

Accurate First Impressions Leave a Lasting Impression: The Long-Term Effects of Distinctive Self-Other Agreement on Relationship Development

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Abstract

Above and beyond the benefits of biases such as positivity and assumed similarity, does the accuracy of our first impressions have immediate and long-term effects on relationship development? Assessing accuracy as distinctive self-other agreement, we found that more accurate personality impressions of new classmates were marginally associated with greater liking concurrently, and significantly predicted greater interaction throughout the semester and greater liking and interest in future interactions by the end of the semester. Importantly, greater distinctive self-other agreement continued to promote social interaction even after controlling for Time 1 liking, suggesting that these positive effects of accuracy operate independently of initial liking. Forming positively biased first impressions was a strong predictor of both initial and longer term relationship development, while assumed similarity showed strong initial but not long-term associations. In sum, independent of the benefits of biased impressions, forming accurate impressions has a positive impact on relationship development among new acquaintances.

Keywords

first impressions, accuracy, bias, relationship development, social interactions

Does forming accurate first impressions have positive immediate and long-term benefits for relationship initiation and development? We are constantly meeting new people, some of whom become acquaintances, friends, or romantic partners. These social ties, both weak (i.e., acquaintances) and strong (i.e., close friends), make up a large part of our daily lives and have important implications for our general well-being (e.g., Baumeister & Leary, 1995). What role do our first impressions play in this process of turning a stranger into a social tie? Biases such as positivity and assumed similarity are known to promote liking and relationship development (e.g., Murray, Holmes, & Griffin, 1996; Selfhout, Denissen, Branje, & Meeus, 2009), but little is known about the impact of accuracy. That is, if you form a more accurate impression of someone, does it leave a lasting impression—one that promotes relationship development over time? The current study examines this question by exploring whether more accurate first impressions, indexed as distinctive self-other agreement, have positive immediate and longer term social consequences for new acquaintances, above and beyond the potential benefits of being biased.

a new acquaintance more accurately would promote processing fluency, the subjective sense that the person is easy to process or understand, which should in turn result in more positive appraisals of the person (Reber, Schwarz, & Winkielman, 2004). More accurate impressions should also promote feelings of familiarity, which also promote greater liking (Langlois & Roggman, 1990; Reis, Maniaci, Caprariello, Eastwick, & Finkel, 2011; but see Norton, Frost, & Ariely, 2007, 2011). For example, Reis et al., 2011 found that interacting with a stranger for longer periods of time led to greater liking. These effects were mediated by processes such as greater perceived knowing and increased comfort during the interaction. Thus, with amount of time held constant, greater accuracy could promote perceived knowing and comfort during the interaction, thereby promoting liking. In fact, people are aware of when their impressions are more or less accurate for different targets (Biesanz et al., 2011), making it possible that greater accuracy has immediate positive social consequences. More accurate first

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Accurate Impressions

Why might accuracy have positive consequences for relationship development and satisfaction? It is plausible that viewing

impressions may also benefit relationship development over time as the perceiver sees their initial impressions being confirmed with increased acquaintanceship, further enhancing their feeling of knowing and comfort with the individual.

There is preliminary evidence that accuracy may have positive social consequences. For instance, more accurate impressions are associated with greater liking in first impressions (Human & Biesanz, 2011) and greater relationship satisfaction in close relationships (e.g., Luo & Snider, 2009). Further, there is longitudinal evidence that wives who form more accurate impressions of their husbands experience better relationship outcomes (Neff & Karney, 2005). Importantly, however, there has not yet been a longitudinal examination of whether accurate first impressions have a long-term impact on turning a stranger into a social tie. Thus, the direction of association between accuracy and liking at this early stage of relationship development is unclear. Indeed, the associations between accuracy and liking could certainly be bidirectional. That is, liking could also facilitate accuracy, perhaps by promoting how much attention the perceiver pays to the target (e.g., Human, Biesanz, Parisotto, & Dunn, 2012). Thus, it is critical to examine these associations longitudinally to determine whether accuracy does indeed promote relationship development among new acquaintances.

