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They're All the Same! . . . but for Several Different Reasons: A Review of the Multicausal Nature of Perceived Group Variability

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Abstract

Researchers studying people's perceptions of variability among members of social groups, or *perceived group variability*, have tended to focus on the ways in which perceivers' group affiliations lead to in-group and out-group homogeneity effects, including the other-race effect. However, recent advances have highlighted the role of additional influences. In this review, we consider the influence of (a) the perceiver's group affiliation, (b) the group's objective variability, (c) the group's social position, and (d) the group's central tendency on trait dimensions. We focus on recent research in these areas that has highlighted the strategic, context-dependent, and symbolic nature of perceived group variability. We conclude that future research needs to adopt a multicausal approach in order to provide a more complete and comprehensive account of perceived group variability.

Keywords

perceived group variability, in-group homogeneity, out-group homogeneity, stereotyping, other-race effect

All a girl really wants is for one guy to prove to her that they are not all the same.

—Marilyn Monroe

Like Marilyn Monroe, people often perceive the members of a social group, such as men, as being “all the same.” In technical terms, we can say that Marilyn perceived a relatively low degree of *variability* among men, or that she perceived men as being relatively homogeneous rather than heterogeneous.

Perceived group variability is important because groups that are perceived to be more homogeneous are often subject to greater stereotyping, prejudice, and memory biases. Perceived group homogeneity reinforces stereotypes by leading people to generalize their stereotypical judgments from one group member to the rest of the group (e.g., Park & Hastie, 1987). So, we would expect Marilyn's negative perceptions of one man to generalize to other men she met. Perceived group homogeneity also bolsters stereotypes by leading people to psychologically exclude nonstereotypical members from groups (Park & Hastie, 1987). Hence, even if Marilyn met a decent, trustworthy man, she would perceive him to be an exception to a rule, and his positive qualities would not affect her negative stereotype of men in general.

Recent research has confirmed that perceived group homogeneity also leads to prejudice and discrimination (Brauer &

Er-rafiy, 2011; Hee, Finkelman, Lopez, & Ensari, 2011; see also Roccas & Amit, 2011). People are more likely to hold the same attitude toward all of the members of a group if they perceive them to be “all the same.” This attitude can be negative, reflecting prejudice, but it can also be positive if multicultural ideology is salient (Ryan, Hunt, Weible, Peterson, & Casas, 2007). In addition, people are likely to react more negatively toward deviant members of homogeneous groups than to deviant members of heterogeneous groups (Hutchison, Jetten, & Gutierrez, 2011).

Finally, perceived group homogeneity can reduce the accuracy with which people recognize the faces of members of different groups (for a review, see Hugenberg, Young, Bernstein, & Sacco, 2010). This intergroup facial-recognition deficit has been implicated in wrongful convictions based on inaccurate eyewitness testimony (Hugenberg et al., 2010, p. 1168).

Researchers studying perceived group variability have tended to focus on the ways in which perceivers' affiliations with groups motivate biased perceptions of the groups' variability. However, recent advances in this area have established that

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perceivers' affiliations are only one of several factors that influence perceived group variability. Additional factors include the group's actual variability, social position, and *central tendency* (i.e., average position) on specific measurable social dimensions. In the following sections, we provide a brief overview of each of these factors and outline recent advances that explain how each factor operates. In particular, we focus on the strategic, context-dependent, and symbolic nature of perceived group variability.

The Perceiver's Group Affiliation: My Group Is More or Less Variable Than Yours

The dominant focus in the study of perceived group variability has been the influence of the perceiver's group affiliation. The classic finding in this area is that people tend to perceive significantly more variability among members of groups to which they belong (in-groups) than among members of groups to which they do not belong (out-groups; for reviews, see Boldry, Gaertner, & Quinn, 2007; Linville & Fischer, 1998; Mullen & Hu, 1989; Ostrom & Sedikides, 1992). Although this *out-group homogeneity effect* is a robust and widespread phenomenon, it is by no means ubiquitous. Researchers have identified several types of conditions in which people show a reverse effect, called the *in-group homogeneity effect* (for reviews, see Simon, 1992; Voci, 2000). Parallel results have recently been reported in the area of intergroup facial recognition. Although people tend to be better at recognizing the faces of in-group members than the faces of out-group members (e.g., Rule, Ambady, Adams, & Macrae, 2007; Rule, Garrett, & Ambady, 2010), there are some contexts in which this effect tends to reverse (Ackerman et al., 2006; Wilson & Hugenberg, 2010). In other words, it is sometimes a case of "we are all the same" rather than "they are all the same."

