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The Effects of Prototypicality and Gender Salience on Liking and Friendship Potential of a
Female Interlocutor

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Abstract

Drawing on self-categorization theory, this paper examines the indirect effects of gender salience and prototypicality on friendship potential through increasing liking of a female interlocutor. We manipulated biographies of the fictitious interlocutor to change perceptions of prototypicality. For women, gender salience interacted with prototypicality to directly predict liking, and the desire to become friends with the interlocutor indirectly through liking. Specifically, there was an interaction between prototypicality and gender salience, such that as gender salience increased, the prototypical interlocutor was liked significantly more, and had higher friendship potential. For men, the same relationships did not appear. We discuss the implications of our study as well as directions for future research on intragroup communication and intergroup contexts with regards to power asymmetry.

Keywords: friendship, liking, prototypicality, salience, self-categorization, social attraction

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“Birds of a feather flock together,” while at other times, “opposites attract.” It leaves people to wonder: Are we more likely to be attracted to those who are similar to us, or those who are different in some way that complements us? These two seemingly contradictory idioms may reflect the different processes through which people are attracted to each other. In other words, we may be attracted to different types of people, based on similarity or difference, depending on the context.

The literature on interpersonal attraction has documented the important role of similarity in attraction. People tend to like those who have similar attitudes, economic status (Byrne, 1971), and personality traits (Goldman, Rosenzweig, & Lutter, 1980), among others characteristics, and avoid those who are dissimilar to them in attitudes (Singh & Ho, 2000). Yet, the research on interpersonal attraction has made one assumption: the attraction happens on the individual level, in which people see each other as distinct individuals. On the other hand, the social identity perspective suggests that, although people sometimes see both themselves and others as unique and distinct individuals, at other times, people may think about and evaluate themselves and others in terms of the social groups with which they identify (Tajfel & Turner, 1986; Turner, 1985). This psychological state in which people define themselves as members of a certain group is referred to as group salience (Palomares, 2012). When a social identity becomes salient (i.e., prominent, noticeable) through communication, attraction tends to be based on group-level dynamics (i.e., based on our social identities) rather than individual characteristics (i.e., based on our personal identities).

In general, people favor ingroup members more than members of outgroups (e.g.,

Mullen, Brown, & Smith, 1992). Of course, that does not mean that people never like members of outgroups, but the group-level dynamics of attraction are different in intra- and intergroup contexts. In *intragroup* communication, people like ingroup members who demonstrate the positive attributes that define their group—in other words, group *prototypes* (Hogg, 2006). Group members that are not prototypical are liked less (Hogg, 2001). In *intergroup* communication, people sometimes favor outgroup members who are similar to their ingroup's prototypes (Mastro, Tamborini, & Hullett, 2005). At other times, people favor outgroup interlocutors who are consistent with interlocutors' own group prototypes and roles (Mastro, Atwell Seate, Blecha, & Gallegos, 2012). These seemingly inconsistent results reflect that the rules of intergroup liking are not fully understood.

In our study, we seek to extend the literature on intra- and intergroup attraction, by examining the simultaneous and interactive effects of group salience and interlocutor prototypicality on liking and willingness to make friends in both intragroup and intergroup contexts. Whereas there is support that prototypes are related to attraction (e.g., Hogg & Hardie, 1992), we will be refining our understanding by looking at additional constructs such as group salience, and linking it explicitly to concrete behavioral intentions such as friendship formation. This step is extremely important if we want to obtain a more complete picture of the mechanisms of group-level social attraction.

Each individual belongs to numerous social and demographic groups, and as a result have multiple social identities (Tajfel & Turner, 1986). Gender identity is one of the most important and fundamental social identities, because it is developed at the early stage of life, can be accessed both temporarily and chronically, and plays a crucial role in daily communication (Palomares, 2012). Investigating gender identity can provide valuable insights into the broader

intragroup dynamics. Moreover, as we will explain later, gender identity yields a unique and important understanding of intergroup dynamics, by providing insight into contexts where there are issues of power asymmetry at play. It also should be noted that we only include a female interlocutor in our study design, yielding an intragroup context for women, and an intergroup context for men. Hence, our intergroup context provides insight into situations where high-status group members evaluate low-status group members.

Intragroup: Interlocutor Prototypicality and Group Salience

Identifying with a group is psychologically powerful (Tajfel & Turner, 1986), and the desire to do so is driven in part by an innate human need to belong, to feel positive about ourselves, and to reduce uncertainty about the world (Reid & Hogg, 2005). As a result, people tend to like and affiliate more with members of their ingroups (Turner, 1985). However, there are a number of conditions for this affiliation to happen.

In order for ingroup favoritism to function, people must be aware of that social group membership. This group salience is oftentimes contextual and may be dependent on specific social situations or conversation topics (e.g., Palomares, 2009). Once a group identity is salient, people become involved in a process of depersonalization, in which they see themselves as interchangeable group members rather than unique individuals (Hogg, 2006; Turner, 1985). It is this group-level awareness and resulting cognitions that often lead to ingroup favoritism (Mullen et al., 1992). In other words, defining themselves as members of a group lead people to base their evaluation on this group membership, and like those who belong to the same group. The more people are depersonalized, the more they tend to like ingroup members. Therefore, in the context of intra-gender communication, we hypothesize that,

H1: For women, gender salience positively predicts liking toward the female interlocutor.

