of ethnic identification with the endorser are supposed to lead to more positive attitudes and higher purchase intentions. Pearson’s correlation yielded significant large effects for 3 dependent measures; AM, r = .431, AAD, r = .587 and PI_S, r = .498, (all one-tailed ps < .000). Again, the results for PI_G show a smaller effect: r = .209, p (one-tailed) = .002. Ethnic identification is significantly related to AM, AAD, PI_S and PI_G.

H4. The more a viewer aspires to be like the endorser is hypothesized to have a positive impact on both the attitudes and both purchase intentions. Pearson’s correlation yielded significant large effects for 2 dependent measures; AM, r = .473 and AAD, r = .479, and the effect size for PI_S, r = .363, and PI_G r = .345 are classified as medium (all one-tailed ps < .000). Aspiring to be like the model in the advertisement is significantly correlated to AM, AAD, PI_S and PI_G.
H5. Strength of ethnic identification of the viewer is supposed to moderate the attitudes and willingness to purchase the product. Pearson’s correlation yielded significant small effects for two dependent measures; $A_M, r = .143, p \text{ (one-tailed)} = .025$ and $PI_G, r = -.180, p \text{ (one-tailed)} = .007$. Strength of ethnic identification is significantly related to $A_M$ and $PI_G$.

H6. The type of product used in the advertisement is of influence on the viewers’ attitudes and the willingness to purchase. The more related or relevant the product is to the ethnicity of the viewer, the more it will be of effect. One-way ANOVA results show that there is only a significant difference for the purchase intentions between the three categories, perfume (ethnicity unrelated beauty product), mascara (semi-ethnicity related beauty product) and compact powder (high-ethnicity related beauty product). One-way ANOVA test results show that there is a significant effect for purchases for gift purchases $F(2,187) = 9.250, p = .000$. T-tests results show that there is only a significant difference in the intention to purchase the product for the participant herself between perfume and mascara $t(123) = 2.080, p = .040$ (perfume $PI_S M = 4.47$, mascara $PI_S M = 3.85$). T-tests results for gift purchases show significant differences in the mean scores between perfume and mascara $t(123) = -2.682, p = .008$ (perfume $PI_G M = 3.60$, mascara $PI_G M = 4.34$) and between perfume and compact powder $t(128) = -4.469, p = .000$ (compact powder $PI_G M= 4.82$).

H7. The more a person is involved in the product category, either by using more beauty products or by buying more (in Euros or in number of units bought) the more this will be of influence in the evaluation of the attitudes and the intentions to purchase. Pearson’s correlation yielded a significant small effect for beauty product usage and $A_M, r = .143, p \text{ (one-tailed)} = .027$. There was a significant relationship between Beauty product usage and $A_M$. In addition for $PI_G$, the number of beauty product one buys per month is significantly related to the likelihood to purchase the advertised product as a gift for someone else, $r = -.147, p \text{ (one-tailed)} = .024$, however this effect is small.

For significant effects of t-test, ANOVA and Pearson’s correlation results of the control variables age, income, level of education, rural/urban living situation, objective facial similarity and ethnicity of the model and the viewer on the 4 dependent measures please have a look at Table 6 in Appendix D. What can be concluded from this is that what was presumed in this research does not hold, as a positive score on $A_M$ does not have a positive significant effect on $A_{AD}$, which in turn, did not always have a significant positive effect on $PI_B$ ($PI_S$ and $PI_G$), i.e., $A_M \not\Rightarrow A_{AD} \not\Rightarrow PI_B$. 
Following the analysis of variance, the respective contribution of the different variables will be calculated using the combined multiple regression analysis for all 20 models (5 types of models, for 4 dependent variables). This section will discuss the results coming from the multiple regression analysis of the 20 different models. With these multiple regression analyses, variables were entered stepwise to determine which variables could be entered where the probability of F to enter was <=0.05 and the probability of F to remove was >=0.10. Per dependent variable the results will be discussed.

**Attitude toward the Model**

The results of the regression analyses of all 5 models attempting to explain the variance in score of attitude toward the model are depicted in Table 7a in Appendix E (Model 1a-5a). Multiple regression analyses were used to test which of the independent variables and control variables predicted the rating of attitude toward the model in a stepwise manner. The results of the regression indicate that Model 2a, which is constructed out of the main effects of H1-H4, H5, H6 and H7, and the control variables, explains the variance of the score in AM the most (R² = .368, p<.01). It was found that aspiration significantly positively predicted AM (β = .478, p<.01). The positive βeta of aspiration says that as there is lower levels of aspiration to be like the model, the AM is more negative, in turn we can say that when there are higher levels of aspiration to be like the model, the model is evaluated more positively, this is the same for strength of ethnic identification (β = .206, p<.05). In addition to those factors, the control variables a monthly income of > €5001 lowered the AM (β = .198, p<.05) as did a university education (β = .201, p<.05). Facial similarity reduced the AM (β = -.164, p<.05), which is consistent with the findings on the aspiration variable; When one aspires to be like the model in the ad, this implies there is a difference between the viewer and the model. This difference can be facial dissimilarity and therefore both factors positively contribute to AM.

**Attitude toward the Ad**

The results of the regression analyses of all 5 models attempting to explain the variance in score of attitude toward the ad are depicted in Table 7b in Appendix E (Model 1b-5b). Multiple regression analyses were used to test which of the independent variables and control variables predicted the rating of attitude toward the ad in a stepwise manner. The results of the regression
suggest that Model 1b and 3b yielded exactly the same results, as was the case for Model 2b and 4b. Model 1b which is constructed out of the main effects of H1-H4, and the control variables / Model 3b which is constructed out of the main effects of H1-H4, H5 and the interactions of H5 with H1-H4 plus the control variables best explain the variance of the score in attitude toward the ad (R² = .439, p<.01). The test outcome implies that ethnic similarity significantly predicts A_AD (β= -.184, p<.05), where an ethnic match between the viewer and the endorser leads to more positive evaluation of the ad. In addition, both ethnic identification (β= .391, p<.01) and aspiration (β= .312, p<.01) significantly predict A_AD. The positive βeta of both aspiration say that as there is lower levels of aspiration to be like the model, the A_AD is more negative, in turn we can say that when there are higher levels of aspiration to be like the model, the advertisement is evaluated more positively, this is the same for ethnic identification with the model. As was found for A_M an individual monthly income of more than € 5000 (β= .178, p<.05) negatively predicted attitude toward the advertisement; individuals in the higher income group are more negative about the ad.

