# Do I Look All Right (or All Left)? The Interactive Effect of Facial Appearance and Political Attitudes on Social Attraction

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Research has documented that adults with baby faces are perceived as possessing different personality characteristics than those with mature-looking faces. Recently, studies have also shown that different faces are associated with different political affiliations. Therefore, we assumed that people with babyish faces would be perceived as having left-wing attitudes and mature-faced people would be perceived as having right-wing attitudes. Moreover, based on the status incongruity hypothesis and on research documenting people's preferences for those who do not violate expectations, we predicted that people whose faces are congruent with their stated political attitudes would be perceived as more socially and physically attractive. An experiment we conducted confirmed these hypotheses and documented that the occurrence of these effects depends on the similarity of attitudes between the participants and the target people.

Keywords: baby face, mature face, political attitudes, impression formation, expectancy violation, social attraction, physical attraction

We live in an era in which people frequently share their views on various topics as well as their photos with the public through social networks such as Facebook (e.g., Nosko, Wood, & Molema, 2010). One of the reasons for doing so is to make a positive impression on others in order to be perceived as socially and physically attractive (e.g., Nadkarni & Hofmann, 2012). Indeed, classic work in social psychology documents the important role played by people's attitudes and physical appearances in social attraction: We tend to like people who think like us (e.g., Byrne, 1971). We also tend to like people with attractive and babyish faces (e.g., Zebrowitz, 1997). But do these factors interact? Do we like people whose facial features match their stated attitudes? This study explores this issue, focusing on the interactive effect of the maturity of one's face and his or her stated political attitudes on social attraction to that individual.

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Previous research has demonstrated that people expect politicians with different political orientations to look different (e.g., Olivola & Todorov, 2010b; Rule & Ambady, 2010). According to this research, people perceive more powerful faces as belonging to Republicans, but warmer faces are perceived as belonging to Democrats. One characteristic of the face that makes it look more or less powerful or warmer is the degree of its maturity. The psychological literature documents that people assign different traits and attitudes to people with baby faces than to those with mature faces. The former are perceived as warm and empathic, and those with mature faces are perceived as colder and more assertive (e.g., Zebrowitz, 1997).

As with politicians, we often know not only what a person looks like but also his or her values and attitudes. These characteristics may be congruent or incongruent with the individual's physical appearance. We investigate whether people are socially attracted to individuals whose stated political attitudes match their appearances over those whose appearances and political attitudes seem to contradict one another. We also examine whether this social attraction leads to perceived visual attractiveness and how the similarity of attitudes between the perceiver and the target interact with the congruency between the target's looks and political attitudes in influencing his or her social attractiveness.

# **Appearance-Based Impressions**

People tend to form impressions based on appearance. Indeed, there is an impressive consensus among people about the impression formed of various faces (e.g., Olivola, Funk, & Todorov, 2014). The structure of an individual's face makes people view him or her as stupid or smart, introverted or extroverted, good-hearted or malicious (e.g., Zebrowitz, 1997). The way people look might even affect the degree to which they are viewed as trustworthy and influence court verdicts and the severity of punishment if they are found guilty (e.g., Todorov, Olivola, Dotsch, & Mende-Siedlecki, 2015). Moreover, facial looks affect people's chances of being elected as political leaders. For example, the structure of one's face serves as a cue for people's estimation of a political leader's competence that, in turn, influences the chances of this leader being elected (e.g., Olivola & Todorov, 2010a).

According to the ecological approach to social perception, an individual's face provides us with valuable information about the nature of that individual (McArthur & Baron, 1983). People, however, tend to overgeneralize their perceptions. They attribute specific characteristics not only to people whose faces truly convey these traits, but also to people whose faces only appear to display these traits (Zebrowitz & Montepare, 2008). Thus, even when these facially based perceptions do not have a basis in reality, many people continue to believe they are accurate (Zebrowitz, 1997). For example, Olivola and Todorov (2010b) showed that people's tendency to rely on looks in attributing various characteristics to target individuals results in less accuracy than if they had relied only on the base-rate frequency of the characteristics. Similarly, a recent study demonstrated that although facial appearances play a major role in the selection and compensation of CEOs, they are not correlated with their performance (Graham, Harvey, & Puri, 2016). This tendency to erroneously attribute characteristics to particular facial looks might result from the confirmation bias—meaning, the tendency

to look for evidence that support one's expectations (Nickerson, 1998). One such overgeneralized perception is the baby-face stereotype.

# The Baby-Face Stereotype

People tend to attribute babyish traits to adults whose faces resemble those of infants. Adults with baby faces are perceived as honest, naïve, kind, and warm in contrast to individuals with more mature faces, who are perceived as domineering, strong, and cold (e.g., Berry & McArthur, 1985). Studies have established that this difference in perception, based on the babyishness of the face, holds for both male and female faces (Zebrowitz, 2017) and is evident in both male and female participants (e.g., Zebrowitz & Montepare, 1992; Zebrowitz et al., 2012).