However, group salience is not sufficient for people to favor *all* ingroup members. The social attraction hypothesis (Hogg & Terry, 2000) suggests that, when group identity is salient, people evaluate ingroup members in terms of group prototypes (Hogg, 2006). The perception that other ingroup members conform to ingroup prototypes is at the core of the aforementioned ingroup favoritism (Schmitt & Branscombe, 2001). In other words, when group identity is salient, the attraction between ingroup members is based on their similarity to group prototypes, rather than similarity to each other (Hogg, Hardie, & Reynolds, 1995). This is because the salient group identity accentuates group prototypes, which define the ingroup and differentiates it from the outgroup (Hogg & Hains, 1996). A prototypical interlocutor confirms and reinforces the group identity, and thus is liked more than a non-prototypical interlocutor. For example, Hogg and Hardie (1992) found that when group salience was high (versus when it was low), people's attraction toward ingroup members was based on the perceived prototypicality of those members (i.e., social attraction) rather than on idiosyncratic preferences (i.e., personal attraction). Put differently, when group identity was salient, people were attracted to prototypical ingroup members. When group salience was low, people were attracted to those who possessed their favorable individual characteristics. Also, Schmitt and Branscombe (2001) found that men who thought their gender identity was important (i.e., high identification) favored prototypical men and disliked non-prototypical men, especially when their own masculinity was challenged, thereby making gender identity especially salient. Summarizing the discussion above, we propose that group salience interacts with interlocutor prototypicality to predict people's evaluation of an ingroup member. Specifically,

H2: For women, gender salience and interlocutor prototypicality interact to predict liking, such that the more salient gender is, the more liking women have toward the prototypical, as

compared to the non-prototypical, female interlocutor.

Moreover, such evaluation has implications regarding group behavior. Whereas prototypicality may lead to attraction and affiliation, deviance from ingroup prototypes not only leads to unfavorable attitudes, but also ingroup censorship (Hogg, 2001), marginalization (Abrams & Hogg, 2010), social ostracization, and rejection (Marques & Paez, 1994), because a non-prototypical member harms the validity of ingroup norms (Abrams & Hogg, 2010). The interpersonal attraction literature has investigated the relationship between liking and friendship (Bukowski, Motzoi, & Meyer, 2009). On the other hand, the literature on cross-group friendship suggests that friendship choice can be, and are, affected by social identities (e.g., race), such that people favor ingroup friends (e.g., Moody, 2001). However, the extant literature has yet to integrate these two lines of research to examine the interacting effects of identity salience and prototypicality, on friendship formation through evaluations of the interlocutor. In light of this, we wish to push the social attraction hypothesis forward by examining this novel effect. Specifically, we propose that,

H3: For women, gender salience and interlocutor prototypicality interact to predict friendship potential indirectly through increasing liking toward the female interlocutor.

Group salience can be activated in various ways, one of which is through conversation topics that are stereotypically associated with group characteristics. For gender salience in particular, researchers have used gender-stereotypic conversation topics to experimentally manipulate gender salience. Specifically, when participants were discussing a feminine (e.g., shopping) or masculine topic (e.g., cars), they tended to think and behave in accordance with their gender, compared to when they were discussing a gender-neutral topic (e.g., places-to-eat; Palomares, 2009). In our study, we are also using gender-stereotypic conversation topics to

activate gender salience for both men and women. Our study extends the research by Palomares (2009) in two distinct ways. First, we examine both intra-gender and inter-gender dynamics (rather than solely examining the intergroup implications). Second, we focus on evaluations and social affiliation (rather than language use). To examine the effects of conversation topics on gender salience, and on liking through gender salience, we ask the following research question:

RQ1: Does gender salience mediate the effects of conversation topics on liking toward the female interlocutor for women (a) and for men (b)?

In Figure 1, we present the full model for women communicating with a female interlocutor (i.e., inter-gender context), integrating the three hypotheses and the research question above. In our model, conversation topics lead to different levels of gender salience, which, interacting with interlocutor prototypicality, predicts liking, and friendship potential through liking toward the female interlocutor.

It is important to note that we included only a female interlocutor (being prototypical or non-prototypical) in our design, therefore examining the woman-to-woman, but not man-to-man intragroup context. Yet, theoretically the model presented above should hold for the man-to-man intragroup communication as well—gender salience and interlocutor prototypicality would interact to predict liking, and friendship potential through liking. This is because we derived our hypotheses from the self-categorization theory and the literature on social attraction, which provide sound theoretical rationale and research evidence that the hypothesized relationships would be symmetric if a male interlocutor were included (e.g., Hogg & Hardie, 1992; Schmitt & Branscombe, 2001). The same argument, however, cannot be made for the intergroup context, which will be discussed below.

Intergroup Context: Two Competing Theoretical Arguments

The relationships in the model proposed above may become more complicated in intergroup communication. For gender identity in particular, two competing arguments exist in the literature. On one hand, people usually favor those who are similar to them or to their ingroup prototypes (Mastro et al., 2005). On the other hand, some research on gender-related communication accommodation shows that people do not always expect, or necessarily want, others to converge to their own gender prototypes (Reid, Keerie, & Palomares, 2003). Instead, they often expect the interlocutor to be consistent with the prototypes of the interlocutor's gender group, even when those attributes violate their ingroup prototypes. We discuss these two competing theoretical propositions below.

People may favor an outgroup interlocutor who is non-prototypical of the interlocutor's group, especially when that non-prototypicality results in greater convergence to their ingroup prototype (Marques, Abrams, Paez, & Martinez-Taboada, 1998). For example, research found that Whites favored African American celebrities who endorsed White prototypes rather than African American prototypes, especially when race was not salient (Mastro et al., 2005). Therefore, in our study, we might expect male participants to manifest liking toward a non-prototypical woman, who embodies the prototypes of men rather than women.

However, communication accommodation theory argues that convergence does not always lead to social attraction and liking (Gallois, Ogay, & Giles, 2005). In a study testing gender-based communication accommodation, Reid, Keerie, and Palomares (2003) found that men were more influenced by a female communicator when she was more tentative, a characteristic associated with female prototypes. This effect only existed when student identity, rather than gender identity was salient. Also, in a study on the evaluations of sports commentators, the commentators were more likable when their gender matched with the gender-

stereotypical sports than when there was a mismatch (e.g., female commentator reports on WNBA versus football; Mastro et al., 2012). Therefore, in our case, we might instead expect that male participants would like a prototypical rather than non-prototypical female interlocutor.