Purchase Intentions Self

The results of the regression analyses of all 5 models attempting to explain the variance in score of purchase intentions for the viewer herself are depicted in Table 7c in Appendix E (Model 1c-5c). Multiple regression analyses were used to test which of the independent variables and control variables predicted the rating of attitude purchase intentions for the self in a stepwise manner. The results of the regression analysis show that model 4c, which is constructed out of the main effects of H1-H4, H6 and the interactions of H6 with H1-H4 and the control variables, best explains the variance of the score in purchase intentions for the individual herself (R² = .237, p<.01). The results suggest that lower levels of ethnic identification with the model (= a higher score) positively predicts buying intentions (β= .465, p<.01). The second factor that yields significant results in this Model is the beauty product that is unrelated to ethnicity, perfume. Perfume positively predicts the intention to purchase the advertised product for oneself (β= .193, p<.05), indicating individuals are more likely to purchase perfume than any other product.

Purchase Intentions Gift

The results of the regression analyses of all 5 models attempting to explain the variance in score of purchase intentions as a gift for someone else are depicted in Table 7d in Appendix E (Model 1d-5d). Multiple regression analyses were used to test which of the independent variables and control variables predicted the rating of purchase intentions as a gift for someone else in a
stepwise manner. The results of the regression analysis indicate that Model 2d, which is constructed out of the main effects of H1-H4, H5, H6 and H7, and the control variables, best explains the variance of the score in PIg (R² = .249, P<.01). Results show that aspiration significantly predicted gift buying intentions (β = .265, p<.01), with lower levels of aspiration to be like the model in the ad leading to a greater likelihood of purchasing the product as a gift. Product type is also a determinant of the purchase intentions for a gift; Compared to the product that is related to ethnicity (compact powder), the ethnic unrelated product (perfume) predicted negatively the intention to buy the product as a gift (β = -.434, p<.01), as did the semi-ethnic related product (mascara) (β = -.213, p<.05).
Discussion and Conclusion

Results show that what was presumed in this research does not hold, as \( A_M \) does not in all cases have a positive effect on \( A_{AD} \), which in turn, did not always have a positive effect on \( PI_B \) (\( PI_S \) and \( PI_G \)), i.e., \( A_M \rightarrow A_{AD} \rightarrow PI_B \). An overview of which hypotheses are (partially) supported, derived from the test results measuring the individual effect of the single variable on the dependent variables from the t-tests, one-way ANOVA test and Pearson’s correlation results can be found in Table 8a.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Attitude toward the Model</th>
<th>Attitude toward the Ad</th>
<th>Purchase Intentions Self</th>
<th>Purchase Intentions Gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Ethnic Similarity/ Match</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H2: Perceived Similarity</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>H3: Ethnic Identification</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>H4: Aspiration</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Moderating Variables:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Attitude toward the Model</th>
<th>Attitude toward the Ad</th>
<th>Purchase Intentions Self</th>
<th>Purchase Intentions Gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5: Strength of Ethnic Identification</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>H6: Type of Product</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>H7: Level of Involvement</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>- Beauty product usage</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>- Beauty product buying #</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>- Beauty product spending</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 8b shows for which hypotheses the multiple regression analysis provided support. ‘Negative’ is used to describe cases when results yielded support for the contrary to what was presupposed in the hypothesis.
Table 8b
Support for hypotheses based on multiple regression analysis, stepwise incorporating variables

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Attitude toward the Model $A_M$</th>
<th>Attitude toward the Ad $A_{AD}$</th>
<th>Purchase Intentions Self $PI_S$</th>
<th>Purchase Intentions Gift $PI_G$</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Ethnic Similarity/ Match</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H2: Perceived Similarity</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H3: Ethnic Identification</td>
<td>No</td>
<td>Yes</td>
<td>Negative</td>
<td>No</td>
</tr>
<tr>
<td>H4: Aspiration</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Negative</td>
</tr>
</tbody>
</table>

**Moderating Variables:**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$A_{AD}$</th>
<th>$A_M$</th>
<th>$PI_S$</th>
<th>$PI_G$</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5: Strength of Ethnic Identification</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H6: Type of Product</td>
<td>No</td>
<td>No</td>
<td>Negative</td>
<td>Yes</td>
</tr>
<tr>
<td>H7: Level of Involvement</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>- Beauty product usage</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>- Beauty product buying #</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>- Beauty product spending</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Ethnic similarity positively contributes to $A_{AD}$. Nevertheless this is not the case for $A_M$ and purchase intentions. This provides additional support for the Accommodation theory of Byrne (1971), the Identification theory of Kelman (1961) and the In-Group Bias theory (Brewer, 1979), as same-ethnicity endorsers are evaluated more positively than endorsers of other ethnicities. The research question of this experiment; “If the viewer and the endorser in the ad are ethnically similar, does this lead to more positive attitudes toward the (endorser in the) advertisement?” can therefore partially be answered positively. This is also consistent with the effects of source-recipient similarity, as that argues that similar others are liked more (Neimeyer & Mitchell, 1988) and found more persuasive (Berscheid, 1966; Brock, 1965; Burnstein et al., 1961).