These perceptions about baby-faced and mature-faced people lead others to expect different behaviors from them. For example, baby-faced people are expected to be honest and not to break the law intentionally (Berry & Zebrowitz-McArthur, 1988). Given that baby-faced people are perceived as warm and compassionate, they are generally favored for jobs requiring these traits, such as kindergarten teachers. On the other hand, more mature-faced people are favored for jobs requiring intelligence, dominance, and leadership, such as managerial positions (Zebrowitz, Tenenbaum, & Goldstein, 1991). For example, a recent study demonstrated that sports leaders are stereotypically viewed as having mature faces, and their faces are indeed more mature than leaders in other fields (Olivola, Eubanks, & Lovelace, 2014).

Based on these stereotypes, one can assume that the maturity of the face is also associated with political orientations. Given that baby-faced people are perceived as warm and empathic, the political attitudes that should match their faces should be prosocial, humanistic, and open to compromise. Mature-looking individuals, on the other hand, are perceived as cold and assertive. Thus, the political attitudes that should match their faces should be militaristic and hawkish in nature. Indeed, previous research in Switzerland revealed that political candidates with dominant faces are perceived as right-wing and those with less-dominant faces are considered left-wing (Samochowiec, Wänke, & Fiedler, 2010). Similarly, in an American study, political candidates with powerful faces were perceived as Republicans (Rule & Ambady, 2010). These studies confirm that people associate baby-faced individuals with left-wing attitudes and mature-faced individuals with right-wing attitudes.

Attempts to examine the accuracy of the baby-face stereotype yield mixed findings. There are a few studies documenting that baby-faced college students are warmer and less aggressive than more mature-faced students (e.g., Berry, 1991). However, other studies established the inaccuracy of these stereotypes. For example, in contrast to the baby-face stereotype, baby-faced adolescents achieved higher grades than their mature-faced peers and tended to be more delinquent (Zebrowitz, Andreoletti, Collins, Lee, & Blumenthal, 1998). Thus, in real life, people are often faced with situations in which the hints they receive from the maturity of an individual's face do not match the individual's behavior.

# Responses to Behavior Incongruent with the Baby-Face Stereotype

How do people react when they encounter a baby-faced person acting in a way that contradicts the baby-face stereotype? Several lines of research and theory demonstrate that people respond negatively to those who behave incongruently with the stereotypes assigned to them. According to the role congruity theory (Eagly & Karau, 2002), part of the reason for women's difficulty in attaining leadership roles is that the leader's role and the female gender role are perceived as incongruent. When women leaders behave in a manner consistent with the stereotype of leaders, their behavior contradicts that expected by their gender role, prompting negative reactions.

This negative response to behavior that contradicts one's stereotype is not limited to women leaders. In several studies, Phelan, Rudman, and their colleagues (e.g., Phelan & Rudman, 2010) demonstrated how individuals whose behaviors do not conform to the stereotype concerning their social groups are viewed and treated negatively. This was the case when men behaved modestly (e.g., Moss-Racusin, Phelan, & Rudman, 2010), and when Whites and Asians succeeded in areas atypical of their groups (Phelan & Rudman, 2010). Rudman and her colleagues proposed the status incongruity hypothesis (Rudman, Moss-Racusin, Glick, & Phelan, 2012) to explain this phenomenon. According to the hypothesis, negative reactions to counterstereotypical behaviors occur only when those behaviors defy social hierarchies. These authors claim that perceivers react this way to discourage threats to the status quo (Rudman et al., 2012).

However, according to Mendes, Blascovich, Hunter, Lickel, and Jost (2007), people perceive a person who conforms to the stereotype more positively than one whose behavior counters the stereotype even when the incongruent behavior does not violate the social order. For example, American participants disliked an Asian confederate with a southern accent more than an Asian confederate with a local accent. These authors explain that encountering behavior that violates expectations elicits uncertainty and requires mental effort. Both processes make interacting with these individuals threatening. Thus, people tend to regard a person who conforms to the stereotype more positively than a person whose behavior counters the stereotype.

We extend Mendes and colleagues' (2007) theoretical assumptions to the effect of the match between faces and political attitudes on the liking of ordinary people. We argue that the liking for a person who conforms to the stereotype will also occur for individuals whose looks fit the political attitudes they convey. Although no research to date has examined this possibility, there is evidence in that direction about voting for politicians. Based on real election outcomes, Samochowiec et al. (2010) found that political leaders whose appearances resemble the stereotypical looks of their party had a better chance of being elected. Therefore, we expect people to like or be socially attracted to a baby-faced individual who expresses political attitudes consistent with the baby-face stereotype more than a baby-faced individual whose stated attitudes are incongruent with the stereotype. We also predict the same pattern for a mature-faced individual.

H1: People will demonstrate more social attraction to a baby-faced individual or a mature-faced individual who expresses political attitudes that are congruent with the stereotype associated with their faces than to individuals whose stated attitudes are incongruent with the stereotype.