In-group and out-group homogeneity effects are thought to be motivated by people's need to maintain a positive and distinct social identity. However, our own work in this area has highlighted the relatively strategic and instrumental manner in which people use these effects (Rubin, Hewstone, & Voci, 2001). In a series of three studies, we asked participants to rate the variability of their in-group and an out-group in relation to certain trait dimensions. We found that people perceived their in-group to be relatively heterogeneous only with respect to traits that were (a) negatively stereotypical of the in-group and (b) positively stereotypical of the out-group. These types of traits are threatening because they highlight the in-group's weaknesses and the out-group's strengths, respectively.

By perceiving their in-group as relatively heterogeneous on these traits, people can distance themselves from their group's negative position and get closer to the out-group's positive position. So, as Figure 1 illustrates, Marilyn Monroe might perceive women to be relatively heterogeneous on the positive male-stereotypical trait of adventurousness in order to distance herself from the stereotype that women are not very adventurous and consider herself to be one of few adventurous women. These results are important because they demonstrate that the degree to which people perceive their group to be variable depends on whether they want to distance themselves from or associate themselves with a given in-group stereotype.

The Group's Objective Variability: This Group Is Actually More or Less Variable Than Another Group

Although in-group and out-group homogeneity effects are undoubtedly important factors in perceived group variability, they do not tell the whole story. A second, less researched but

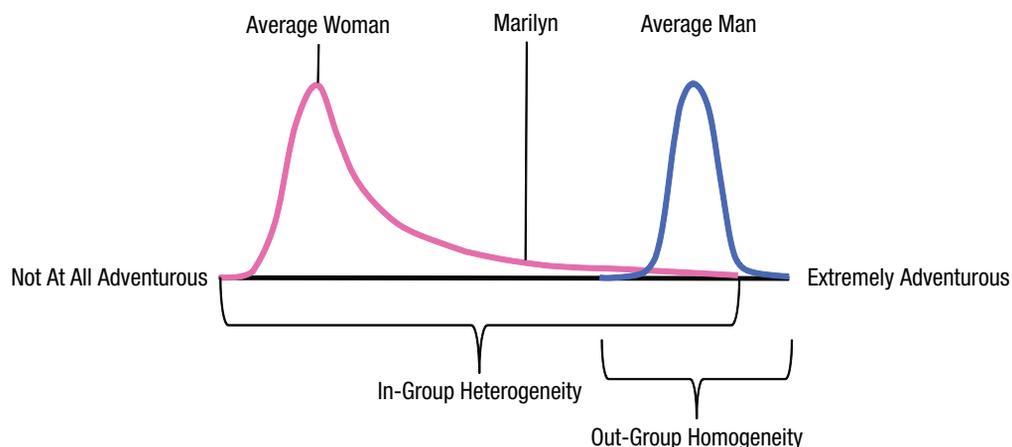


Fig. 1. Illustration of a strategic out-group homogeneity effect with respect to a trait that is positively stereotypical of the out-group. In this example, Marilyn Monroe perceives women (members of her in-group) as being heterogeneous and men (members of an out-group) as being homogenous on adventurousness. Consequently, she can perceive herself as a uniquely adventurous woman.

more obvious influence on perceived group variability is the actual, objective variability of the group in question: People may perceive the members of a group to be relatively homogeneous because in reality, they are (e.g., Park & Hastie, 1987). In other words, perceived group variability may reflect accurate perceptions of actual group variability.

A complication here is that people may be inaccurate in their judgments and either overestimate or underestimate a group's actual variability, although underestimation is more likely on some measures of perceived variability than on others (Judd, Ryan, & Park, 1991; Ryan, 1996). When perceivers are affiliated with the groups concerned, overestimation and underestimation of actual variability can contribute to in-group and out-group homogeneity effects (Judd et al., 1991). However, recent research has shown that these effects are not always due to inaccurate perceptions. In particular, Voci, Hewstone, Crisp, and Rubin (2008) found that although male students underestimated the actual variability of men more than they underestimated the variability of women, they nonetheless perceived men to be more variable than women.