Both the psychological literature (Back, 1951; Brock, 1965; Burnstein et al., 1961; Stotland et al., 1961) and the research on ethnicity of the endorser (Whittler, 1989; Williams and Quails, 1989) have shown that perceived similarity between the communicator and the recipient of a communication increases persuasion. Pearson’s correlation results show significant effects for the level of perceived similarity with the model for all dependent variables, however those disappear in the results of the multiple regression analysis for all dependent variables as well; these effects that first appeared to be significant might be explained by other factors, for example ethnic similarity and aspiration.
This research findings support the findings of Huesman and colleagues (1983) that viewers, in this case females, who identify themselves more with the ethnicity of the model are more positive about the model. Pearson’s correlation results show significant effects for the level of ethnic identification with the model for all dependent variables, however those disappear in the results of the multiple regression analysis for $A_M$ and $PI_G$, and even become the contrary for $PI_S$. These effects that first appeared to be significant might be explained by other factors, for example the level of aspiration.

Advertising affects consumers “because they implicitly or explicitly compare themselves with the idealized images and life-styles portrayed in ads” (Richins, 1991, p.76). When female consumers aspire to be like the endorser in the advertisement, they want to imitate their attitudes or behavior (Assael, 1984) and increase their perception of the affective characteristics of the model, such as attractiveness, likability and credibility. The results of this experiment iterate the findings of Assael, aspiration is found to have a significant effect on all four dependent variables in the results of the Pearson’s correlation test, and those findings are further supported by the results from the regression analyses (PI excluded). Thus, when viewers aspire to be like the endorser in the ad, they evaluate the (model in the) ad more positively but are not more likely to purchase the product for themselves or as a gift. In the latter case the effect is even negative, so it seems that women would not give away something that aids others in becoming (as beautiful) as the model in the ad.

Strength of ethnic identification is supposed to influence the effect of the four above mentioned factors. Social identity theory (Tajfel, 1978; 1981; Tajfel & Turner, 1985) claims that individuals assign themselves to social categories, i.e. ethnic group and their identity stems from this categorization. This research has found in the results of the Pearson’s correlation that intensity of ethnic identification is of influence on $A_M$ and gift buying intentions; however the multiple regression analysis does not find a significant effect for gift buying. What can be derived from the $t$-tests comparing the means of the different groups, is that gift buying behavior might be subject to more cultural factors than those that were measured in this research.

The type of beauty product advertised is not of influence on the evaluation of the model, nor of the advertisement itself. However, buying intentions are influenced by the type of product advertised and by the degree of ethnicity-relatedness of the product. In accordance with what was hypothesized, compared to the ethnicity related product (compact powder), the other two that are less related to ethnicity (perfume and mascara) yield negative results in gift purchases, where
perfume is less likely bought as a gift, next mascara and the greatest likelihood of purchase is for a compact powder. When evaluating the likelihood to purchase the product for herself, the individual is more likely to purchase perfume than the other beauty products, contrary to what was hypothesized.

The last factor supposed to moderate the effects is the level of involvement with the product category. All three variables, beauty product usage, the quantity of beauty products bought per month and spending in the category do not significantly influence one of the four dependent variables in any of the tests performed.

In alignment with Zhang and Gelb (1996) the author recommends to use marketing communications that that are congruent with the culture of the ethnic target audience. The endorser and the marketing communication will be evaluated more positively by the same-ethnicity consumer if the advertisements are adjusted to fit the needs of the targeted ethnic group. So to create successful advertisements in multicultural societies, the so called melting pot societies, it is necessary to understand cultural differences (Keegan, 1996) and adjust the advertisement to the targeted audience. The author has not found a so-called “Backlash effect” for Caucasians (Barban, 1969; Bush et al., 1979; Cagley & Cardoza, 1970; Guest, 1970; Harris, 1989; Qualls & Moore, 1990; Stafford et al., 1970).

This study shows that Caucasian individuals respond just as favorably or even more favorably to models in ads with Arab endorser as they do to ads with a Caucasian model. This is consistent with the findings of the authors that have compared evaluations of Caucasian endorsed and Black endorsed ads (Bush et al., 1979; Pitts et al., 1989; Schlinger & Plummer, 1972; Whittler, 1989). One note; caution should be taken to draw conclusions, as Muse (1971) suggested that personal care products may result in a more negative response from Caucasian participants, and this research deals with personal care products.

There is a counter argument to ethnic target marketing as well; increased use of ethnic target marketing strategies has evoked growing criticism and concerns about stereotype perpetuation, unfair target market representations, and consumer exploitation (see Bristor, Lee & Hunt, 1995; Ringhold, 1995; Smith & Cooper-Martin, 1997; Spradley, 1993).
Implications

Many researchers believe it is difficult to standardize advertising in different markets (Geier, 1986; Hornik, 1980; Mueller, 1992). The findings of this research do not support this claim. Marketers may improve their connection with Arab consumers without endangering their position with the Caucasian consumers, by simply varying the ethnicity of the endorsers featured in marketing communications, without alienating Caucasians.

Marketers struggle with the practical reality of managing multiple target markets, because of globalization markets become more heterogenic and the number and buying power of ethnic consumers increases. How can a marketer attract different segments in the market simultaneously? There are several possible strategies to influence consumers: traditional marketing, separated marketing, integrated marketing and multicultural marketing (Geng, 1997). The researcher proposes multicultural marketing to be the best option when dealing with consumers with either a Caucasian or an Arab ethnicity. The findings of this research propose a standardized approach in marketing communications aimed at both Caucasians and Arabs. The theory of targeting contradicts a standardized approach to advertising, however does not prove to be valid for these two ethnic groups.

Ethnic identification with a print ad, created by a model’s apparent ethnicity, induces more favorable $A_{AD}$. Companies targeting only one ethnic group might benefit from running ads that stress same-ethnicity models’ skin color, facial features, and hair styles. To encourage customers to ethnically identify with such ads and featured brands, these endorsers could have the physical traits of the targeted ethnic group. However, care should be taken to avoid overreliance on stereotypes in advertising, because this might lead to strengthening of prejudices of a certain ethnic group (Rokeach, 1979) and have corresponding negative consequences (Taylor & Stern, 1997).