Although our research concentrates on the impact of the congruence between people's faces and attitudes, we cannot neglect the impact of the attitudes themselves on the liking of the individual. Studies have confirmed the similarity-attraction hypothesis that people tend to like others who hold attitudes similar to their own (Byrne, 1971). Since our third hypothesis assumes this well-documented effect of similarity in attitudes on liking, we test to see whether it occurs in our study. Thus, based on the similarity-attraction hypothesis, we hypothesize that our participants will show greater liking for those who hold political attitudes that are similar to their own.

H2: People will demonstrate more social attraction to those who express political attitudes similar to their own than to people who state dissimilar attitudes.

Although it is well-documented that people like those who hold attitudes similar to their own and are repulsed by those who hold dissimilar attitudes, research has established that the reaction to similar and dissimilar attitudes is not symmetrical. Dissimilar attitudes exert a much stronger influence than similar attitudes (e.g., Montoya & Horton, 2012). Given that the effect of the dissimilarity in attitudes is so dramatic, it might override the effect of congruency between facial shape and political attitudes hypothesized in H1. In other words, learning that a person has an attitude on an important issue that does not accord with one's own might cause the perceiver to dislike him or her, regardless of the person's appearance.

A recent study that manipulated the face of a person presented as a Palestinian political leader offering a peace proposal to be either baby faced or mature faced strengthens this hypothesis. Israeli Jews were likelier to support the peace proposal when the leader appeared to be baby faced. However, this effect was evident only among dovish participants who did not have a priori antagonistic attitudes (Maoz, 2012). Thus, we predict that the similarity in attitudes and the congruence between facial appearances and attitudes will have an interactive effect on social attraction.

H3: The effect of the congruence between facial appearances and stated attitudes on social attraction will occur when there is a similarity in attitudes between the perceiver and the target, not when there is dissimilarity in attitudes.

When people see the behaviors, personalities, and attitudes of others as positive, they not only like these people but also regard them as physically attractive (e.g., Kniffin & Wilson, 2004). There are various explanations for this outcome. First, as a result of the halo effect, people's perceptions of physical attractiveness is altered by the global evaluation they have of the target person (e.g., Nisbett & Wilson, 1977). Other researchers suggest that physical attractiveness is an evaluation of the fitness of an individual. The more a person is perceived as fitting, both physically and nonphysically, the more he or she is perceived as beautiful (Kniffin & Wilson, 2004). In H1, we assumed that congruence between facial appearances and stated attitudes would lead to greater liking of the target. Since people tend to regard

those they like as more physically attractive, we assume that this congruence will also indirectly lead to an enhanced perception of physical attractiveness. Following H3, we expect to find this mediated effect when there is a similarity in attitudes between the perceiver and the target person.

H4: People will perceive a baby-faced individual or a mature-faced individual whose expressed political attitudes are congruent with the stereotype connected with his or her face as more physically attractive than individuals whose stated attitudes are incongruent with the stereotype. This effect will be mediated by social attraction and occur when there is a similarity in attitudes between the perceiver and the target.

To test our four hypotheses, we conducted an experiment in which the participants had to form an impression of a target person whose picture and political attitudes were provided. The target was a man or woman whose face had either babyish features or mature features. The political attitudes the target person presumably held were related to the problem of African refugees in Israel. In recent years, tens of thousands of Africans have crossed the border illegally into Israel, resulting in a heated debate among Israeli citizens. Some believe that most of these individuals are refugees who must be protected and cared for, but others believe that most of them are work immigrants trying to take advantage of the flexible policy of the Israeli government for immigration. The latter group believes that these individuals threaten Israel's economy, health, and safety. Therefore, Israel should respond by securing its borders and expelling these individuals (e.g., Klinger, 2009). Given the stereotypes described above and the manipulation check described below, we assume baby-faced people will be perceived as favoring the refugees and those with mature faces as seeking their expulsion.

#### Method

# Manipulation Check

We conducted two tests to examine our stimuli. The first tested the underlying assumption that baby-faced people are perceived as having more prorefugee attitudes than mature-faced people. We asked 42 students to evaluate the degree to which the baby-faced and mature-faced people used in the main research were for or against the African refugees in Israel. They were presented with a questionnaire including the four faces used in the main study of babyish and mature faces of women and men, and were asked to guess to what degree these people had the following two opinions: the refugees must be expelled immediately to their home country, and the refugees must be cared for and given shelter in Israel (reverse coded). The answers were provided on a 1–7 scale, ranging from "not at all" to "to a very large extent." Four indices were created based on the mean of the two questions for each character. The results confirmed the study's underlying assumptions.