It is important to consider that the aforementioned contradictory findings were only obtained when identity salience was low or unspecified. Aware of these two competing arguments about the relationship between prototypicality and liking of an outgroup member, and the unclear role of identity salience in this relationship, we pose the following research question:

RQ2: For men, what are the roles of interlocutor prototypicality and gender salience on liking toward the female interlocutor?

Last, we argue that liking still predicts the friendship potential of the female interlocutor, regardless of the roles of gender salience and prototypicality on liking. This is consistent with the interpersonal attraction literature, which has found that affective attraction such as liking can lead to friendship (Bukowski et al., 2009), except that now we are focusing on the group-level, rather than individual-level processes. Therefore,

H4: For men, liking of the female interlocutor predicts willingness to make friends with her.

One thing needs to be noted about the hypothesis and research question above. Previous research on gendered communication using self-categorization theory has found symmetric intergroup dynamics for men and women (e.g., both men and women became more tentative when their gender was considered non-expert in the conversation topic; Palomares, 2009). Therefore, one might argue that the results for RQ2 would also hold for women communicating with a (prototypical or non-prototypical) male interlocutor, and that the results could be generalized to other social identities and intergroup contexts as well. Yet, Palomares' study

demonstrated symmetric pattern of self-focused communicative behavior (i.e., tentative language use), whereas our study examines relational evaluation and behavior (i.e., liking and willingness to make friends). In other words, evaluation is a process that has to do with how we see the other, whereas language use reflects how we express ourselves. While these are likely interrelated in the real social interactions, they may still involve different processes. Therefore, we need to take into account the relational dynamics between the two gender groups when examining intergroup evaluations.

Gender is a special social identity because the two gender groups have unequal status—men typically have more power and privileges than women do (Sen, 2001), and the two competing arguments presented above may reflect the ambivalent expectations men tend to have toward women, who have lower status and power in society (Glick & Fiske, 2001). A parallel example of such power dynamics in intergroup relationships is how Asian Americans have been stereotyped in the U.S. Asian Americans are called the “yellow peril” because they are a cultural and economic threat to the mainstream U.S. culture, but at the same time considered the “model minority,” evaluated seemingly positively for their efforts to strive for a better social status (Kawai, 2005). The dominant group’s double notions of the low status group may lead to ambivalent, contradicting expectations toward the latter—a dialectic between converging to the dominant group and remaining in the own (low-status) group. This dialectic is also reflected in the research discussed above, which presents different contexts that involve a dominant group and a non-dominant group: Whites vs. African Americans (Mastro et al., 2005) and men vs. women (Reid et al., 2003). Therefore, we argue that the two competing expectations can be found in intergroup contexts where a high-status group is evaluating a low-status group. In other words, we do not seek to generalize the results of RQ2 to all social identities, but only to the

judgments by the dominant group of the subordinate one.

In summary, our study seeks to replicate and expand research and theory on social attraction (e.g., Hogg & Terry, 2000) and gendered communication (e.g., Palomares, 2009) by making three unique contributions. First, we manipulate the prototypicality of the interlocutor rather than measuring it (as it was done in previous research), to avoid the influence of confounding factors. Second, we extend the social attraction hypothesis from intragroup evaluations to both intergroup and intragroup settings by examining a novel identity—gender. This is important, because gender identity is chronically salient, and plays a major role in our daily communication patterns (Palomares, 2012). Gendered expectations have been understudied in past literature, and the findings are inconsistent (Mastro et al., 2005; Reid et al., 2003). Additionally, gender identity yields unique intergroup dynamic related to society-based power difference. Finally, we seek to expand the social attraction literature by looking at how liking relates to social affiliation such as friendship formation. Although seemingly obvious, this relationship remains untested in the literature of social attraction, and is relevant to the continuing group dynamics involved in social judgment.

Method

In our study, participants were exposed to an experimentally manipulated depiction of a female interlocutor. These conditions varied by the degree to which the interlocutor fit female prototypes (see details below). We also asked participants to write back to the fictitious female interlocutor on a variety of conversation topics that we believed would elicit different levels of gender salience, and measured participants' subjective evaluations of their own gender salience. We wish to note that the data being used in this paper were collected as part of a larger study examining the effects of these conversation topics and prototypicality on tentative language use,

which is published separately. However, the measures of the dependent variables (liking and friendship potential) were not used in any previous analysis.

Pilot Study

We conducted a pilot study to ensure that our manipulation of a prototypical or non-prototypical female interlocutor was successful. Participants were recruited through an online research system at an east coast university in the United States. Undergraduate students who took a communication course signed up for the study, and earned extra credit for participation in the study. Participants were in the same population as the main study and outside of the experimental sample ($N = 368$, 63.6% female). They identified themselves as Caucasian (57.6%), Asian/Pacific Islanders (17.9%), African American (13.3%), Latino/Hispanic (5.2%) and other (6%). Participants were, on average, 19 years old ($M = 19.05$, $SD = 2.51$).

Participants were randomly assigned one of the two biographies of a fictitious interlocutor named Christina, who described how she would spend a perfect day. In the prototypical condition, Christina described shopping for cute outfits to add to her collection and watching an emotional *Lifetime* movie, whereas in the non-prototypical condition, Christina described shopping for a new sports jersey to add to her collection and watching an interesting *ESPN* documentary. Then, participants responded to a 5-item measure of perceived prototypicality. They were asked to rate on items: “How typical is Christina as a woman?” “How feminine is Christina?” “How representative is Christina of her gender group?” “To what extent does Christina represent women?” and “How similar is Christina to other women?” on a 7-point scale, where higher scores represented higher gender prototypicality. Because the second item had relatively low correlations with the other items, it was deleted from the measure. The 4-item measure of prototypicality was highly reliable, Cronbach’s $\alpha = .89$, so we averaged the ratings of

the four items.