These results are most likely to have occurred because men are actually more variable than women on the rated dimension and, consequently, it was possible for perceivers to underestimate their actual variability without perceiving them to be less variable than women. Hence, these findings highlight the importance of interpreting overestimation and underestimation effects in the context of actual differences in objective group variability. So, for example, if men were actually more variable than women on a certain dimension, then it would be possible for Marilyn Monroe to underestimate men's actual variability on that dimension more than she underestimated women's variability while continuing to perceive men as more variable than women.

The Group's Social Position: Superior Groups Appear More or Less Variable Than Inferior Groups

In general, groups with inferior social positions (e.g., small groups, low-status groups, and low-power groups) tend to be perceived as relatively homogeneous (Badea & Deschamps, 2009; Guinote, Judd, & Brauer, 2002; for reviews, see Mullen & Hu, 1989; Rubin, Hewstone, Crisp, Voci, & Richards, 2004). These *social-position effects* may be due to objective differences in actual group variability (e.g., Guinote et al., 2002), as well as cognitive effects that relate to differences in the salience of groups involved (e.g., Brauer & Bourhis, 2006; Lorenzi-Cioldi, 2008) and the attention that is paid to them (Ratcliff, Hugenberg, Shriver, & Bernstein, 2011).

Our own work in this area has highlighted the context-dependent nature of social-position effects by showing that inferior groups are not always perceived as more homogeneous than superior groups (Badea, Brauer, & Rubin, 2012). We predicted that, in the context of an intergroup competition,

winning groups (i.e., groups in a superior social position) should be seen as *more* homogeneous than losing groups (i.e., groups in an inferior social position) because people implicitly believe that uniformity, group cohesiveness, and coordination are necessary for successful group performance.

Consistent with this prediction, our results revealed that people rated the members of a group of fashion designers (Study 1) and the members of a group of architects (Study 2) as significantly more similar to one another when they were told that the group had won a competition than when they were told that it had lost the competition. These results suggest that the influence of a group's social position on perceived group variability depends on the context in which it is considered.

The Group's Central Tendency: Groups Are Rated Less Variable on Stereotypical Traits

A group's central tendency on a social dimension can also influence its perceived variability on that dimension. In particular, people rate groups as being more homogeneous on stereotypical dimensions (e.g., "adventurous" for men; for a review, see Rubin & Badea, 2007). Researchers have traditionally tended to explain this *stereotype effect* in terms of perceivers' group affiliations: People rate in-groups as relatively homogeneous on stereotypical traits in order to protect the positive social identity that is associated with the in-group (e.g., Simon, 1992).

We recently challenged this social-identity explanation on both theoretical and empirical grounds (Rubin & Badea, 2007, 2010). Theoretically, although this explanation can account for perceived in-group homogeneity on positive stereotypical traits, it cannot account for perceived in-group homogeneity on *negative* stereotypical traits. If perceiving an in-group as homogenous on positive in-group traits helps people to consolidate the group's position on those traits and supports their positive social identity, then, by the same logic, perceiving an in-group as homogenous on negative in-group traits should lead people to consolidate the group's position on those traits and *undermine* their positive social identity (Rubin et al., 2001).

Empirically, we found that, contrary to the social-identity account, people judge even groups they are unaffiliated with to be homogeneous on stereotypical traits (Rubin & Badea, 2010). Specifically, psychology students rated a group of fashion designers as being significantly more homogeneous on traits that the fashion designers possessed than on traits that they did not possess. Thus, the stereotype effect can occur in the absence of social-identity concerns.

Given the limitations of the social-identity account, we have offered an alternative explanation for the stereotype effect. We assumed that people often follow a "homogeneity equals trait possession" heuristic, such that they perceive homogeneous groups to possess traits to a greater extent than do heterogeneous groups. Consequently, we assumed that

people rate groups as relatively homogeneous on stereotypical traits in order to indicate their perception that the groups possess those traits. So, for example, we would expect Marilyn to rate men as being particularly homogeneous on the trait of adventurousness if she believed that men possess this trait to a greater degree than do women.

Our explanation assumes that people's ratings of group variability symbolize their perception of the extent to which groups possess particular traits. This symbolic-variability explanation is distinct from the social-identity explanation because it does not relate to perceivers' group affiliation or need for a positive social identity. Consequently, it can explain the stereotype effect regardless of (a) the affiliation of the perceiver with the group in question (affiliated vs. unaffiliated) and (b) the valence of the traits concerned (positive vs. negative).