In this study, accuracy was indexed as the extent to which a target is viewed in line with the target's self-reported unique profile of personality traits, controlling for positivity and similarity (termed *distinctive self-other agreement*). For example, if both Jane and Susie view Susie as more talkative than reliable, controlling for the extent to which the average person and Jane herself may share this patterning of traits, Jane is viewing Susie with distinctive self-other agreement. Because the average person's personality profile is very positive (Borkenau & Zaltauskas, 2009; Edwards, 1957), distinctive self-other agreement therefore controls for the extent to which agreement is driven by positive bias. Distinctive accuracy also reflects being able to differentiate a target from other specific targets (see Biesanz, 2010; Biesanz & Human, 2010; Kenny & Winquist, 2001, pp. 275–278). That is, Jane and Susie also agree that Susie is more talkative and reliable than Steve. We hypothesize that achieving greater distinctive self-other agreement in first impressions will leave a lasting impression—one that promotes liking and relationship development over time.

Biased Impressions

At first glance, it may seem that accuracy would be less important to relationship development than biased impressions. Indeed, more positive personality impressions are strongly associated with greater liking among new and existing acquaintances (Human & Biesanz, 2011; Leising, Erbs, & Fritz, 2010) and with greater satisfaction among romantic partners (e.g., Murray et al., 1996; Luo & Snider, 2009). The bias of assumed similarity—viewing another person as more similar to the self than they really are (Cronbach, 1955)—also has positive social consequences (Byrne, Griffit, & Stefaniak, 1967). For instance,

greater assumed similarity is associated with greater liking among new acquaintances (Human & Biesanz, 2011; Selfhout et al., 2009; Sunnafrank & Ramirez, 2004) and greater relationship satisfaction among romantic partners (Murray, Holmes, Bellavia, Griffin, & Dolderman, 2002). Further, there is longitudinal evidence that there are long-term benefits of positive illusions in romantic relationships (Murray & Holmes, 1997) and of assumed similarity for new acquaintances (Selfhout et al., 2009; Sunnafrank & Ramirez, 2004). No research, however, appears to have examined the longitudinal effects of positively biased first impressions for new acquaintances—a gap the current study will also fill.

Positive bias was indexed in this study with an indicator of the overall *positivity* of impressions: normative agreement. This indicator of positivity refers to how well a perceiver's impressions map on to what the average person is like (Biesanz, 2010; Cronbach, 1955; Furr, 2008). As noted above, because the average or normative personality profile is highly socially desirable (i.e., people tend to be more kind than hostile; Borkenau & Zaltauskas, 2009; Edwards, 1957), more normative impressions imply more positive impressions. Further, we also controlled for any actual similarity between the target and the average person, thereby making normative agreement an indicator of viewing a specific target more normatively, and therefore more positively, than the target really is. Thus, if Jane views Susie as being more talkative and reliable, and less hostile, than she really is, Jane is viewing Susie with positive bias.

Assumed similarity was indexed with *distinctive assumed similarity* (Human & Biesanz, 2011, 2012), which reflects the extent to which a perceiver's impressions of a given target map on to the perceiver's own unique personality profile. Distinctive assumed similarity controls for any actual similarity between the perceiver and target (by controlling for the target's own self-reports when examining the relationship between the perceiver's self-reports and their ratings of the target), thereby making this indicator more reflective of bias than of accurate perceptions of real similarity (Kenny & Acitelli, 2001). Thus, if Jane is more reliable than talkative and believes that Susie shares this unique patterning of traits, even though Susie does not report being more reliable than talkative, Jane is viewing Susie with distinctive assumed similarity.

Integrating Bias and Accuracy

Given the established benefits of being biased, it may seem surprising to propose that accuracy would benefit relationship development as well. Instead, it may seem more plausible that forming an accurate first impression would be irrelevant, or even detrimental, to relationship development. Indeed, Leising et al. (2010) suggest that accuracy is associated with less liking among well-acquainted individuals, although they did not directly examine accuracy. Importantly, however, accuracy and bias can be independent of one another in personality impressions (Funder & Colvin, 1997; Kenny & Acitelli, 2001; Human & Biesanz, 2011, 2012). For instance, Jane can erroneously project her own distinctive patterning of traits onto

Table 1. Descriptive Statistics for the Relationship Development Indicators.