Results of independent-samples t-test showed that the biography of the prototypical woman ($M = 4.60$, $SD = 1.24$) was significantly different than the biography of the non-prototypical woman ($M = 3.60$, $SD = 0.94$) in terms of perceived gender prototypicality, $t(358) = 8.82$, $p < .001$, when equal variances were not assumed ($F = 12.25$, $p < .001$); Cohen's $d = 0.91$. Because the difference between the two biographies was statistically significant, and a Cohen's d of 0.91 is regarded a large effect size (Cohen, 1988), our manipulation of gender prototypicality of the two biographies was successful.

Participants

Among the 318 participants who completed the main study, five were deleted because of errors in operation (e.g., not completing the study; $N = 313$; 59.1% female). Participants identified themselves as Caucasians (51.8%), Asian/Pacific Islanders (17.9%), African Americans (15.6%), Latino/Hispanic (7.7%), and other (7.0%). The average age was 19 years old ($M = 19.14$, $SD = 1.42$). None of the participants reported a mismatch between gender and biological sex.

Procedures

Participants filled out an online questionnaire that asked them to write a paragraph of how to spend a perfect day. The paragraph they wrote was not used, but was intended to increase the credibility of the paragraph they read in the second part of the study. Then they were contacted through email and were scheduled to participate in the second part of the study at least one week after the first portion. After participants came to the research center, they were randomly assigned one of the two interlocutors. Participants were told that the study aimed at examining college students' online communication behavior, and that they were going to write

an email to another participant on a topic assigned to them. Next, participants read a paragraph about how to spend a perfect day, and they were told the paragraph was written by their interlocutor. The paragraph depicted either a prototypical or non-prototypical woman.

Participants then wrote an email to their interlocutor on one of three randomly assigned topics: cars, shopping, or food. Last, participants indicated their evaluations toward the interlocutor, including liking and friendship potential. Participants were not led to believe that they would actually meet the female interlocutor.

Measures

Gender salience. The measure of gender salience was adapted from previous research (Palomares, 2009). After writing the email, participants indicated their agreement with ten 7-point Likert-scale items on how salient their gender was when they were writing the email. Some examples are: “While typing my email, I was thinking about being a male or a female,” and “While typing my email, I thought my gender came into play.” The measure had high reliability (Cronbach’s $\alpha = .93$). An average score was computed for each participant ($M = 3.75$, $SD = 1.68$).

Because we used conversation topics to induce gender salience, it is important to show that *only* the conversation topics affected gender salience, and that gender salience did not differ across participant gender or interlocutor prototypicality for the three conversation topics. We ran a full factorial three-way ANOVA using conversation topics, participant gender, interlocutor prototypicality, and their respective interactions to predict gender salience. The model was significant in predicting gender salience, $F(11, 312) = 22.32$, $p < .001$, adjusted $R^2 = .43$. Conversation topics had a significant effect on gender salience, $F(2, 312) = 112.20$, $p < .001$. None of the other two independent variables and the interaction terms significantly predicted

gender salience. Therefore, we can conclude that conversation topics successfully induced gender salience, and this effect was undifferentiated across participant gender and interlocutor prototypicality.

Liking. Liking toward the fictitious female interlocutor was measured using a scale from Jayanti and Whipple (2008). Participants were asked to rate four items: “How likable/pleasant/nice/interesting is your partner?” on a 7-point scale, where higher scores indicated higher liking. Because the measure was reliable (Cronbach’s $\alpha = .82$), we averaged the scores to yield a liking score for each participant ($M = 5.04$, $SD = 0.86$).

Friendship potential. The friendship potential measure has four items. Two of the items were taken from interpersonal social attraction scale (McCroskey, McCroskey, & Richmond, 2006): “I think my partner could be a friend of mine” and “I could become close friends with my partner” (1 = Strongly Disagree, 7 = Strongly Agree). The other two items were created by the researchers: “How willing are you to become friend with your partner? (1 = Not Willing At All, 7 = Very Willing)” and “How alike is your partner to your current friends? (1 = Very Unlike, 7 = Very Alike).” The measure was reliable (Cronbach’s $\alpha = .80$), and an average score was computed for each participant ($M = 4.08$, $SD = 1.16$).

Results

To test the hypotheses and answer the research questions, we ran the structural models for men and women separately in Mplus 7.0 (Muthén & Muthén, 1998-2012) using the standard deviations and correlation matrices of the variables. Because there were three conversation topics, there were two effects that they could possibly have on gender salience: linear and quadratic (i.e., nonlinear). To test both of these effects, we recoded the conversation topics into two orthogonal polynomials: topics linear (-1 = gender-neutral topic, 0 = masculine topic, 1 =

feminine topic) and topics quadratic (-1 = gender-neutral topic, 2 = masculine topic, -1 = feminine topic), to represent the linear and quadratic effects of the three conversation topics.

Gender prototypicality of the female interlocutor was coded as: 1 = the prototypical interlocutor, 0 = the non-prototypical interlocutor. Moreover, we created the interaction term of gender salience and interlocutor prototypicality by multiplying the mean-corrected gender salience and mean-corrected prototypicality separately for women and women, to reduce the potential multicollinearity between the predictors.

Model Fitting For Women

First, we ran the model only for women ($n = 185$). Specifically, we entered the model, in which topics linear and topics quadratic predicted gender salience, the two topic variables, gender salience, prototypicality, and the gender salience-prototypically interaction term predicted liking, and liking predicted friendship potential. The model did not have good fit, $\chi^2 = 26.77$, $df = 7$, $p = .0004$; RMSEA = .12, CFI = .89, SRMR = .06. The model results suggested that topics quadratic was not significant in predicting either gender salience or liking. This means that conversation topics (when in the order of gender-neutral, masculine, and feminine) only had a significant linear effect on the outcomes, and the quadratic term could be discarded. Moreover, the modification indices suggested that a path could be added from prototypicality to friendship potential. It is possible that prototypicality of the interlocutor is associated with social norms that affected friendship potential beyond liking (Felmlee, 1999). Also, the theory of reasoned action suggests that many behavioral intentions are predicted by evaluations as well as subjective norms (Fishbein & Ajzen, 2010), and prototypes may serve as the latter. Therefore, we believe that adding this path is justified.