The mature-faced male was perceived as likelier to have antirefugee attitudes (M=4.65, SD=1.11) than the baby-faced male (M=4.12, SD=1.35), and F(1,41)=4.91, p=.032,  $\eta^2_G=0.05$ . Similarly, the mature-faced female was perceived as likelier to have antirefugee attitudes (M=3.94, SD=1.71) than the baby-faced female (M=3.25, SD=1.30), and F(1,41)=8.60, p=.005,  $\eta^2_G=0.05$ . We also combined the results for the male and female characters and compared the means to the value "4,"

which was the midscale. This analysis revealed that the baby-faced characters were perceived as having prorefugee attitudes (M = 3.67, SD = 0.74) that differed significantly from 4, t(41) = -2.89, p = .006. Moreover, the mature-faced characters were perceived as having antirefugee attitudes (M = 4.30, SD = 1.02) that differed from 4 in a marginally significant way, t(41) = 1.90, p = .065.

The second test (N=99) examined the manipulation of the maturity of the faces. The participants were presented with the four photographs along with other photographs from another unrelated study and asked to indicate the degree to which each of them was mature-faced or baby-faced. Each mature-faced picture was perceived as significantly more mature than its baby-faced version (p < .001).

#### **Participants**

The participants in the main study were recruited through social networks. The link to the survey was attached to the group pages of junior undergraduate students in communications and junior undergraduate students in psychology at a university in northern Israel and to the Facebook page of two of the researchers. These two researchers also sent the link to members of their e-mail list. Given that we were looking for eligible voters only, we dropped four participants from the analysis who were under 18. Of the 221 participants, 53 were male, 167 female, and one did not report his or her gender. Their ages ranged from 20 to 64 years, with a mean age of 26.77 (SD = 6.70). These participants were randomly allocated to the various experimental conditions.

# Design, Procedures, and Materials

The study has a 2 (facial features of the character: baby-faced or mature-faced)  $\times$  2 (the attitudes of the character: pro- or antirefugees)  $\times$  2 (the gender of the character)  $\times$  2 (the participants' attitudes: pro- or antirefugees) between-subjects factorial design. We devised an online questionnaire using Qualtrics software (www.qualtrics.com). The questionnaire consisted of four parts: an introduction presenting the target person, interpersonal attraction questions, questions about the participants' opinions about the refugee issue, and demographic questions. The participants were told that the survey was about social perceptions. They were asked to report their true thoughts and feelings and were told that there were no right answers. The participants were assured that the questionnaire was anonymous and confidential, and that the data would be used for research purposes only.

Then, the participants were told that they were about to be introduced to Tal, whose name in Hebrew can be masculine or feminine, and to her or his attitudes about the refugee problem in Israel. They were presented with a photo of Tal that was taken from the Web. The photo was of a man or a woman in his or her early twenties. Each gender had two versions manipulated by computer graphics software to include facial features that were baby faced or more mature looking. The manipulation of the facial features included the size of the eyes (larger eyes for the baby-faced version), the size of the eyebrows (thinner for the baby-faced version), the location of the face (further down for the baby-faced

version), facial shape (rounder for the baby-face version), and chin size (smaller for the baby-face version).  $^{1}$ 

The participants were randomly given either the photograph of the male or female character with either the baby-faced or mature features. Underneath the photo, we presented the character's attitudes about the refugee issue, which were randomly either in favor of or against the refugees. The statements of opinions were based on opinions presented in real forums online. The prorefugee attitude stated, "The refugees come from countries plaqued by wars. According to international law, we must offer them shelter. As a nation that experienced the Holocaust, we cannot ignore the fact that they need shelter. We are talking about human beings, like me and you, flesh and blood. Moreover, Israel needs these hard workers whom we prefer not to see, but whose presence we need in agriculture, hotels, personal assistance, nurseries and many other venues. They are here, living with us-that is a fact." The antirefugee attitude stated, "The infiltrators are a time bomb for Israeli citizens and should be returned to their home countries quickly. They are a real danger to the citizens of the state; there is no point in waiting; there should be urgent action. If they continue coming here, our country will be destroyed, and then the Jewish people will be exposed once again to the danger of a possible holocaust. In the time that they have spent in south Tel Aviv, they have destroyed all of our good places." Then, the participants were asked to fill out the questionnaire about their personal attraction to Tal, to give their opinions about the refugee issue, and to answer demographic questions.

#### Measures

The dependent variables. The Interpersonal Attraction Questionnaire (McCroskey & McCain, 1974) contains three factors related to interpersonal attraction: social attraction, which refers to the liking of the other person; physical attraction; and task attraction. In this study, we used 10 items that were based on (but not identical to) items from the first two factors. We selected the items best suited to our research. For example, we did not use an item that referred to sexual attraction because our participants responded to both opposite-sex and same-sex targets. Similarly, we did not use items referring to grooming because we showed only the face of the target person. In addition, we also changed some of the items from negative to positive to avoid double negatives when disagreeing with the statement. For example, instead of "wouldn't fit into my circle of friends," we used an item that stated that the target person "would fit into my circle of friends." The items measuring social attraction were: (1) I think Tal could be a friend of mine, (2) I think it would be easy for me to talk to Tal, (3) It is most likely that Tal and I could form a friendly relationship, (4) I think it would be nice to be in Tal's presence, (5) I would have liked to have a friendly talk with Tal, and (6) Tal would fit in my circle of friends. The items measuring physical attraction were: (7) I find Tal good-looking, (8) I like the look of Tal, (9) I think that Tal is handsome (or pretty), and (10) I think Tal is repulsive (reverse coded). Participants answered on a 7-point Likert scale, ranging from "strongly agree" to "strongly disagree" with higher values indicating greater social and physical attraction.