Our symbolic-variability explanation assumes that people use ratings of group variability symbolically because they do not have a more direct method of expressing a group's central tendency to researchers. Consistent with this assumption, we found that after people indicated the degree to which a group possessed a trait using an explicit method, they no longer rated the group as relatively homogeneous on stereotypical traits (Rubin & Badea, 2007). Hence, using a direct and explicit method of expressing trait possession appeared to retrench the

relatively indirect, symbolic expression via ratings of group variability. Why waste time hinting at a group's trait possession via variability ratings after you have explicitly stated the degree to which the group possesses that trait via a more direct method?

Conclusions and Future Directions

Figure 2 presents a multicausal model of perceived group variability that includes the four influences we have discussed in this review.

It is important to note that the four influences specified in our model are neither omnipresent nor mutually exclusive: Some influences may operate in some situations but not in others, and some influences may jointly contribute to perceived group variability. These influences may also interact with one another. So, for example, group size (i.e., group social position) may interact with a perceiver's affiliation (i.e., as an in-group or out-group member) on the basis of motivations that relate to the need for in-group distinctiveness (Brewer, 1993).

It is also important to note that our model is incomplete. For example, a perceiver's social position may also be a key influence on his or her perception of a group's variability (e.g., Guinote et al., 2002). The main aim of our model and our

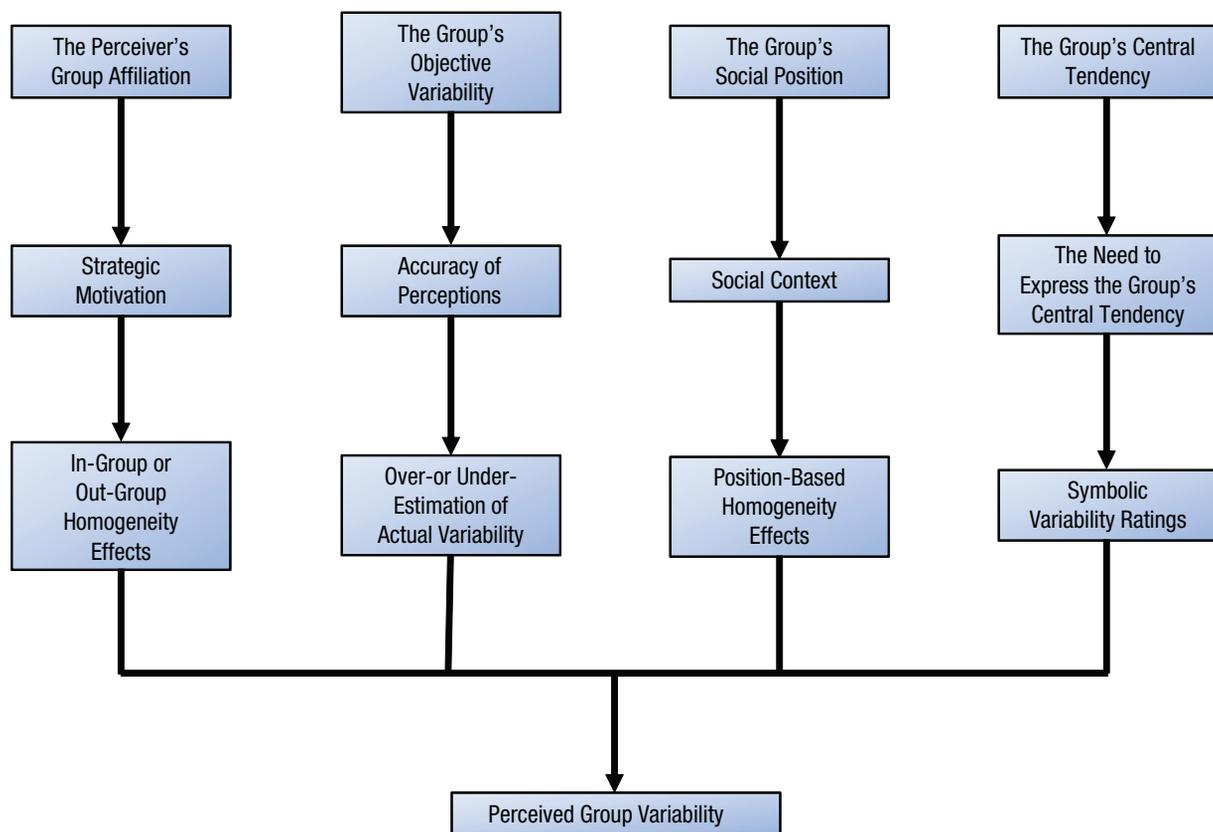


Fig. 2. A multicausal model of perceived group variability. Elements in the top row are influences on perceived group variability; elements in the middle row are processes through which these influences operate; and elements in the bottom row are specific perceived-group-variability effects that result from each influence.

review is not to provide a comprehensive account of the multiple influences on perceived group variability but rather to explicitly recognize that such an account is necessary. We believe that this sort of multicausal approach will lead to a more complete understanding of perceived group variability and, ultimately, of stereotyping, prejudice, and intergroup memory biases.