Relationship development indicators	Scale	Mean or percentage	SD	N
Time 1				
Liking	1–7	5.34	0.91	530
Future interaction	1–7	5.25	1.12	525
Time 2				
Liking	1–5	2.91	0.76	484
Future interaction	1–5	2.86	0.88	486
Social tie	%	9.37	–	512
Overall interaction	1–7	1.32	0.72	510
Sit	0–6	0.28	1.04	510
Interaction composite	0–4	0.22	0.48	510
Talk	%	19.02	–	510
Text	%	0.59	–	510
Facebook friend	%	1.77	–	510
Study	%	0.98	–	510

Note. SD = standard deviation; N = number of dyadic impressions with complete data on this variable; % = Percentage endorsed.

Susie (e.g., believing Susie to be more reliable than talkative when she is actually more talkative than reliable), while still accurately perceiving Susie's standing on these traits relative to other targets (e.g., accurately viewing Susie as more reliable and talkative than Steve and the average person). Thus, accuracy need not be negatively or unrelated to relationship development simply because positivity and assumed similarity promote relationship development; these processes can be independent of one another and at times even have simultaneously positive effects (Lackenbauer, Campbell, Rubin, Fletcher, & Troister, 2010; Lorenzo, Biesanz, & Human, 2010; Luo & Snider, 2009). Nevertheless, it is important to consider, and control for, these biases when examining the role of accuracy in relationship development.

Overall, we predicted that accurate first impressions would have a positive impact on relationship initiation and development over time. We also expected that the biases of positivity and assumed similarity would have independently beneficial effects on relationship development. To test these hypotheses, we examined the role of first impressions in social evaluation and interaction over time in a setting with considerable potential for the development of new social ties: the classroom.

Method

Across two waves of data collection, a total of 113 undergraduate students (75 female and 38 male; $M_{age} = 19.05$, $SD = 2.00$) came into the lab in groups at the start of the semester (the second or third week). The 19 groups ($M_{size} = 5.95$; range: 3–9) were comprised of classmates from eight large undergraduate courses ($M_{size} = 260.01$; range: 163–372). Participants were compensated with up to two extra course credits or \$17 for completing all components of the study. All participants completed self-reports of personality on the Big Five Inventory (BFI; John & Srivastava, 1999), plus three perceived intelligence items (e.g., “Is bright”), on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Participants then met individually

with every other group member for 2 to 3 min and rated each other's personalities on an abbreviated 21-item version of the BFI plus the three perceived intelligence items (for exact items see Human & Biesanz, 2011). Participants also rated how much they liked the person and how interested they were in talking to the person in the future, on 1 (*not at all*) to 7 (*a great deal*) scales. Impressions from previously acquainted dyads were excluded from the analysis (3% of total impressions), and one participant did not provide ratings for one of their interaction partners, resulting in a total of 530 unique impressions based upon 265 dyads.¹ Participants' photos were also taken at this time for use in e-mails sent throughout the semester and in a later online questionnaire.²

At the end of the semester, 109 of the original participants (96%) completed a brief survey during class, in which they identified all of the people in their class whom they would consider a weak tie (i.e., acquaintance) or a strong tie (i.e., close friend). Based on the descriptions of these individuals, the authors were able to identify whether any of the participant's initial group members had developed into a weak tie or a strong tie. Only three participants indicated developing a strong tie with a fellow group member (vs. 45 weak ties), so we collapsed across the designations such that the identification of any group member as a strong or weak tie was coded as a “social tie” (= 1), while group members who were not identified were categorized as a “nonexistent tie” (= 0; see Table 1 for descriptive statistics).

At the end of the semester, 109 participants also completed an online questionnaire where they were asked to make a number of ratings about their relationship with their group members.³ At the top of each page, a group member's photograph was shown, and participants rated how much they liked each individual and were interested in talking to the individual in the future, on 1 (*not at all*) to 5 (*a great deal*) scales. Participants also rated how much they had interacted with the individual throughout the semester on a 1 (*not at all*) to 7 (*very much*) scale and how many times they sat together in class on a 0 (0 times) to 6 (>5 times) scale. Finally, participants indicated

whether or not they had talked outside of the study, called, texted, become Facebook friends, or studied together, all on dichotomous (no = 0, yes = 1) scales. No participants indicated calling another participant, so this outcome was not examined. Given the low rates of interaction for most of the remaining dichotomous variables (see Table 1), these items were summed together to form a composite count score to assess the overall amount of interaction across these different mediums.