<sup>&</sup>lt;sup>1</sup> Different manipulations were applied to the pictures of the man and woman. We do not have copyright permission to print the pictures but can provide them individually on request.

All 10 items were subjected to a principal component analysis (PCA) with varimax rotation and eigenvalues greater than 1. After removing item 10, which did not load on any of the factors, two clearly separate factors emerged for the items measuring social attraction (eigenvalue: 6.39, % of variance: 47.74) and those measuring physical attraction (eigenvalue: 1.43, % of variance: 30.42), KMO = 0.92. We calculated an index of social attraction based on the mean of items 1–6 (M = 3.81, SD = 1.38, Cronbach's a = 0.95), and an index of physical attraction based on the mean of items 7–9 (M = 3.94, SD = 1.41, Cronbach's a = 0.96).

The participants' opinion questionnaire about the refugee issue included four statements to which they responded on a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree." The items were based on opinions presented in forums online and included: (1) I support the expulsion of the refugees to their home countries (reverse coded), (2) Our moral obligation is to give shelter to the refugees in our country, (3) The refugees take away the jobs of Israelis, exacerbating the unemployment rate (reverse coded), and (4) I support the idea that the Israeli welfare service should help the refugees who are coming to the country. After removing item 3, which reduced the reliability, the Cronbach's alpha reliability of the scale reached 0.71. An index was created based on the mean score of items 1, 2, and 4 (M = 3.46, SD = 0.90). The participants were divided into those who scored higher than the midscale value (3) who were considered to be "in favor of the refugees," and those who scored below it who were considered to be "against the refugees." Those who scored 3 were excluded from the analysis (n = 29).

Computation of the independent variables. Two independent variables were computed: the fit between the characters' faces and attitudes, and the similarity between the characters' attitudes and the participants' attitudes. The first variable received the value of "fit" when the character's face was babyish and his or her attitudes were prorefugees, and when the character's face was mature and his or her attitudes were against the refugees. The variable received the value of "misfit" when the character's face was mature and his or her attitudes were prorefugees, and when the character's face was babyish and his or her attitudes were against the refugees. The second variable received the value of "similar" when both the character and the participants were prorefugees or against the refugees. The value of "dissimilar" was given to cases in which their attitudes did not match one another.

# Results

A two-way ANOVA was conducted, with fit with the stereotype (fit or misfit) and similarity of attitudes (similar or dissimilar) as the independent variables and the social attraction index as a dependent variable. As H1 predicted, there was a significant main effect of fit with the stereotype. The participants liked the character whose attitudes matched his or her facial features (M = 3.95, SD = 1.00

 $<sup>^2</sup>$  We conducted a power analysis for the main effects assuming a two-tailed  $\alpha$  of 0.05. This analysis demonstrated a power of 0.28 for a small effect size (0.1), a power of 0.94 for a medium effect size (0.25), and a power of 1.00 for a large effect size (0.4). We also conducted a power analysis for the interaction effect assuming a two-tailed  $\alpha$  of 0.05. This analysis demonstrated a power of 0.16 for a small effect size (0.1), a power of 0.69 for a medium effect size (0.25), and a power of 0.97 for a large effect size (0.4).

1.43), more than the one whose face did not match his or her attitudes (M = 3.67, SD = 1.33), F(1, 188) = 3.92, p = .049,  $\eta^2 = 0.02$ .

As H2 predicted, there was a main effect of similarity of attitudes. The participants liked the character whose attitudes matched their own (M = 4.42, SD = 1.24), more than the one whose attitudes did not  $(M = 3.17, SD = 1.25), F(1, 188) = 52.55, p < .001, <math>\eta^2 = 0.21$ . Finally, as H3 predicted, there was a two-way interaction between fit with the stereotype and similarity of attitudes on social attraction, F(1, 188) = 9.53, p = .002,  $\eta^2 = 0.04$ . To better understand the nature of the interaction, we examined the simple main effects of fit with the stereotype separately for cases of similarity and dissimilarity in attitudes. As H3 predicted, when there was a similarity in attitudes, there was a significant effect of fit with the stereotype. The participants liked the character whose attitudes matched his or her facial features (M = 4.89, SD = 0.90), n = 46 more than the one whose face was a mismatch with his or her attitudes (M = 4.00, SD = 1.35), n = 52, F(1, 188) = 13.11, p < .001,  $\eta^2 =$ 0.05. However, when there was dissimilarity in attitudes, there was no significant effect of the fit with the stereotype. The participants liked the character whose attitudes matched his or her facial features (M = 3.08, SD = 1.29), n = 50 to the same degree that they liked the one whose face did not match his or her attitudes (M = 3.28, SD = 1.21), n = 44, F(1, 188) = 0.6, p = .440. Entering the character's gender into the analysis as another independent variable did not produce a main effect (p = .333) or interactive effects with the two independent variables on social attraction (p = .650, p = .521, p = .650.538).