Recommended Reading

Boldry, J. G., Gaertner, L., & Quinn, J. (2007). (See References).

A recent meta-analysis of 177 perceived group variability effects that focuses on the relation between group status, real-life versus laboratory groups, and 11 measures of perceived group variability.

Linville, P. W., & Fischer, G. W. (1998). (See References). A review of explanations of the out-group homogeneity effect and the implications of perceived group variability.

Ostrom, T. M., & Sedikides, C. (1992). (See References). A good starting point for readers interested in perceived group variability, including a "taxonomy of theories" of the out-group homogeneity effect.

Rubin, M., Hewstone, M., Crisp, R. J., Voci, A., & Richards, Z. (2004). (See References). A recent review of the effects of group status and group size on perceived group variability, focusing in particular on gender group variability.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

References

Ackerman, J. M., Shapiro, J. R., Neuberg, S. L., Kenrick, D. T., Becker, D. V., Griskevicius, V., . . . Schaller, M. (2006). They all look the same to me (unless they're angry): From out-group homogeneity to out-group heterogeneity. *Psychological Science, 17*, 836–840. doi:10.1111/j.1467-9280.2006.01790.x

Badea, C., Brauer, M., & Rubin, M. (2012). The effects of winning and losing on perceived group variability. *Journal of Experimental Social Psychology, 48*, 1094–1099. doi:10.1016/j.jesp.2012.03.006

Badea, C., & Deschamps, J.-C. (2009). In-group homogeneity perception and dynamics of social status. *Revue Internationale de Psychologie Sociale, 22*, 91–115.

Boldry, J. G., Gaertner, L., & Quinn, J. (2007). Measuring the measures: A meta-analytic investigation of the measures of outgroup homogeneity. *Group Processes & Intergroup Relations, 10*, 157–178. doi:10.1177/1368430207075153

Brauer, M., & Bourhis, R. Y. (2006). Social power. *European Journal of Social Psychology, 36*, 601–616. doi:10.1002/ejsp.355

Brauer, M., & Er-rafiy, A. (2011). Increasing perceived variability reduces prejudice and discrimination. *Journal of Experimental Social Psychology, 47*, 871–881. doi:10.1016/j.jesp.2011.03.003

Brewer, M. B. (1993). Social identity, distinctiveness, and in-group homogeneity. *Social Cognition, 11*, 150–164. doi:10.1521/soco.1993.11.1.150

Guinote, A., Judd, C. M., & Brauer, M. (2002). Effects of power on perceived and objective group variability: Evidence that more powerful groups are more variable. *Journal of Personality and Social Psychology, 82*, 708–721. doi:10.1037/0022-3514.82.5.708

Hee, F., Finkelstein, J., Lopez, P. D., & Ensari, N. (2011). Reducing prejudice in organizations: The role of intergroup contact, out-group homogeneity, and in-group size. *Journal of Psychological Issues in Organizational Culture, 2*, 39–59. doi:10.1002/jpoc.20060

Hugenberg, K., Young, S., Bernstein, M., & Sacco, D. F. (2010). The categorization-individuation model: An integrative account of the other-race recognition deficit. *Psychological Review, 117*, 1168–1187. doi:10.1037/a0020463

Hutchison, P., Jetten, J., & Gutierrez, R. (2011). Deviant but desirable: Group variability and evaluation of atypical group members. *Journal of Experimental Social Psychology, 47*, 1155–1161. doi:10.1016/j.jesp.2011.06.011

Judd, C. M., Ryan, C. S., & Park, B. (1991). Accuracy in the judgment of in-group and out-group variability. *Journal of Personality and Social Psychology, 61*, 366–379. doi:10.1037/0022-3514.61.3.366

Linville, P. W., & Fischer, G. W. (1998). Group variability and covariation: Effects on intergroup judgment and behavior. In C. Sedikides, J. Schopler, & C. A. Insko (Eds.), *Intergroup cognition and intergroup behaviour* (pp. 123–150). Mahwah, NJ: Erlbaum.