Analytic approach. We utilized the social accuracy modeling procedures (SAM; Biesanz, 2010) with R's lme4 multilevel modeling package (Bates & Sarkar, 2007) to examine how distinctive accuracy (i.e., distinctive self-other agreement), positive bias, and distinctive assumed similarity are associated with the relationship development indicators (see Supplemental Online Appendix for details; for detailed empirical examples see Biesanz & Human, 2010; Human & Biesanz, 2011). Briefly, using SAM, in the within-perceiver part of the model (Level 1), we predicted perceivers' ratings of each target on each personality item simultaneously from (1) the target self-report on that item after subtracting the normative mean for that item (*distinctive self-other agreement*), (2) the normative mean on that item (*positive bias*), and (3) the perceiver self-report on that item after subtracting the normative mean on that item (*distinctive assumed similarity*). The normative means were derived from the mean target self-report from a larger sample of participants, $n = 380$, from the same population. Items were not reverse coded prior to analysis. Distinctive self-other agreement, positive bias, and distinctive assumed similarity were allowed to vary randomly across perceivers and targets, therefore accounting for dependence due to perceiver and target individual differences in accuracy and bias.⁴

Although we are conceptualizing the relationship development indicators as outcomes of accuracy, positive bias, and assumed similarity, the modeling framework described above requires using the relationship development indicators as moderators of each perceptual tendency. For example, we would assess Jane's distinctive self-other agreement by predicting Jane's ratings of each target from the target's own self-reports, controlling for positivity and similarity. In order to examine whether Jane liked a target more if she viewed them more accurately, Jane's liking of each target would be included as a moderator of the relationship between Jane's ratings and the targets' self-reports. If Jane better likes targets she viewed with more distinctive self-other agreement, we would expect liking to significantly moderate her distinctive self-other agreement levels; that is, Jane's ratings would be more in line with the self-reports of targets she likes than targets she does not like. Thus, this moderator approach still allows us to address the same questions that we would if we were able to use distinctive self-other agreement as a predictor of these social outcomes. In order to make the interpretation of our results as clear as possible, in the Results section we use the terms *associated* and *predicted* in lieu of *moderated*.

Results and Discussion

On average, after just several minutes of interaction, participants viewed one another with significant levels of distinctive self-other agreement, $b = .10$, $z = 4.78$, $p < .0001$. Participants also displayed significant levels of positive bias, $b = .90$, $z = 23.60$, $p < .0001$, and distinctive assumed similarity, $b = .10$, $z = 4.70$, $p < .0001$. Did distinctive self-other agreement have positive initial social consequences? Greater distinctive self-other agreement was marginally associated with greater Time 1 liking, but not with Time 1 interest in future interactions, all $|z| < 1.75$ (see Table 2). Perhaps not surprisingly, greater positive bias and distinctive assumed similarity both significantly and strongly predicted greater Time 1 liking and interest in talking again in the future, all $|z| > 4.97$ (see Table 2). Looking at the effect size estimates (β s), which can be interpreted as equivalent to Cohen's d (Gelman, 2008), it is clear that positive bias had the strongest associations with Time 1 indicators of relationship development, more than doubling the size of the distinctive assumed similarity and distinctive self-other agreement effects.

Of note, greater distinctive self-other agreement did have a longer term impact on relationship development: perceiving a target more in line with their distinctive self-reported personality traits significantly predicted greater Time 2 liking and interest in future interactions, and also predicted greater interaction throughout the semester on the composite interaction count variable, all $|z| > 1.98$ (see Table 2). Critically, the social interaction effect held and the rest remained at least marginal when controlling for Time 1 liking (see Table 2), providing initial evidence that accuracy positively impacts relationship development at least partially independently of Time 1 liking.

What role did the biases play in relationship development over time? Forming more positively biased impressions significantly predicted greater Time 2 liking and interest in future interactions, a greater likelihood of developing a social tie with the target, and greater interaction throughout the semester, both on the single self-report item and on the composite interaction count variable, all $|z| > 2.29$. More positively biased impressions continued to predict greater Time 2 liking and interest in future interactions after controlling for Time 1 liking, all $|z| > 2.58$, suggesting that positively biased first impressions also impact relationship development over time partially independently of Time 1 liking. Of note, the effect sizes for positivity were much more equivalent to the distinctive self-other agreement effect sizes for these longer term associations, relative to the associations at Time 1.