To examine H4, we conducted a mediation analysis using PROCESS, an SPSS macro designed by Hayes (2013). In line with H4 and following the above analysis showing that the fit with the stereotype had an influence only when there was a similarity in attitudes, we examined only the cases in which there was a similarity in attitudes (n=98). The model used 1,000 bootstraps and included the fit with the stereotype as the independent variable, physical attractiveness as the dependent variable, and social attractiveness as the mediator. As H4 predicted, the fit with the stereotype affected physical attractiveness through the mediation of social attractiveness (b=0.66, SE=0.19, p<0.05, CI 95% [0.30, 1.10]). In other words, the characters whose facial appearances corresponded to their political attitudes were more physically attractive through the mediation of their social attractiveness. The direct effect of the fit with the stereotype on physical attractiveness, controlling for social attractiveness, was not significant (b=-0.28, SE=0.22, p=0.204).

 $<sup>^3</sup>$  The participants were randomly assigned to the various conditions. However, the distribution of looking at targets who were the same gender or the opposite gender was not perfect. Of the male participants, 16 watched a male target and 37 a female target. Of the female participants, 77 watched a female target and 90 watched a male target. Importantly, when we entered the participant's gender into the model that examined H1–H3, no main effect or interactions with gender were revealed. Moreover, when we entered the participant's gender and the character's gender as covariates in the models that examined all of the hypotheses, the pattern of results was very similar: There was a significant effect of similarity in attitudes F(1, 185) = 53.22, p < .001,  $\eta^2 = 0.21$ , a marginally significant effect of fit with the stereotype F(1, 185) = 3.63, p = .058,  $\eta^2 = 0.01$  and a significant interactive effect among these variables on social attraction

Although we did not formulate hypotheses about possible differences between the perceptions of the right-wing and left-wing characters or the differences in perceptions formed by the right-wing and left-wing participants, it is important to explore these issues in a post hoc analysis. Indeed, previous research indicates that people with different political orientations prefer different faces for their political leaders (Olivola et al., 2012). Since previous research has documented that gender is correlated with both a baby-faced appearance (Olivola & Todorov, 2010a) and perceived political ideology (Olivola et al., 2012), it is important to examine the possible effect of this variable too.

Thus, we conducted a four-way ANOVA with social attractiveness as the dependent variable and with the following independent variables: the facial features of the character (baby-faced or mature-faced), the attitudes of the character (pro- or antirefugees), the gender of the character and the participants' attitudes (pro- or antirefugees divided by their scores as lower or higher than 3, the midscale value). This analysis revealed a significant interaction between the characters' attitudes and their facial features F(1, 176) = 4.09, p = .045,  $\eta^2 = 0.01$ . To better understand the nature of the interaction, we examined the simple main effects of facial features separately for the characters with prorefugee and antirefugee attitudes. When the character was prorefugees, there was a significant effect of facial features F(1, 188) = 4.36, p = .038,  $\eta^2 = 0.02$ . The character was perceived as more socially attractive when he or she had a baby face (M = 4.78, SD = 1.11) than when he or she had a mature face (M = 4.26, SD = 1.12). However, when the character was antirefugees, there was no difference in perceived social attractiveness when he or she had a baby face (M = 3.12, SD = 1.29) or a mature face (M = 3.12, SD = 1.23), F(1, 188) = 0.00, p = .983. Thus, facial features played a significant role for the left-wing characters but not for the right-wing characters.

This analysis also revealed a significant interaction between the participant's attitudes and facial features F(1, 176) = 5.51, p = .020,  $\eta^2 = 0.02$ . To better understand the nature of the interaction, we examined the simple main effects of facial features separately for the participants with prorefugee and antirefugee attitudes. When the participants were prorefugees, there was a significant effect of facial features F(1, 188) = 5.53, p = .020,  $\eta^2 = 0.03$ . The character was perceived as more socially attractive when he or she had a baby face (M = 4.14, SD = 1.41) than when he or she had a mature face (M = 3.60, SD = 1.37). However, when the participants were antirefugees, there was no difference in perceived social attractiveness of the character when he or she had a baby face (M = 3.42, SD = 1.48) or a mature face (M = 3.96, SD = 1.02), F(1, 188) = 1.83, p = .178. Thus, the facial features of the characters played a significant role for the left-wing participants but not for the right-wing participants. Most importantly, the character's gender had no significant main or interactive effect.