Aspiration to be like the model drives the $A_M$ and $A_{AD}$. Marketers could design advertisements in such a way that it appeals to multiple ethnic target markets, using a physically attractive model, especially when advertising beauty products. This is consistent with the match-up hypothesis for consumers. However, it could also be that the attractive model is perceived to be more "expert" in cosmetics/beauty products (given their attractiveness) than an unattractive model (Joseph, 1977).
Limitations and Suggestion for Future Research

This study is not without limitations. First, the standard limitations hold regarding the use of a convenient sample in only two locations, Amsterdam, the Netherlands and Istanbul, Turkey. The sample does not cover participants of all Arab nations so it might be harder to generalize the findings for the entire female Arab population. Also, many within-country ethnicities are multifarious because their members have emigrated from different countries and regions; thus, marketers may choose ineffective ethnic endorsers in ads when targeting such groups. For example, when targeting Arabs, should advertisers use Moroccan, Turkish, Kurdish or Jordan ethnic endorsers and cues in their ads? To examine subculture heterogeneity and its effect on ad evaluations and purchase intentions, future research could examine both felt-ethnicity and country-of-origin of both parents, to also include mixed ethnicities. The current sample size was too small to discern between ethnic majorities and minorities. Caucasians in the sample can stem from Western Europe, where they are a majority or from Istanbul, Turkey, where they are an ethnic minority group. The same applies to Arabs in the sample, as they are constituted from ethnic minorities in Western Europe and members of the ethnic majority group in Turkey. Further research is needed to incorporate these majority and minority classified groups. Further research can also examine multiple bases of similarity, including combinations of demographic, cultural and psychographic variables, as recommended by Noor Al-Deen (1991).

Additionally most of the participants are students, meaning they are of a young age and have relatively limited income, in addition the level of education might indicate a greater consciousness and tendency to evaluate advertisements via the central route, instead of the peripheral route.

The experiment consists of a single advertising medium, a single advertised product category, an unknown brand, a segregated advertisement and a female-only ad model. The advertisement was a standalone ad, and not placed in a magazine, let alone in other media. Television commercials give the marketer two sensory methods to convey the marketing communication: aural and visual. Furthermore it would be interesting to see if the evaluations of the model and the advertisement and the purchase intentions are different when the sensory method of smelling is also used, when making the perfume ad into a so-called “scratch and sniff” ad. Both options are more costly, and that is why the researcher had opted for a more limited experiment.
For future research it is recommended to include integrated advertisements and also media exposure, as cultivation theory (Gerbner, 1998; Gerbner, Gross, Morgan, & Signorielli, 1994) suggests that exposure and frequency of a message distributed through different media influences perception; in other words, the more media a viewer is exposed to, the more he or she will interpret the message to be valid. Those media can be ethnicity oriented media, or mass-media, as those might elicit different evaluations (Barban, 1969; Fannin, 1989; Harris, 1981; Legette, 1993). Use of a celebrity endorser should be investigated, because it may be a more important cue for evaluation of unknown brands than for familiar brands, as Joseph’s (1982) claims that consumers have much more knowledge about familiar brands and therefore do not depend on peripheral cues such as attractiveness and ethnicity of the endorser in their attitudes toward the (endorser) in the ad and purchase intentions.

Furthermore, the researcher used online discussion forums targeted at a specific ethnic group to get more responses. However, it is more likely that ethnic conscious women visit those sites. This means that the sample might contain more ethnically aware participants, or visiting such a website might have acted as a prime. Forehand and Deshpande (2001) find in their study that exposure to an ethnic prime increased the rate at which participants spontaneously mentioned their ethnicity in self-descriptions (a measure of ethnic self-awareness) and caused participants to respond more favorably to same-ethnicity endorsers and advertising that targeted their ethnicity. Wooten (1993) found similar results; an ad may elicit positive reactions among members of a particular ethnic group when the ad is viewed in isolation. However, A_{AD} may be even more favorable when the advertisement is embedded in the appropriate primed ad context.

Besides it can be interesting to research in following attempt ads that are also rich in cultural cues, called culturally embedded, which is denoted as the degree to which cultural cues are present in an ad. Highly embedded ethnical targeted ads that contain many ethnic culture-relevant cues will likely enhance the likelihood that a same-ethnicity viewer will identify with characters based on ethnicity rather than other shared characteristics. In contrast, ads that contain few ethnic culture-relevant cues, as the one used in this experiment, will likely prompt lower levels of identification based on ethnicity, and identification may predominate based on other shared characteristics (e.g., role and gender) (Brumbaugh, 2009).
Lastly, questionnaires can be subject to wording ambiguities, this might cause deviations in answers (Mueller, 1992). Ethnicity was a concept that was not always understood correctly by the respondents. In addition, those who received the hardcopy version had the ability to flip back to the ad, therefore could examine the ad in more detail, which gave them more time to look at the ad, which might have inflated results, because this does not approximate real-world evaluations of print ads.
Reference List


*Journal of Marketing Research, 1* (4), 53-56.

Barber, N. (1995). The evolutionary psychology of physical attractiveness: Sexual selection and 

http://www.guardian.co.uk/media/2011/feb/28/curvy-models-style-magazines

Belk, R.W., Bryce, W., & Pollay, R. (1985). Materialism and individual determinism in U.S. and 
Japanese television advertising. In R. Lutz (Ed.), *Advances in Consumer Research* (pp. 568–

A historical and cross cultural content analysis. *International Marketing Review, 2* (12), 38 -
47.

p. S34.

Berscheid, E. (1966). Opinion change and communicator-communicatee similarity and 


(Summer), 253-262.

of Marketing, 46* (Winter), 27-35.

(December-January), 19-25.