We reran the model, removing the quadratic topic variable, and adding the path of

prototypicality predicting friendship potential. The revised model had good fit, $\chi^2 = 5.16$, $df = 5$, $p = .40$; RMSEA = .01, CFI = .999, SRMR = .03. Overall, the model was significant in predicting gender salience, estimated $R^2 = .41$, $SE = .06$, $p < .001$, was marginally significant in predicting liking, estimated $R^2 = .07$, $SE = .04$, $p = .056$, and was significant in predicting friendship potential, estimated $R^2 = .35$, $SE = .06$, $p < .001$.

Hypothesis testing and research question. We hypothesized that gender salience positively predicts liking toward the female interlocutor (H1). Moreover, gender salience and prototypicality were hypothesized to interact to predict liking (H2), and friendship potential through liking (H3). We also asked whether gender salience mediates the effects of gender-stereotypic conversation topics on liking (RQ1a).

The model results showed that topics linear was significant in predicting gender salience, $b = 1.29$, $SE = 0.11$, $p < .001$. Based on the way topics linear was coded, this result suggested that the feminine topic induced the strongest gender salience, followed by the masculine topic and the gender-neutral topic. The effect of gender salience on liking was only marginally significant, $b = 0.09$, $SE = 0.05$, $p = .057$. H1 was not supported. However, the interaction between gender salience and prototypicality was significant in predicting liking, $b = 0.17$, $SE = 0.07$, $p = .021$, which supported H2.

To interpret the interaction effect, we used the PROCESS macro (Hayes, 2013) in SPSS to examine whether the slope was significant at either level of the moderator. Specifically, we used model 1 with 5,000 bootstrap samples, entering topics linear as the covariate, gender salience as the independent variable, prototypicality as the moderator, and liking as the dependent variable. The conditional effect of gender salience on liking showed that gender salience significantly predicted liking when the interlocutor was a prototypical woman, $b = 0.18$,

$SE = 0.06$, $p = .004$, but was not significant in predicting liking when the interlocutor was a non-prototypical woman, $b = 0.009$, $SE = 0.06$, $p = .88$ (see Figure 2). When the same interaction was decomposed differently (i.e., prototypically as the independent variable, gender salience as the moderator, and liking as the dependent variable), results showed that when gender salience was low (i.e., one SD below of the mean) or moderate (i.e., at the mean), the liking toward the prototypical interlocutor did not differ from the liking toward the non-prototypical interlocutor, $b = -0.17$, $SE = 0.18$, $p = .33$ and $b = 0.11$, $SE = 0.13$, $p = .37$, respectively. However, when gender salience was high (i.e., one SD above the mean), women liked the prototypical interlocutor more, $b = 0.40$, $SE = 0.18$, $p = .03$.

Moreover, both liking ($b = 0.72$, $SE = 0.09$, $p < .001$) and prototypicality ($b = 0.73$, $SE = 0.15$, $p < .001$) significantly increased friendship potential. Based on these results and the model fit indices, H3 was supported. Moreover, RQ1(a) was answered—gender salience did mediate the effects of conversation topics on liking toward the interlocutor. The computational model for women, including the unstandardized path coefficients and their significance levels, can be seen in Figure 3.

Model Fitting for Men

Next, we fit the original model to the male sample data ($n = 128$), in which topics linear and topics quadratic predicted gender salience, the two topic variables, gender salience, prototypicality, and the gender salience-prototypically interaction term predicted liking, and liking predicted friendship potential. The model had good fit, $\chi^2 = 4.55$, $df = 7$, $p = .72$; RMSEA $< .001$, CFI = 1.00, SRMR = .03. No modification indices were above the minimum value (3.84). The model was significant in predicting gender salience, estimated $R^2 = .47$, $SE = .06$, $p < .001$, was not significant in predicting liking, estimated $R^2 = .05$, $SE = .04$, $p = .167$, and was

significant in predicting friendship potential, estimated $R^2 = .44$, $SE = .07$, $p < .001$.

Hypothesis testing and research questions. Both topics linear ($b = 1.32$, $SE = 0.15$, $p < .001$) and topics quadratic ($b = -0.33$, $SE = 0.08$, $p < .001$) significantly predicted gender salience. But because gender salience was not significant in predicting liking toward the female interlocutor, we could not claim that gender salience mediated the effects of conversation topics on liking. RQ1(b) was answered. Moreover, other than topics linear ($b = -0.24$, $SE = 0.12$, $p = .047$), none of the other variables (topics quadratic, prototypicality, and the interaction term) significantly predicted liking, which answered RQ2. Regardless, liking still had a positive effect on friendship potential, $b = 0.95$, $SE = 0.10$, $p < .001$. H4 was supported. The computational model for men can be seen in Figure 4.

We were also interested in whether the direct path from prototypicality to friendship potential observed in the female sample would also work for males. We reran the model adding this path. Although the model still had good fit, this path was not significant. Previous research has shown that men and women attach different levels of importance to different social norms in both same- and cross-gender friendships (Felmlee, 1999), so this non-significant result for men was reasonable. Therefore, we retained the model shown in Figure 4.

Discussion

The results of our study were consistent with the self-categorization theory (Turner, 1985), and expanded theory and research on social attraction (e.g., Hogg & Terry, 2000) and gendered communication (e.g., Palomares, 2009). Within the realm of gender identity, we demonstrated the effects of group salience and interlocutor prototypicality on identity-based evaluation (i.e., liking) and behavioral intention (i.e., friendship potential) toward the interlocutor in both intragroup and intergroup settings. The results found that for women (i.e., intragroup

context), interlocutor prototypicality interacted with gender salience to predict liking, and friendship potential through liking, of the female interlocutor. In other words, women liked the prototypical female interlocutor and were more willing to make friends with her, as gender salience increased. Moreover, interlocutor prototypicality directly predicted friendship potential. Interestingly our results for intergroup evaluations did not follow the same pattern, for several potential reasons we will discuss below.