Lorenzi-Cioldi, F. (2008). Group homogeneity perception in status hierarchies: The moderating effect of the salience of group status differentials. *Revue Internationale de Psychologie Sociale, 21*, 67–111.

Mullen, B., & Hu, L. (1989). Perceptions of in-group and out-group variability: A meta-analytic integration. *Basic and Applied Social Psychology, 10*, 233–252. doi:10.1207/s15324834basps1003_3

Ostrom, T. M., & Sedikides, C. (1992). Out-group homogeneity effects in natural and minimal groups. *Psychological Bulletin, 112*, 536–552. doi:10.1037/0033-2909.112.3.536

Park, B., & Hastie, R. (1987). Perception of variability in category development: Instance- versus abstraction-based stereotypes. *Journal of Personality and Social Psychology, 53*, 621–635. doi:10.1037/0022-3514.53.4.621

Ratcliff, N., Hugenberg, K., Shriver, E. R., & Bernstein, M. J. (2011). The allure of status: High-status targets are privileged in face processing and memory. *Personality and Social Psychology Bulletin, 37*, 1003–1015. doi:10.1177/0146167211407210

Roccas, S., & Amit, A. (2011). Group heterogeneity and tolerance: The moderating role of conservation values. *Journal of Experimental Social Psychology, 47*, 898–907. doi:10.1016/j.jesp.2011.03.011

Rubin, M., & Badea, C. (2007). Why do people perceive in-group homogeneity on in-group traits and out-group homogeneity on out-group traits? *Personality and Social Psychology Bulletin, 33*, 31–42. doi:10.1177/0146167206293190

Rubin, M., & Badea, C. (2010). The central tendency of a social group can affect ratings of its intragroup variability in the absence of social identity concerns. *Journal of Experimental Social Psychology, 46*, 410–415. doi:10.1016/j.jesp.2010.01.001

- Rubin, M., Hewstone, M., Crisp, R. J., Voci, A., & Richards, Z. (2004). Gender out-group homogeneity: The roles of differential familiarity, gender differences, and group size. In V. Yzerbyt, C. M. Judd, & O. Corneille (Eds.), *The psychology of group perception: Perceived variability, entitativity, and essentialism* (pp. 203–220). New York, NY: Psychology Press.
- Rubin, M., Hewstone, M., & Voci, A. (2001). Stretching the boundaries: Strategic perceptions of intragroup variability. *European Journal of Social Psychology, 31*, 413–429. doi:10.1002/ejsp.51
- Rule, N. O., Ambady, N., Adams, R. B., Jr., & Macrae, C. N. (2007). Us and them: Memory advantages in perceptually ambiguous groups. *Psychonomic Bulletin & Review, 14*, 687–692. doi:10.3758/BF03196822
- Rule, N. O., Garrett, J. V., & Ambady, N. (2010). Places and faces: Geographic environment influences the ingroup memory advantage. *Journal of Personality and Social Psychology, 98*, 343–355. doi:10.1037/a0018589
- Ryan, C. S. (1996). Accuracy of Black and White college students' ingroup and out-group stereotypes. *Personality and Social Psychology Bulletin, 11*, 1114–1127. doi:10.1177/01461672962211003
- Ryan, C. S., Hunt, J. S., Weible, J. A., Peterson, C. R., & Casas, J. F. (2007). Multicultural and colorblind ideology, stereotypes, and ethnocentrism among Black and White Americans. *Group Processes & Intergroup Relations, 10*, 617–637. doi:10.1177/1368430207084105
- Simon, B. (1992). The perception of ingroup and outgroup homogeneity: Reintroducing the intergroup context. *European Review of Social Psychology, 3*, 1–30. doi:10.1080/14792779243000005
- Voci, A. (2000). Perceived group variability and the salience of personal and social identity. *European Review of Social Psychology, 11*, 177–221. doi:10.1080/14792772043000031
- Voci, A., Hewstone, M., Crisp, R. J., & Rubin, M. (2008). Majority, minority, and parity: Effects of gender and group size on perceived group variability. *Social Psychology Quarterly, 71*, 114–142. doi:10.1177/019027250807100203
- Wilson, J. P., & Hugenberg, K. (2010). When under threat, we all look the same: Distinctiveness threat induces ingroup homogeneity in face memory. *Journal of Experimental Social Psychology, 46*, 1004–1010. doi:10.1016/j.jesp.2010.07.005