Brewer, M.B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational 

Reports, 22*, 976.


and Social Psychology, 1*, 650-653.


Byrne, D., Griffitt, W., & Golightly, C. (1966). Prestige as a factor in determining the effect of attitude similarity-dissimilarity on attraction. *Journal of Personality, 34,* 434-444.


Dunkel, T., Davidson, D. & Qurashi, S. (2009). Body satisfaction and pressure to be thin in younger and older Muslim and non-Muslim women: The role of Western and non-Western dress preferences. *Body Image, 7*, 56-65.


Mills, J. & Harvey, J. (1972). Opinion change as a function of when information about the communicator is received and whether he is attractive or expert. *Journal of Personality and Social Psychology, 21* (January), 52-55.


US Census Bureau (2012). Hispanic origin main. Retrieved from
http://www.census.gov/population/hispanic/


Appendix A: Questionnaire

Hello,

Thank you for taking 4 minutes of your time to fill out this questionnaire. I am a master student at the Erasmus University in Rotterdam and I am conducting a research for my thesis in the field of marketing. I’d like to hear your reactions about an advertisement for a new beauty product.

Answering the questions will take approximately 4 minutes of your time. All answers will be treated confidentially. If you want to enter the draw for the € 50 gift certificate of a large perfumery, please enter your e-mail address at the end of the questionnaire.

Thank you for participating.

Please indicate your gender

- ☐ Male
- ☐ Female

“IF MALE: I am sorry, you cannot participate in this research because I research advertisements of female beauty products. I apologize for this discriminatory factor. Thank you for your time.”

Advertisements

Please view this ad for approximately 15 seconds.
Then click the button >> to answer the questions.

<<One of the 6 variants of the Advertisement as shown in Appendix B is randomly show>>

Questions

What would be a reasonable price for the advertised product? (in Euros)

Please indicate the level of agreement with the following statements:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would buy the advertised product for myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would buy the advertised product as a gift for someone else.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please evaluate the overall advertisement you just saw on the following characteristics:
Please mark the point best describing how you feel about the advertisement presented.
Can you please rate the PERSON in the advertisement on the following criteria? Please mark the point best describing how you feel about the woman presented.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Likable</th>
<th>Unlikable</th>
<th>Attractive</th>
<th>Unattractive</th>
<th>Appealing</th>
<th>Unappealing</th>
<th>Bad</th>
<th>Good</th>
<th>Interesting</th>
<th>Uninteresting</th>
<th>Not for me</th>
<th>For me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attractive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appealing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not for me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unattractive

Not Classy

Ugly

Plain

Not Sexy

Undependable

Dishonest

Unreliable
Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>This advertisement is intended for me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can identify myself with the person in the advertisement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I admire the person in the advertisement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I aspire to be like the person in the advertisement.

I am similar to the person in the advertisement in terms of overall lifestyle.

I am similar to the person in the advertisement in terms of personality.

I am similar to the person in the advertisement in terms of basic values.

I am similar to the person in the advertisement in terms of cultural background.
Beauty products are cosmetics, fragrances, skincare products and hair care products. 

How many beauty products do you buy on average per month? (in units)

__________________________

How much do you spend on average per month on beauty products in Euros?

__________________________

Please indicate how often you use the following beauty products:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Less than Once a Month</th>
<th>Once a Month</th>
<th>2-3 Times a Month</th>
<th>Once a Week</th>
<th>2-3 Times a Week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfume</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mascara</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foundation/Compact Powder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lipstick/Lip gloss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please indicate what color of foundation/compact powder would suit your skin color best?

Porcelain - ○  Light - ○  Honey - ○  Toffee - ○  Mocha - ○

What is your age?

__________________________

What is the highest level of education you enjoyed?
• Primary school or equivalent
• High School or equivalent
• College or equivalent (MBO)
• University (Bsc, Msc)
• Other

What is your individual income per month before taxes in Euros?
• < € 1000
• € 1001 - € 1500
• € 1501 - € 2000
• € 2001 - € 2500
• € 2501 - € 3000
• € 3001 - € 4000
• € 4001 - € 5000
• > € 5001

What is the natural color of your hair?
• Blond
• Red
• Brown
• Black

What is the color of your eyes?
• Blue
• Brown
• Green
• Grey
• Hazel

Please indicate your nationality/ nationalities.

Please indicate your country of residence

Where do you live?

• Rural area (Country side)
• Urban area (City)

Please indicate your mother tongue

What is your ethnicity?

Please mark your choice

<table>
<thead>
<tr>
<th></th>
<th>Completely</th>
<th>Strongly</th>
<th>Somewhat Strongly</th>
<th>Neither strong nor weak</th>
<th>Somewhat weakly</th>
<th>Weakly</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>How strongly do you identify with the ethnic group just indicated?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well do you think the ethnicity of the advertisement endorser</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This is the end of the Survey.

Thank you for participating.

What do you think is the purpose of this study?

Please enter your e-mail address here for a chance to win the € 50 gift certificate:
Appendix B: Advertisements

All six advertisements are displayed on the following pages.
Figure 4: Advertisement of Caucasian Model endorsing Mascara (semi ethnicity-related product)
Figure 5: Advertisement of Caucasian Model endorsing Perfume (ethnicity unrelated product)
Figure 6: Advertisement of Arab Model endorsing Compact Powder (ethnicity-related product)
Figure 7: Advertisement of Arab Model endorsing Mascara (semi ethnicity-related product)
Figure 8: Advertisement of Arab Model endorsing Perfume (ethnicity unrelated product)
Image Sources