Ingroup Favoritism

Self-categorization theory suggests that when people categorize themselves and the interlocutors into social groups, their relevant group identity, rather than personal identity, influences how they evaluate others (Turner, 1985). Essentially, people will exhibit ingroup favoritism by showing stronger liking toward ingroup members when the relevant group identity is salient compared to when it is not salient. However, in our study, gender salience alone did not predict liking and friendship potential with the ingroup interlocutor. We did find an interaction between salience and prototypicality, such that in intra-gender communication, gender salience predicted liking and friendship potential through liking, only when the interlocutor was a prototypical ingroup member. Although we should use caution when interpreting the null result, our finding of the significant interaction and lack of main effect of gender salience may indicate that there are more complexities behind the phenomenon of ingroup favoritism. Specifically, identity salience is not enough to ensure liking toward ingroup members, but rather create a new set of criteria by which individuals are judged. The prototypicality of the ingroup member reaffirmed the group identity, which was salient at that moment. Therefore, the nonsignificant result for the first hypothesis actually makes sense—a prototypical interlocutor, along with group salience, might be necessary for ingroup favoritism to happen.

Moreover, previous research on social identities has shown that for the effect of prototypicality to happen, people need to identify strongly with the group (e.g., Schmitt & Brancombe, 2001). Yet, identification with a group is a relatively stable characteristic, whereas group salience is more changeable with the communicative context. A person can be highly identified with a specific group, but it does not necessarily mean that he or she is always thinking of him or herself as a member of this group, rather than as an individual or a member of other groups. Only when this group identity is pronounced *at the moment* can the prototypicality of the interlocutor influence people's subsequent judgment and evaluations toward her. This underscores the importance of investigating the communicative context in understanding group-based evaluations and behavior.

Intragroup Social Attraction

Our findings also advance Hogg's notion of social attraction (i.e., ingroup attraction based on prototypicality when group is salient; Hogg & Hains, 1996; Hogg et al., 1995) in three ways. First, we manipulated the prototypicality of the fictitious interlocutor using two biographies, rather than measuring perceived prototypicality. Self-categorization theory has suggested that group salience may increase the perceived prototypicality of ingroup members (Turner, 1985), so using measured prototypicality can possibly confound prototypicality with gender salience. However, this is not the case in our study—gender salience did not differ across the two levels of prototypicality,¹ suggesting that the two constructs were not confounded with each other.

Second, after conversation topics induced gender salience, we assessed the individual-level gender salience rather than using the salient versus non-salient dichotomy in our analysis. Self-categorization theory suggests that group salience depersonalizes people, an individual-level

psychological process that installs group, rather individual, as the social focus and actor (Turner, 1985). In other words, even when the context facilitates group salience, to what degree group identity is at play (i.e., how much a group member is depersonalized) should differ from individual to individual. It is this subjective gender salience, rather than the categorization by researchers, that directly affects men and women's identity-related attitudes and behavioral intention.

Interestingly, the effects of conversation topics on gender salience differed for the two gender groups. Overall we see that the quadratic term was statistically significant for men, but not for women, and the linear term was significant for both groups. Given how the quadratic term was coded and the sign of the coefficient, this indicates that for men the slope between the neutral topic and masculine was less steep than the slope between the masculine topic and feminine topic. Whereas for women, the significant linear term indicates equivalent slopes between the topics. We believe that this could exemplify how gender salience works differently in the dominant group (i.e., men) from the non-dominant group, such that compared to women, men think less about their own gender when the topic is masculine, because the masculine topic is taken as the "default" in daily conversations (McIntosh, 1988). This difference in functional form is an important one for both theory and future research as it underscores the different psychological processes at play for dominant and non-dominant social groups. This finding also verifies the importance of using measured gender salience in our model—a large amount of variance would be lost if we simply treated the masculine and feminine topics as the high salience condition, and the neutral topic as the low salience condition.

Third, we look beyond the evaluations toward the interlocutor, and examine the potential behavioral implications for both intragroup and intergroup contexts, providing a more complete

picture for the social attraction literature. In the intragroup setting, interlocutor prototypicality and group salience interacted to predict friendship potential indirectly through liking. When people categorize themselves as group members, they are more willing to make friends with someone in the group who is closer to the group prototypes—someone who has the characteristics that are accepted, shared, and favored by group members, and are used to distinguish the ingroup from other groups. This prototype-based friendship potential may have the function of making a more homogenous and high solidarity group, in which prototypical members have more ingroup connections, whereas deviant members are marginalized. One of the core functions of social identity is belonging (Tajfel & Turner, 1986), and what our findings suggest is that identity salience may activate a desire to form social relationships with individuals who are representative of the group, as a potential byproduct of that need for belonging becoming more salient. While we did not measure this need directly in our study, it does suggest an interesting avenue for further research.

Furthermore, it is important to note that prototypicality had a direct positive effect on friendship potential in the intragroup context, meaning that people were more willing to friend the prototypical ingroup interlocutor. This result was unexpected, but can be easily explained—there may be factors, such as social norms, that affect friendship formation beyond liking toward the person (Felmlee, 1999). It is possible that the biography of the prototypical female contained features that are more “friendable” for women, for example, the emotional support that the interlocutor was able to provide. The same path was not found in the intergroup context. One possible reason is that men and women may pay attention to different social norms (including prototypes) in friendships (Felmlee, 1999). Of course, these speculations await further research.