Although there was no significant three-way interaction, we examined the simple main effects of facial features in each of the four conditions that were formed from the combination of the attitudes of the character and the participants. In accordance with H3, when there was a fit between the attitudes of the character and those of the participants, facial features had a significant impact. In the case of prorefugee attitudes, the character was perceived as more socially attractive when he or she

F(1, 185) = 8.83, p = .003,  $\eta^2 = 0.04$ . The mediation analysis that examined H4 was also significant (b = 0.61, SE = 0.19, p < .05, CI 95% [0.28, 1.04]).

had a baby face than when he or she had a mature face. On the other hand, in the case of antirefugee attitudes, the character was perceived as more socially attractive when he or she had a mature face rather than a baby face. In the other cases, there was no significant difference between the baby-face and the mature-face conditions (see Table 1).<sup>4</sup>

Table 1. The Impact of the Character's Facial Features, and Attitudes of the Characters and Participants on the Perceived Social Attractiveness of the Character.

		Facial features		
Characters'	Participants'			_
Attitudes	Attitudes	Baby-Faced	Mature-Faced	
Left-wing	Left-wing	5.05 (0.83)	4.43 (1.09)	$p = .024,  \eta^2 = 0.02$
	Right-wing	3.88 (1.49)	3.73 (1.07)	p = .755
Right-wing	Left-wing	3.13 (1.23)	2.86 (1.15)	p = .321
	Right-wing	3.12 (1.44)	4.24 (0.94)	$p = .017, \eta^2 = 0.02$

#### **Discussion**

Research has documented the impact of facial appearances generally and of the maturity of the face specifically on people's perceptions (e.g., Maoz, 2012). However, until now, studies have focused primarily on the main effects of facial maturity. In contrast, we established that the effect of facial features on attraction varies in different contexts. Specifically, we showed that people preferred those whose political attitudes and facial features corresponded (H1). In other words, a baby-faced person holding left-wing attitudes and a mature-faced person with right-wing attitudes were preferable to those whose looks and attitudes were a mismatch.

Thus, our findings support the preference for people who behave in accordance with the stereotypes attached to their social groups. According to the status incongruity hypothesis, the negative reactions to counterstereotypical behaviors occur only when those behaviors defy social hierarchies and discourage threats to the status quo (Rudman et al., 2012). However, according to Mendes et al. (2007), negative reactions to people who violate stereotypical expectations occur even when the incongruent behavior does not violate the social order and results from the uncertainty and threat that the perceivers experience in

<sup>&</sup>lt;sup>4</sup> We also conducted an analysis with the participants' opinions as a continuous variable. We used Hayes's PROCESS (2013) to test the effect of the character's facial features on social attractiveness with the character's opinion (dichotomous) and the participants' opinions (continuous) as moderators and the character's gender as a covariate. We found a significant interaction between the participants' attitudes and those of the characters, such that they liked more those who had similar opinions (b = -0.72, SE = 0.25, p = .005). Similar to what we reported above, in the condition in which the characters were prorefugees, the facial features had a significant effect when the participants' attitudes were at the mean (b = -0.55, SE = 0.22, p = .013) or one standard deviation above the mean (meaning they were prorefugees; b = -0.74, SE = 0.30, p = .015). When the characters were antirefugees, the facial features had a marginally significant effect when the participants' attitudes were one standard deviation below the mean (meaning they were antirefugees; b = 0.53, SE = 0.31, p = .082).

these situations. Our findings support this last suggestion, as the incongruence of facial features with political attitudes does not violate social hierarchies. Thus, our study contributes to the theory of social perception in generalizing the negative reactions to people who violate stereotypical expectations to cases in which this violation is not a violation of the social order. Specifically, it generalizes this negative reaction to cases in which a person's political attitudes violate the stereotypical expectations of his or her facial features.

In line with Maoz (2012), we demonstrated that the effects of facial features on perception occurred only when there was an agreement in attitudes between the perceiver and the target (H3). In Maoz's (2012) research, only left-wing participants were affected by the facial features of a Palestinian leader in their support for his peace proposal. A similar pattern occurred in our research, in which when there was a similarity in attitudes between the character and the participants, there was a significant effect of fit with the stereotype. The participants liked the character whose attitudes matched his or her facial features more than the one whose face was a mismatch with his or her attitudes. However, when there was a dissimilarity in attitudes, there was no significant effect of the fit with the stereotype. Note, however, that although in Maoz (2012) the participants showed greater support for the peace proposal of the politician with a baby face, in our study, the preference was not for a particular facial look but for both baby and mature faced targets, depending on their political attitudes.

Although the results generally confirm our hypothesis about the positive reaction to those whose faces are congruent with the stereotype, one should be aware of the relatively small effect of this congruency. Perhaps the target's stated attitudes led to perceiving the target person as looking more or less baby faced, thereby reducing the effect of the target's real appearance. Future research examining the effect of a person's attitudes on the perceived maturity of the face can test this possibility.