Surprisingly, assumed similarity was not significantly associated with any of the Time 2 relationship development indicators, all $|z| < 1.64$. Furthermore, assumed similarity marginally predicted *less* interaction throughout the semester, as indexed by the composite measure, after controlling for Time 1 liking, $b = -.03$, $\beta = -.13$, $z = -1.70$, $p < .10$. Thus, distinctive assumed similarity without liking may actually have negative long-term social consequences. In sum, above and beyond the (sometimes very strong) effects of bias in first impressions,

Table 2. Associations Among Distinctive Self-Other Agreement, Positivity, Distinctive Assumed Similarity and the Relationship Development Indicators.

Relationship development indicators	Accuracy			Bias					
	Distinctive self-other agreement			Positivity			Distinctive assumed similarity		
	<i>b</i> (SE)	β	$\beta_{\text{Time Liking Partialled}}$	<i>b</i> (SE)	β	$\beta_{\text{Time Liking Partialled}}$	<i>b</i> (SE)	β	$\beta_{\text{Time Liking Partialled}}$
Time 1									
Liking	.02 (.011)	.45 [†]	–	.25 (.018)	1.36***	–	.07 (.011)	.64***	–
Future interaction	.01 (.009)	.28	–	.18 (.016)	1.20***	–	.05 (.009)	.54***	–
Time 2									
Liking	.03 (.013)	.59*	.48 [†]	.15 (.024)	.66***	.38***	.00 (.014)	.02	–.13
Future interaction	.02 (.011)	.51*	.43 [†]	.11 (.020)	.56**	.27**	.02 (.012)	.15	.00
Social tie	.01 (.033)	.09	.06	.15 (.060)	.27*	.14	.06 (.031)	.16	.09
Overall interaction	.02 (.012)	.38	.35	.06 (.021)	.25**	.09	–.01 (.012)	–.07	–.14
Sit	.01 (.009)	.08	.05	.03 (.018)	.09	.03	–.00 (.006)	–.02	–.02
Interaction composite	.05 (.018)	.59*	.61*	.07 (.033)	.22*	.06	–.03 (.016)	–.16	–.13 [†]

Note. For continuous variables, standardized regression coefficients, β , were calculated as the change in the respective slope for a 2 SD change in the relationship development indicators to make the effect size estimate comparable to that of dichotomous predictors (i.e., Cohen's *d*; see Gelman, 2008). $\beta_{\text{Time | Liking Partialled}}$ coefficients were standardized in the same manner but control for Time | Liking.

*** $p < .001$. ** $p < .01$. * $p < .05$.

[†] $p < .10$.

accuracy also appears to have important effects on relationship development over time.⁵

General Discussion

Overall, accurate first impressions have a positive influence on relationship development that appears to become even stronger over time. That is, perceiving a new acquaintance with greater distinctive self-other agreement was marginally associated with greater liking initially, but significantly predicted greater interaction with that individual throughout the semester and, by the end of the semester, greater liking and interest in continued interaction with them in the future. Importantly, distinctive self-other agreement continued to significantly predict greater social interaction after controlling for initial liking, providing preliminary evidence consistent with this form of accuracy playing a causal role in promoting relationship development over time. These results demonstrate the enduring nature of accurate first impressions: how accurately you view someone's personality after only a few minutes of conversation predicts how much you will interact with them and like them several months later. Furthermore, these effects operated independently of the benefits of biases such as positivity and assumed similarity.

It remains unclear why distinctive self-other agreement had such positive longer-term consequences, particularly given the weaker initial effects. One possibility is that perceptions that are more in line with the target's distinctive self-views are more likely to be confirmed, thus reinforcing one's initial feeling of knowing and comfort in interactions (Reis et al., 2011), in turn promoting relationship development over time. That is, perhaps distinctive self-other agreement is most beneficial once it becomes evident that one's impression was

in fact accurate. As such, accuracy may have even stronger effects on liking and continued interaction in contexts where interaction is easier and more frequent than it was in the present study. It is also worth noting that by studying a context where interaction in the future was possible, likely desired by the participants, and encouraged by the research team, the interaction atmosphere was quite positive and may have induced closeness, which may be necessary elements for familiarity, and in turn accuracy, to promote liking (Norton et al., 2011; Reis et al., 2011). Future research is needed to better understand the underlying mechanisms and necessary conditions of these effects. In sum, these findings suggest that viewing others more accurately may benefit relationship development over time.