Appendix C: Bar graphs of Table 4

**Figure 9:** Ethnicity Unrelated Product - Caucasian Model

**Figure 10:** Ethnicity Unrelated Product - Arab Model

**Figure 11:** Ethnicity Semi-Related Product - Caucasian Model

**Figure 12:** Ethnicity Semi-Related Product - Arab Model
Figure 13: Ethnicity Related Product - Caucasian Model

Figure 14: Ethnicity Related Product - Arab Model

Figure 15: Product Unrelated - Caucasian Model

Figure 16: Product Unrelated - Arab Model
### Table 6

T-tests and Pearson's correlation results for all variables on the dependent measures

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward the Model</td>
<td>$\Lambda_M$</td>
<td>Attitude toward the Ad</td>
<td>$\Lambda_{AD}$</td>
<td>Purchase Intentions Self</td>
</tr>
<tr>
<td>H1: Ethnic Match</td>
<td>t (188) = -0.329, p=.742</td>
<td>t (188) = -1.400, p=.163</td>
<td>t (188) = -0.877, p=.382</td>
<td>t (188) = -0.337, p=.737</td>
</tr>
<tr>
<td>H2: Perceived Similarity</td>
<td>r = .370, p=.000</td>
<td>r = .383, p=.000</td>
<td>r = .317, p=.000</td>
<td>r = .140, p=.027</td>
</tr>
<tr>
<td>H3: Ethnic Identification</td>
<td>r = .431, p=.000</td>
<td>r = .587, p=.000</td>
<td>r = .498, p=.000</td>
<td>r = .209, p=.002</td>
</tr>
<tr>
<td>H4: Aspiration</td>
<td>r = .473, p=.000</td>
<td>r = .479, p=.000</td>
<td>r = .363, p=.000</td>
<td>r = .345, p=.000</td>
</tr>
</tbody>
</table>

### Moderating Variables:
- **H5: Strength of Ethnic Identification**
  - Pearson's r (123) = -0.182, p=.141
  - Pearson's r (123) = -0.053, p=.395
  - Pearson's r (123) = -0.000, p=.000

- **H6: Type of Product**
  - Perfume, Mascara
    - Pearson's r (123) = 0.145, p=.298
    - Pearson's r (123) = -0.037, p=.351
    - Pearson's r (123) = -0.000, p=.000
  - Mascara, Compact Powder
    - Pearson's r (123) = 0.098, p=.931
    - Pearson's r (123) = -0.037, p=.351
    - Pearson's r (123) = -0.000, p=.000

- **H7: Level of Involvement**
  - Beauty product usage
    - Pearson's r (123) = -0.016, p=.415
    - Pearson's r (123) = -0.061, p=.206
    - Pearson's r (123) = -0.000, p=.000
  - Beauty product buying
    - Pearson's r (123) = -0.016, p=.415
    - Pearson's r (123) = -0.061, p=.206
    - Pearson's r (123) = -0.000, p=.000

### Control Variables:
- **Age**
  - Pearson's r = .057, p=.216
  - Pearson's r = .103, p=.078
  - Pearson's r = .306, p=.000
  - Pearson's r = .192, p=.004

- **Individual Income**
  - Pearson's r = .430, p=.192
  - Pearson's r = .131, p=.741
  - Pearson's r = .239, p=.007
  - Pearson's r = .285, p=.007

- **Level of Education**
  - Pearson's r = .047
  - Pearson's r = .517
  - Pearson's r = .523
  - Pearson's r = .309

- **High School, College**
  - Pearson's r = .013
  - Pearson's r = .388
  - Pearson's r = .838
  - Pearson's r = .446

- **University**
  - Pearson's r = .013
  - Pearson's r = .388
  - Pearson's r = .838
  - Pearson's r = .446

- **Situation**
  - Pearson's r = .047, p=.684
  - Pearson's r = .146, p=.145
  - Pearson's r = .230, p=.023
  - Pearson's r = .761, p=.436

- **Facial similarity**
  - Pearson's r = .087, p=.115
  - Pearson's r = .064, p=.191
  - Pearson's r = .097, p=.91
  - Pearson's r = .085, p=.121

- **Ethnicity Model**
  - Pearson's r = .013
  - Pearson's r = .997
  - Pearson's r = .318
  - Pearson's r = .704, p=.482

- **Ethnicity Viewer**
  - Pearson's r = .978
  - Pearson's r = 3.162, p=.002
  - Pearson's r = 7.768, p=.000
  - Pearson's r = 5.525, p=.000
## Appendix E: Results Regression

Table 7a: Multiple regression results for dependent variable attitude toward the model

<table>
<thead>
<tr>
<th>Attitude toward the MODEL</th>
<th>Model 1a</th>
<th>Model 2a</th>
<th>Model 3a</th>
<th>Model 4a</th>
<th>Model 5a</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td>R2</td>
<td>.315 (ps &lt; .01)</td>
<td>.368 (ps &lt; .01)</td>
<td>.348 (ps &lt; .01)</td>
<td>.315 (ps &lt; .01)</td>
<td>.317 (ps &lt; .01)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Constant</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>B</th>
<th>SE</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Ethnic similarity/match</td>
<td>2.002**</td>
<td>.200</td>
<td>**</td>
<td>2.02</td>
<td>.7**</td>
<td>.273</td>
<td>1.842*</td>
<td>.20</td>
<td>*</td>
<td>2.00</td>
<td>.200</td>
<td>1.78</td>
</tr>
<tr>
<td>H2: Perceived similarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3: Ethnic identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4: Aspiration</td>
<td>.230</td>
<td>.037</td>
<td>**</td>
<td>.230</td>
<td>.048</td>
<td>.472**</td>
<td>.215</td>
<td>.03</td>
<td>.443*</td>
<td>.472</td>
<td>.464</td>
<td>.464</td>
</tr>
</tbody>
</table>

### Control Variables:

- **Age**
- **Individual income**
  - <1000€
  - 1001-1500€
  - 1501-2000€
  - 2001-2500€
  - 2501-3000€
  - 3001-4000€
  - 4001-5000€
  - >5000€
- **Level of education**
  - High school
  - College
  - University
  - Other
- **Rural/urban living situation**
- **Facial similarity**
- **Ethnicity model**
  - Caucasian
  - Arab
- **Ethnicity viewer**
  - Caucasian
  - Arab
- **H5: Strength of ethnic identification**
  - Interaction H1, H5
  - Interaction H2, H5
  - Interaction H3, H5
  - Interaction H4, H5