Inter- versus Intragroup Evaluations

Perhaps the most interesting contribution of our findings is that they expand on, and demonstrate the interplay between two lines of research: Hogg's work on social attraction and Palomares' work on inter-gender communication, by showing that the roles of prototypicality and gender salience on liking and friendship potential in inter-gender setting is not simply the opposite to intra-gender effects. There is research with conflicting findings in the literature on whether people from a dominant group like non-dominant outgroup members that are prototypical or non-prototypical (e.g., Mastro et al., 2005; Reid et al., 2003). It may be tempting to conclude that the inconsistency is due to different types of social identities. Yet, the null effects for men in our study suggest that the underlying process may be more complex: Two opposing motivations may be in effect simultaneously when a dominant group member is evaluating a non-dominant outgroup member. On one hand, men may favor a female interlocutor who endorses male gender prototypes, and is more masculine. On the other hand, they may like a woman who converges to female gender prototypes, and is more feminine. These two opposite forces may have produced the null effects that we observed regardless of the degree of gender salience, reflecting the ambivalent expectations that men (dominant group) have toward women (non-dominant group). Yet, our speculation about the null effects cannot firmly answer the research question. Future research should test these two motivations, how they combine to affect liking toward a low-status outgroup member, and under what conditions (e.g., when people's dominant group identity is threatened) is each of the motivations more influential than the other.

It should again be noted that unlike previous research on gender salience and language use, which presented a symmetric behavioral pattern for men and women (Palomares, 2009), in our study we would not expect the same pattern to emerge if women were to evaluate a prototypical or non-prototypical male interlocutor. In other words, the contradicting expectations

that we speculate are restricted to intergroup contexts in which a high-status group member is evaluating a low-status group member, employing double standards that allow them to strategically evaluate other groups to serve their need for self-enhancement (e.g., Kawai, 2005).

Our study has its limitations. First, we only included a fictitious female interlocutor, yielding intra-gender context only for women and inter-gender context only for men. Therefore, it was impossible to compare men and women in the exact same context. Future research can use interlocutors of all genders to assess the relationships tested in our study. Second, we only examined one type of social identity, gender identity. Although gender is a social identity that is extremely important in communication (Palomares, 2012), is relatively understudied, and is special because of its status differential, the question remains whether the findings of our study can be generalized to other social identities. Third, our model of the intragroup context was only marginally significant in predicting liking. It may be due to the relatively small sample size because we ran the model separately for women and men. Alternatively, there may be other crucial group-level factors predicting liking that we did not examine in our study. Future research should consider other possible group-level predictors to better predict liking toward the interlocutor.

Our study provides an important replication and extension of social identity research on social attraction and intergroup evaluation, and applies it to an important and chronically accessible social identity that is both incredibly influential and special in people's daily communication. Our findings suggest a theoretically consistent role of social attraction within groups, that salient identities lead to social judgments based on group prototypes and that these judgments play a significant role in affiliation and building social networks. Our findings also highlight how little is understood of this process between groups, and how the currently

inconsistent findings may need further theoretical development to obtain a satisfactory explanation.

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Footnote

¹ An independent-samples t-test was conducted to examine the difference of gender salience across the two levels of interlocutor prototypicality. The result was not significant, $t(183) = -1.68, p = .094$.

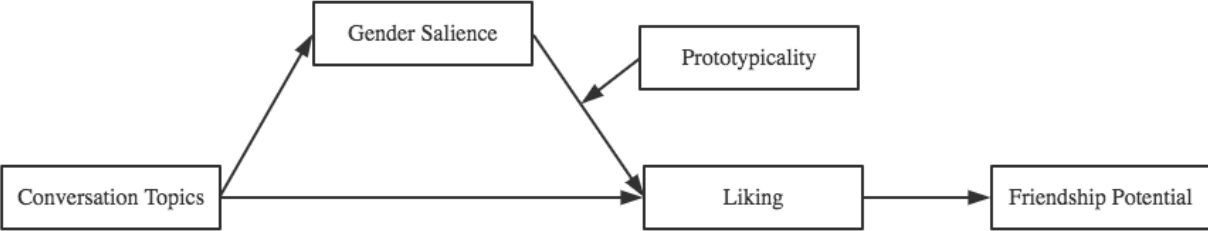


Figure 1. Conceptual model for women.