Not surprisingly, biased personality impressions also promoted relationship development. The formation of positively biased impressions played a particularly strong role, predicting substantially greater levels of liking and interest in future interactions, both initially and at the end of the semester. Further, more positively biased first impressions spurred greater interaction throughout the semester. Although these effects were reduced when controlling for initial liking, positively biased impressions continued to significantly predict liking and interest in future interactions at the end of the semester, consistent with the argument that forming positively biased impressions may play a causal role in promoting relationship development over time. These findings are in line with previous cross-sectional studies linking positive perceptions to greater liking, among new and longer term acquaintances (Human & Biesanz, 2011; Leising et al., 2010), and with longitudinal evidence that positively biased perceptions benefit romantic relationships (Murray & Holmes, 1997). However, to our knowledge, this is the first longitudinal study to demonstrate the long-term

social benefits of positively biased perceptions among new acquaintances, filling an important gap in the literature.

Greater assumed similarity was also concurrently associated with greater liking and interest in future interactions, in line with previous research (e.g., Human & Biesanz, 2011; Selfhout et al., 2009). Unexpectedly, however, assumed similarity did not significantly predict any of the longer term relationship development indicators. Furthermore, assumed similarity marginally predicted less interaction when controlling for initial liking, suggesting that assumed similarity in the absence of liking may actually have negative long-term consequences. Overall, this pattern of results suggests that assumed similarity may have positive consequences initially, but these associations do not appear to last very long.

Why do our findings differ from previous longitudinal studies that have found that assumed similarity promotes greater friendship development over time (Selfhout et al., 2009; Sunnafrank & Ramirez, 2005)? One possibility is the differing social context: despite presumably having the opportunity to interact in class, social interactions were quite infrequent among classmates. Perhaps assumed similarity was not strong enough to promote greater interaction in such a setting. The classes in this study were very large in size (averaging over 250 students), potentially making it difficult to interact again even if desired. In contrast, Selfhout et al.'s (2009) study, which found long-term positive consequences of assumed similarity, involved much smaller classes (averaging about 25 students), where it might actually be hard to avoid interacting. Thus, perhaps assumed similarity is best able to promote relationship development in settings where interaction is easier and more frequent, such as smaller classes, dormitories, or in the workplace.

There are several limitations to the current study. First, our assessment of accuracy was limited to distinctive self-other agreement. Although self-reports are a well-validated accuracy criterion (Funder & Colvin, 1997), it would be ideal to have additional accuracy validation measures, such as close informant reports or behavioral indicators. Such additional perspectives would help to disentangle whether it is accuracy in general, or being perceived in line with how one views the self, specifically, that promotes relationship development. The generalizability of the study is also somewhat limited by some of the components of the study design, such as the encouragement to remain in touch and the e-mails with fellow classmates' photos. However, given that the overall interaction rates were still quite low, it does not seem likely that these efforts had too strong of an influence on participants' behavior. Thus, it is possible that these results are quite representative of naturally occurring processes among classmates. An important next step will be to examine these processes in a study that does not explicitly attempt to promote the development of social networks.

In conclusion, accurate first impressions do play an important role in promoting long-term relationship development. Specifically, distinctive self-other agreement appears to promote both greater interaction and more positive social evaluation over time. Importantly, these effects occur independently of the very strong short- and long-term benefits of positive bias

and the strong short-term benefits of assumed similarity. These findings provide the first longitudinal evidence that accurate first impressions have important long-term social consequences among new potential social ties. In sum, more accurate first impressions do in fact leave a lasting impression—one that promotes greater relationship development over time.