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>B</th>
<th>SE</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 11-15</td>
<td>.579</td>
<td>.281</td>
<td>*</td>
<td>.707</td>
<td>.281</td>
<td>.198*</td>
<td>.595</td>
<td>.5</td>
<td>.161*</td>
<td>.579</td>
<td>.281</td>
<td>*</td>
</tr>
<tr>
<td>Age 16-20</td>
<td>.280</td>
<td>.111</td>
<td>*</td>
<td>.319</td>
<td>.124</td>
<td>.201*</td>
<td>.299</td>
<td>.0</td>
<td>.204*</td>
<td>.280</td>
<td>.111</td>
<td>*</td>
</tr>
<tr>
<td>Age 21+</td>
<td>.191</td>
<td></td>
<td></td>
<td>.11</td>
<td>.204*</td>
<td>.191</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual income &lt;1000€</td>
<td>.157</td>
<td></td>
<td></td>
<td>.27</td>
<td></td>
<td>.157</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1001-1500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1501-2000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2501-3000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3001-4000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4001-5000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;5000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of education High school</td>
<td>.191</td>
<td></td>
<td></td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural/urban living situation</td>
<td>.058</td>
<td>.028</td>
<td>-.164*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial similarity</td>
<td>-.058</td>
<td>.028</td>
<td>-.164*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity model</td>
<td>Caucasian</td>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>.099</td>
<td>.038</td>
<td>.206*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity viewer</td>
<td>Caucasian</td>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>.016</td>
<td>.038</td>
<td>.183*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interaction H1, H5
Interaction H2, H5
Interaction H3, H5
Interaction H4, H5
<table>
<thead>
<tr>
<th>H6: Type of product</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfume (unrelated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mascara (semi)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compact Powder (related)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H1, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H2, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H4, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compact Powder (related)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H1, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H2, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H4, H6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H7: Level of Involvement</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a: Beauty Product Usage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H1, H7a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H2, H7a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H7a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H4, H7a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b: Beauty Product Number</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>interaction H1, H7b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H2, H7b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H7b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H4, H7b</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c: Beauty Product Spend</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>interaction H1, H7c</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H2, H7c</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H7c</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P = < .05
** P = < .01
Table 7b: Multiple regression results for dependent variable attitude toward the ad

<table>
<thead>
<tr>
<th>AD</th>
<th>Model 1b</th>
<th>Model 2b</th>
<th>Model 3b</th>
<th>Model 4b</th>
<th>Model 5b</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td>R²</td>
<td>.439 (ps &lt; .01)</td>
<td>.435 (ps &lt;.01)</td>
<td>.439 (ps &lt;.01)</td>
<td>.315 (ps &lt;.01)</td>
<td>.435 (ps &lt;.01)</td>
</tr>
<tr>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Constant</td>
<td>1.741**</td>
<td>.275</td>
<td>1.77 2**</td>
<td>.291</td>
<td>.27</td>
</tr>
<tr>
<td>H1: Ethnic similarity/match</td>
<td>-.280</td>
<td>.142</td>
<td>-.280</td>
<td>.142</td>
<td>-.280</td>
</tr>
<tr>
<td>H2: Perceived similarity</td>
<td>.261</td>
<td>.058</td>
<td>** .261</td>
<td>.061</td>
<td>** .261</td>
</tr>
<tr>
<td>H4: Aspiration</td>
<td>.234</td>
<td>.065</td>
<td>** .234</td>
<td>.068</td>
<td>** .234</td>
</tr>
<tr>
<td>Control Variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1001-1500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1501-2000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2501-3000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3001-4000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4001-5000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;5000€</td>
<td>1.009</td>
<td>.393</td>
<td>* .987</td>
<td>.402</td>
<td>* .987</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- High school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- College</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural/urban living situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial similarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5: Strength of ethnic identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H1, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H2, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H4, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H6: Type of product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfume (unrelated)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mascara (semi)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compact Powder (related)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interaction H1, H6
Interaction H2, H6
Interaction H3, H6
Interaction H4, H6
Interaction H1, H6
Interaction H2, H6
Interaction H3, H6
Interaction H4, H6

<table>
<thead>
<tr>
<th>H7: Level of Involvement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a: Beauty Product Usage</td>
<td></td>
</tr>
<tr>
<td>Interaction H1, H7a</td>
<td></td>
</tr>
<tr>
<td>Interaction H2, H7a</td>
<td></td>
</tr>
<tr>
<td>Interaction H3, H7a</td>
<td></td>
</tr>
<tr>
<td>Interaction H4, H7a</td>
<td></td>
</tr>
</tbody>
</table>

b: Beauty Product Number
Interaction H1, H7b
Interaction H2, H7b
Interaction H3, H7b
Interaction H4, H7b

c: Beauty Product Spend
Interaction H1, H7c
Interaction H2, H7c
Interaction H3, H7c
Interaction H4, H7c

* P = < .05
** P = < .01
Table 7c: Multiple regression results for dependent variable purchase intentions for self