Moreover, another reading of the results should be considered. Although the three-way interaction among the political attitudes of the character and the participant and the character's facial characteristics was not significant, the pattern of results (see Table 1) might suggest that left-wing people prefer baby-face features, and right-wing people prefer adult facial features. However, when the target characters' views are antagonistic to their views, they dislike them regardless of their facial features.<sup>5</sup>

This explanation concerning the difference in the facial preferences of left- and right-wing people accords with recent research documenting the preference of conservative voters for a political candidate who "looks Republican" (Olivola et al., 2012; Olivola, Tingley, & Todorov, 2018). In both studies, Democrat politicians who looked like Republicans had a better chance of being elected by Republican voters. It also accords with a recent study documenting the preference of conservative voters for leaders with dominant faces and that of liberal voters for leaders with nondominant faces (Laustsen & Petersen, 2016). These last authors provide two theoretical explanations for their findings. First, they claim that because dominant-looking leaders are preferred in times of conflict, and conservatives tend to view society as conflict ridden, conservatives prefer leaders with dominant faces. This explanation does not fit our study, because the target characters were not political leaders but ordinary young people.

<sup>&</sup>lt;sup>5</sup> We would like to thank an anonymous reviewer for this explanation.

Second, they claim that voters associate dominant faces with conservative ideology and nondominant faces with liberal ideology, and thus they prefer leaders who share their ideology. We argue that this is especially true when the opinions of the target people are unknown. When the participants know the opinions of the target characters, this differing preference for facial appearance might stem from the match between the looks of the target person and his or her ideology. To determine which of these explanations is more plausible, future research could replicate our study using other facial features that are associated with other attitudes. If, in that case as well, congruence between the facial appearance and attitudes of the target leads to social attraction, our explanation would be strengthened.

Despite the contributions of our study, it also has limitations. It is based on only four stimuli (a man and a woman with either a baby face or a mature face) that were taken from the Web and were not manipulated by us. Thus, we cannot provide exact details about how they were altered to be baby faced or mature in appearance. Moreover, we might have obtained different results using other stimuli that differed with other characteristics, such as physical attractiveness and skin color. Similarly, the character has a Jewish Israeli name, possibly leading to greater identification among our Jewish participants than our Arab participants. Unfortunately, we did not ask our participants to indicate their ethnicity. This is not an internal validity problem, because we used the same name in all conditions, and the participants were randomly assigned to the conditions. Still, it limits our ability to generalize from the current research to other stimuli.

Similarly, the research focuses on one specific political context—the refugee issue in Israel. One could argue that, compared with other political issues in Israel, this issue is less hotly debated, which might explain the relatively modest effects we found. A more controversial issue might have resulted in more impressive effects. Moreover, the research sample, like most experiments, is not representative of the Israeli population. Specifically, the participants were relatively young, and 90.5% of them were 30 years old or younger. Thus, most of them were about the age of the target characters. This is an important factor because previous research has demonstrated that people have more facial stereotypes about those who are similar to them in age (Zebrowitz & Franklin, 2014). Lastly, we measured the participants' attitudes about the refugees using only three items. Using more items might have led to a more reliable and valid scale, but our scale still had a fair degree of reliability of 0.71.

Despite its limitations, our research not only contributes theoretically, as stated above, but may also have some practical applications. Our findings might be relevant to political campaign professionals who use the "man on the street" ads in which ordinary people express their support of a particular political leader (e.g., Parmelee, 2002). Our results demonstrate that it is important to choose people for this job whose looks match the opinions they express. The same might be true for people used as exemplars in newspapers articles. Those whose faces match the attitudes they convey might not only be perceived as more attractive, but they may also make the article itself more attractive or more credible.

Although our recommendations hold for ordinary people, the case for political leaders is more complex. In line with the current research, previous research has demonstrated that political leaders whose appearances resemble the stereotypical looks of their party have a better chance of being elected (Samochowiec et al., 2010). Other studies, however, reveal that there are also other factors that influence preferences for political leaders' looks. Olivola et al. (2012) documented that people tend to prefer political

leaders who look as if they belong to one's preferred party. More specifically, Democrat candidates who ran in Republican-leaning states received more votes the more they looked like Republicans. Moreover, within each state, Republican voters had a greater chance of voting for Democratic candidates the more they looked like Republicans (Olivola et al., 2018). Another recent study documented that in Israel left-wing politicians benefit from a mature looking face (Tal-Or & Waismel-Manor, 2018). These authors suggested that in a country under constant threat, left-wing politicians who are commonly viewed as less dominant benefit from a mature face that makes them look more dominant. Combining these results with those of our research suggests that, although politicians who are expected to be dominant sometimes benefit from a face that does not match their opinions, for the ordinary person, a match between facial appearance and opinion is preferable.

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