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Notes

1. Previous acquaintanceship was assessed by having participants respond to the yes or no question: “*Have you met this person before?*”, after each interaction, at the end of the questionnaire used to rate their partner's personality. If participants indicated yes, their assessment of that particular target was removed from the analyses. In seven cases, participants did not provide a response to the question, but in each case their interaction partners indicated not having met them before, so these impressions were included in the analyses.
2. These participants were part of a larger experimental study on whether facilitating the development of a social network in a large classroom setting would promote more social interactions, in turn promoting individual well-being. Participants were randomly assigned to either a control condition, which included an individual lab visit, or an experimental condition, which involved a group lab visit with other students who were enrolled in the same class. Within the experimental condition, which is the only one examined in this article, groups were created by using time availabilities provided by the participants; we scheduled the group sessions so as to allow as many people as possible to participate. Some people who were randomly assigned to the experimental condition were not available at any of the times we scheduled ($N = 23$) and were thus unable to participate in the study. Given the aim of the study—to examine the impact of social network development—at the end of the initial group session the experimenter encouraged participants to maintain contact throughout the semester, by sitting together or becoming Facebook friends, for example. Further, participants were also e-mailed photographs of their group members several times throughout the semester to remind them of their potential social ties within their class. Despite this encouragement, overall rates of interaction were quite low (see Table 1).
3. The sample sizes for different analyses vary slightly due to additional missing data on individual items; these are listed in Table 1.
4. Additional potential sources of nonindependence in these data come from the dyadic pairs and the round-robin groups. However, these random effects were very minimal to zero; thus, when we included these random effects, several models failed to converge.

Nevertheless, when these models did converge, the results were generally consistent with the reported results.

5. We also examined whether perceiver impressions were associated with target reported social consequences, finding that being perceived with greater distinctive self-other agreement significantly predicted the target liking the perceiver more at Time 1, as well as sitting with the perceiver more in class, even after controlling for Time 1 liking, all $|z| > 2.35$. Greater positivity and assumed similarity also significantly predicted greater target reported Time 1 liking of the perceiver and interest in future interactions with the perceiver, all $|z| > 2.12$. Positively biased impressions also significantly predicted targets reporting greater interaction on both the single item and composite interaction count measure, even after controlling for Time 1 liking, all $|z| > 2.30$.

References

- Bates, D., & Sarkar, D. (2007). *lme4: Linear mixed-effects models using S4 classes (R package Version 0.9975-12)* [Computer software]. Retrieved January 15, 2009, from <http://cran.r-project.org/web/packages/lme4/index.html>.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497. doi: 10.1037/0033-2909.117.3.497
- Biesanz, J. C. (2010). The social accuracy model of interpersonal perception: Assessing individual differences in perceptive and expressive accuracy. *Multivariate Behavioral Research, 45*, 853–885. doi:10.1080/00273171.2010.519262
- Biesanz, J. C., & Human, L. J. (2010). The cost of forming more accurate impressions: Accuracy-motivated perceivers see the personality of others more distinctively but less normatively than perceivers without an explicit goal. *Psychological Science, 21*, 589–594. doi: 10.1177/0956797610364121
- Biesanz, J. C., Human, L. J., Paquin, A.-C., Chan, M., Parisotto, K. L., Sarracino, J., & Gillis, R. L. (2011). Do we know when our impressions of others are valid? Evidence for realistic accuracy awareness in first impressions of personality. *Social Psychological and Personality Science, 2*, 452–459. doi: 10.1177/1948550610397211
- Borkenau, P., & Zaltauskas, K. (2009). Effects of self-enhancement on agreement on personality profiles. *European Journal of Personality, 23*, 107–123. doi:10.1002/per.707
- Byrne, D., Griffitt, W., & Stefaniak, D. (1967). Attraction and similarity of personality characteristics. *Journal of Personality and Social Psychology, 5*, 82–90. doi:10.1037/h0021198
- Cronbach, L. J. (1955). Processes affecting scores on “understanding of others” and “assumed similarity”. *Psychological Bulletin, 53*, 177–193. doi:10.1037/h0044919
- Edwards, A. L. (1957). *The social desirability variable in personality assessment and research*. New York, NY: Dryden.
- Funder, D., & Colvin, C. (1997). Congruence of others’ and self-judgments of personality. *Handbook of personality psychology* (pp. 617–647). San Diego, CA: Academic Press.
- Furr, R. M. (2008). A framework for profile similarity: Integrating similarity, normativeness, and distinctiveness. *Journal of Personality, 76*, 1267–1316. doi: 10.1111/j.1467-6494.2008.00521
- Gelman, A. (2008). Scaling regression inputs by dividing by two standard deviations. *Statistics in Medicine, 27*, 2865–2873. doi: 10.1002/sim.3107
- Human, L. J., & Biesanz, J. C. (2011). Through the looking glass clearly: Accuracy and assumed similarity in well-adjusted individuals’ first impressions. *Journal of Personality and Social Psychology, 100*, 349–364. doi:10.1037/a0021850
- Human, L. J., & Biesanz, J. C. (2012). Accuracy and assumed similarity in first impressions of personality: Differing associations at different levels of analysis. *Journal of Research in Personality, 46*, 106–110. doi:10.1016/j.jrp.2011.10.002
- Human, L. J., Biesanz, J. C., Parisotto, K. L., & Dunn, E. W. (2012). Your best self helps reveal your true self: Trying to make a good impression leads to more accurate personality impressions. *Social Psychological and Personality Science, 3*, 23–30. doi: 10.1177/1948550611407689
- John, O. P., & Srivastava, S. (1999). The big five taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds). *Handbook of personality: Theory and research* (pp. 102–138). New York, NY: Guilford Press.
- Kenny, D. A., & Acitelli, L. K. (2001). Accuracy and bias in the perception of the partner in a close relationship. *Journal of Personality and Social Psychology, 80*, 439–448. doi:10.1037/0022-3514.80.3.439
- Kenny, D., & Winquist, L. (2001). The measurement of interpersonal sensitivity: Consideration of design, components, and unit of analysis. *Interpersonal sensitivity: Theory and measurement* (pp. 265–302). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Lackebauer, S. D., Campbell, L., Rubin, H., Fletcher, G. J. O., & Troister, T. (2010). The unique and combined benefits of accuracy and positive bias in relationships. *Personal Relationships, 17*, 475–493. doi:10.1111/j.1475-6811.2010.01282.x
- Langlois, J. H., & Roggman, L. A. (1990). Attractive faces are only average. *Psychological Science, 1*, 115–121. doi:10.1111/j.1467-9280.1990.tb00079.x
- Leising, D., Erbs, J., & Fritz, U. (2010). The letter of recommendation effect in informant ratings of personality. *Journal of Personality and Social Psychology, 98*, 668–682. doi: 10.1037/a0018771
- Lorenzo, G. L., Biesanz, J. C., & Human, L. J. (2010). What is beautiful is good and more accurately understood. Physical attractiveness and accuracy in first impressions of personality. *Psychological Science, 21*, 1777–1782. doi:10.1177/0956797610388048
- Luo, S., & Snider, A. (2009). Accuracy and biases in newlyweds’ perceptions of each other: Not mutually exclusive but mutually beneficial. *Psychological Science, 20*, 1332–1339. doi:10.1111/j.1467-9280.2009.02449.x
- Murray, S. L., & Holmes, J. G. (1997). A leap of faith? Positive illusions in romantic relationships. *Personality and Social Psychology Bulletin, 23*, 586–604. doi: 10.1177/0146167297236003
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology, 70*, 79–98. doi: 10.1037/0022-3514.70.1.79