<table>
<thead>
<tr>
<th>Purchase Intentions</th>
<th>Model 1c</th>
<th>Model 2c</th>
<th>Model 3c</th>
<th>Model 4c</th>
<th>Model 5c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td>R2</td>
<td>.200 (ps &lt; .01)</td>
<td>.228 (ps &lt;.01)</td>
<td>.200 (ps &lt;.01)</td>
<td>.237 (ps &lt;.01)</td>
<td>.186 (ps &lt;.01)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.819**</td>
<td>.380</td>
<td>3.35</td>
<td>8** .410</td>
<td>2.819*</td>
</tr>
<tr>
<td>H1: Ethnic similarity/match</td>
<td>3.35</td>
<td>8** .410</td>
<td>2.819*</td>
<td>.38</td>
<td>2.53</td>
</tr>
<tr>
<td>H2: Perceived similarity</td>
<td>.456</td>
<td>.083 **</td>
<td>.456</td>
<td>.084 **</td>
<td>.456</td>
</tr>
<tr>
<td>H3: Ethnic identification</td>
<td>.465</td>
<td>.086 **</td>
<td>.465</td>
<td>.086 **</td>
<td>.465</td>
</tr>
<tr>
<td>H4: Aspiration</td>
<td>.432</td>
<td>.086 **</td>
<td>.432</td>
<td>.086 **</td>
<td>.432</td>
</tr>
<tr>
<td>Control Variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1001 -1500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1501 -2000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001 -2500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2501 -3000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3001 -4000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4001 -5000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;5000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- High school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- College</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural/urban living situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial similarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5: Strength of ethnic identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H1, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H2, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H4, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H6: Type of product</td>
<td>Interaction</td>
<td>Interaction</td>
<td>Interaction</td>
<td>Interaction</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Perfume (unrelated)</td>
<td>H1, H6</td>
<td>H2, H6</td>
<td>H3, H6</td>
<td>H4, H6</td>
<td></td>
</tr>
<tr>
<td>Mascara (semi)</td>
<td>H1, H6</td>
<td>H2, H6</td>
<td>H3, H6</td>
<td>H4, H6</td>
<td></td>
</tr>
<tr>
<td>Compact Powder (related)</td>
<td>H1, H6</td>
<td>H2, H6</td>
<td>H3, H6</td>
<td>H4, H6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H7: Level of Involvement</th>
<th>Interaction</th>
<th>Interaction</th>
<th>Interaction</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>a: Beauty Product Usage</td>
<td>H1, H7a</td>
<td>H2, H7a</td>
<td>H3, H7a</td>
<td>H4, H7a</td>
</tr>
<tr>
<td>b: Beauty Product Number</td>
<td>H1, H7b</td>
<td>H2, H7b</td>
<td>H3, H7b</td>
<td>H4, H7b</td>
</tr>
<tr>
<td>c: Beauty Product Spend</td>
<td>H1, H7c</td>
<td>H2, H7c</td>
<td>H3, H7c</td>
<td>H4, H7c</td>
</tr>
</tbody>
</table>

* P = < .05  
** P = < .01
Table 7d: Regression results for dependent variable purchase intentions gift

<table>
<thead>
<tr>
<th>Purchase Intentions</th>
<th>Model 1d</th>
<th>Model 2d</th>
<th>Model 3d</th>
<th>Model 4d</th>
<th>Model 5d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gift</td>
<td>N=190</td>
<td>N=190</td>
<td>N=190</td>
<td>N=190</td>
<td>N=190</td>
</tr>
<tr>
<td>R2</td>
<td>.153 (ps &lt; .01)</td>
<td>.249 (ps &lt; .01)</td>
<td>.184 (ps &lt; .01)</td>
<td>.234 (ps &lt; .01)</td>
<td>.113 (ps &lt; .01)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.763** .503</td>
<td>4.08** .550</td>
<td>3.109* .52</td>
<td>2.91** .483</td>
<td>2.993** .519</td>
</tr>
<tr>
<td>H1: Ethnic similarity/match</td>
<td>.353</td>
<td>.265</td>
<td>.098**</td>
<td>.271</td>
<td>.33</td>
</tr>
<tr>
<td>H2: Perceived similarity</td>
<td>.410</td>
<td>.098**</td>
<td>.294</td>
<td>.095**</td>
<td>.442</td>
</tr>
<tr>
<td>H3: Ethnic identification</td>
<td>.8</td>
<td>**</td>
<td>.098**</td>
<td>.442</td>
<td>.095**</td>
</tr>
<tr>
<td>H4: Aspiration</td>
<td>.176</td>
<td>.054</td>
<td>.49</td>
<td>1.00</td>
<td>.167</td>
</tr>
<tr>
<td>Control Variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1001 -1500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1501 -2000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001 -2500€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2501 -3000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3001 -4000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4001 -5000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;5000€</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- High school</td>
<td>-1.059</td>
<td>.504</td>
<td>.49</td>
<td>1.00</td>
<td>.167</td>
</tr>
<tr>
<td>- College</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural/urban living situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial similarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity viewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5: Strength of ethnic identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H1, H5</td>
<td>.01</td>
<td>.037</td>
<td>.8</td>
<td>-.177*</td>
<td></td>
</tr>
<tr>
<td>interaction H2, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H3, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interaction H4, H5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
H6: Type of product

<table>
<thead>
<tr>
<th>Product</th>
<th>H1, H6</th>
<th>H2, H6</th>
<th>H3, H6</th>
<th>H4, H6</th>
<th>H5, H6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfume (unrelated)</td>
<td>1.40</td>
<td>-</td>
<td>8</td>
<td>.320</td>
<td>.434**</td>
</tr>
<tr>
<td>Mascara (semi)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compact Powder (related)</td>
<td>-.693</td>
<td>.315</td>
<td>-.213*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

H7: Level of Involvement

<table>
<thead>
<tr>
<th>Involvement</th>
<th>a: Beauty Product Usage</th>
<th>b: Beauty Product Number</th>
<th>c: Beauty Product Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction</td>
<td>H1, H7a</td>
<td>H2, H7a</td>
<td>H3, H7a</td>
</tr>
<tr>
<td>Interaction</td>
<td>H4, H7a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>H1, H7b</td>
<td>H2, H7b</td>
<td>H3, H7b</td>
</tr>
<tr>
<td>Interaction</td>
<td>H4, H7b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P = < .05
** P = < .01