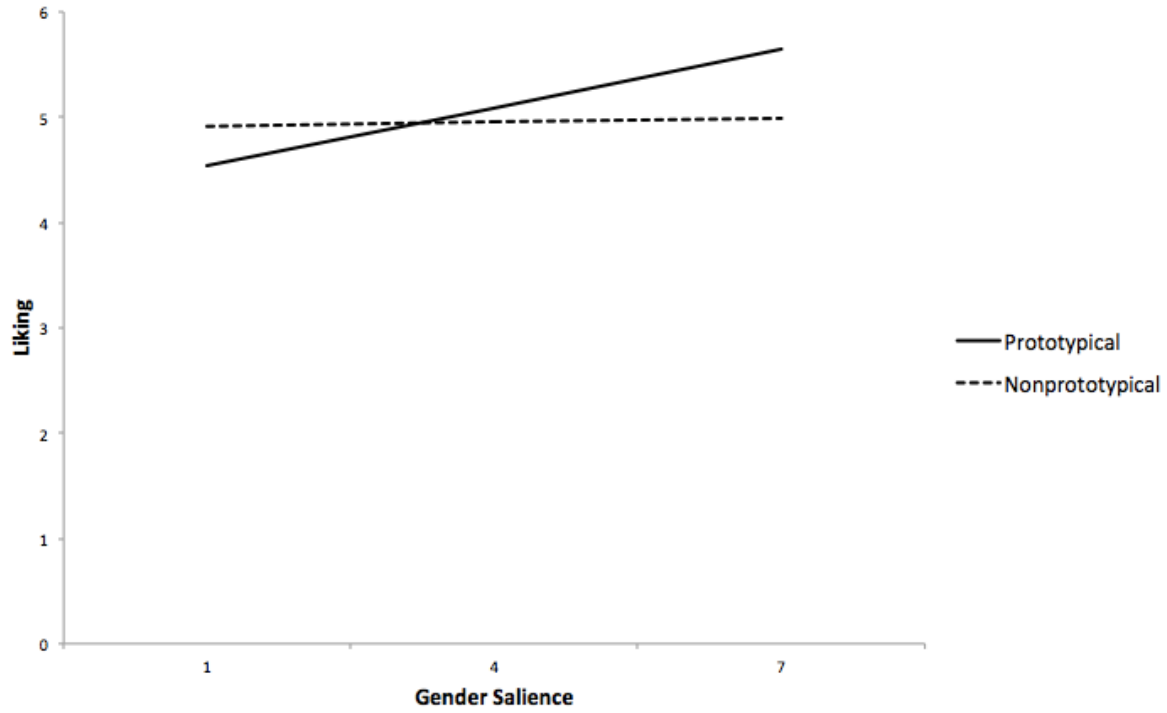


Figure 2. Gender salience and interlocutor prototypicality interacted to predict women’s liking toward the interlocutor. Gender salience predicted liking when the interlocutor was a prototypical woman, but did not significantly predict liking when the interlocutor was a non-prototypical woman.

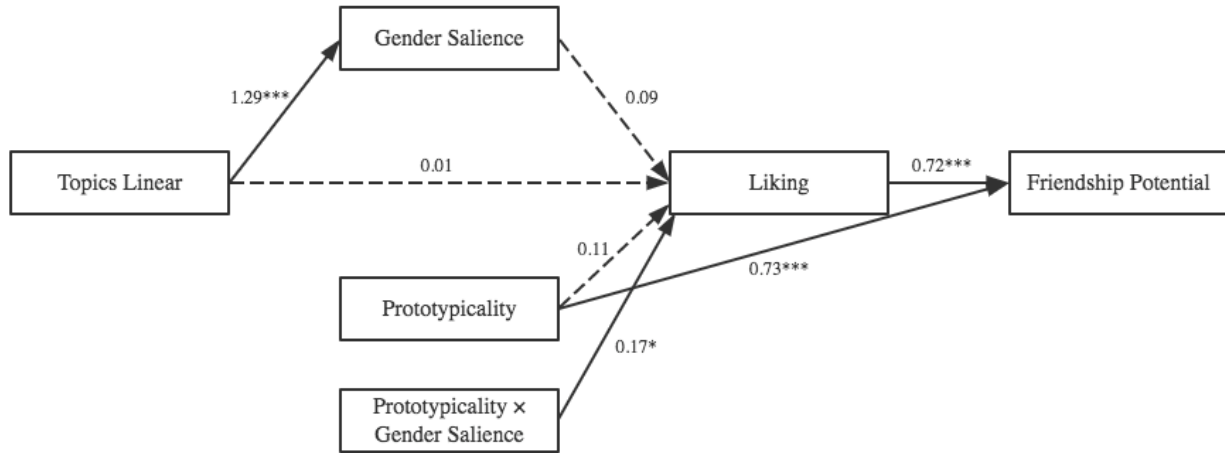


Figure 3. Computational model for women. The model fit indices were: $\chi^2 = 5.16, df = 5, p = .40$; RMSEA = .01, CFI = .999, SRMR = .03. Overall, the model was significant in predicting gender saliency, estimated $R^2 = .41, SE = .06, p < .001$, was marginally significant in predicting liking, estimated $R^2 = .07, SE = .04, p = .056$, and was significant in predicting friendship potential, estimated $R^2 = .35, SE = .06, p < .001$. All path coefficients are unstandardized. Non-significant paths are represented as dotted lines.

* $p < .05$, *** $p < .001$

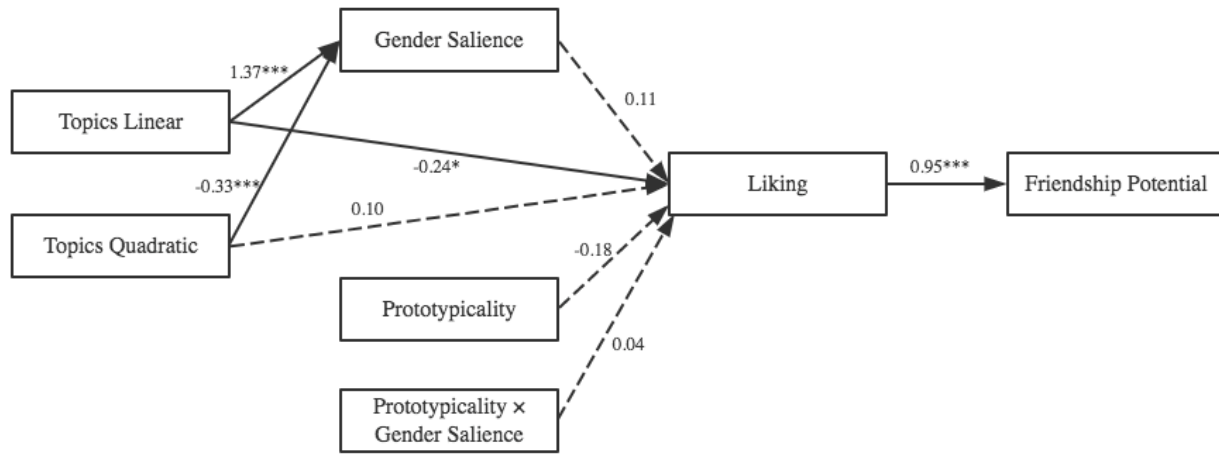


Figure 4. Computational model for men. The model fit indices were: $\chi^2 = 4.55$, $df = 7$, $p = .72$; RMSEA < .001, CFI = 1.00, SRMR = .03. The model was significant in predicting gender saliency, estimated $R^2 = .47$, $SE = .06$, $p < .001$, was not significant in predicting liking, estimated $R^2 = .05$, $SE = .04$, $p = .167$, and was significant in predicting friendship potential, estimated $R^2 = .44$, $SE = .07$, $p < .001$. All path coefficients are unstandardized. Non-significant paths are represented as dotted lines.

* $p < .05$, *** $p < .001$