- Murray, S. L., Holmes, J. G., Bellavia, G., Griffin, D. W., & Dolderman, D. (2002). Kindred spirits? The benefits of egocentrism in close relationships. *Journal of Personality and Social Psychology*, 82, 563–581. doi:10.1037/0022-3514.82.4.563
- Neff, L. A., & Karney, B. R. (2005). To know you is to love you: The implications of global adoration and specific accuracy for marital relationships. *Journal of Personality and Social Psychology*, 88, 480–497. doi:10.1037/0022-3514.88.3.480
- Norton, M. I., Frost, J. H., & Ariely, D. (2011). Does familiarity breed contempt or liking? Comment on Reis, Maniaci, Caprariello, Eastwick, and Finkel (2011). *Journal of Personality and Social Psychology*, 101, 571–574. doi: 10.1037/a0023
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review*, 8, 364–382. doi:10.1207/s15327957pspr0804_3
- Reis, H. T., Maniaci, M. R., Caprariello, P. A., Eastwick, P. W., & Finkel, E. J. (2011). Familiarity does indeed promote attraction in live interaction. *Journal of Personality and Social Psychology*, 101, 557–570. doi:10.1037/a0022885
- Selfhout, M., Denissen, J., Branje, S., & Meeus, W. (2009). In the eye of the beholder: Perceived, actual, and peer-rated similarity in personality, communication, and friendship intensity during the acquaintanceship process. *Journal of Personality and Social Psychology*, 96, 1152–1165. doi:10.1037/a0014468
- Sunnafrank, M., & Ramirez, A., Jr. 2004. At first sight: Persistent relational effects of get-acquainted conversations. *Journal of Social and Personal Relationships*, 21, 361–379. doi:10.1177/0265407504042837

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