

# **Communication Methods and Measures**



ISSN: 1931-2458 (Print) 1931-2466 (Online) Journal homepage: https://www.tandfonline.com/loi/hcms20

# Not Being Accurate Is Not Quite the Same as Being Inaccurate: Variations in Reported (in)Accuracy of Perceptions of Political Views of Network Members Due to Uncertainty

William P. Eveland, Jr., Hyunjin Song, Myiah J. Hutchens & Lindsey Clark Levitan

To cite this article: William P. Eveland, Jr., Hyunjin Song, Myiah J. Hutchens & Lindsey Clark Levitan (2019) Not Being Accurate Is Not Quite the Same as Being Inaccurate: Variations in Reported (in)Accuracy of Perceptions of Political Views of Network Members Due to Uncertainty, Communication Methods and Measures, 13:4, 305-311, DOI: 10.1080/19312458.2019.1612865

To link to this article: <a href="https://doi.org/10.1080/19312458.2019.1612865">https://doi.org/10.1080/19312458.2019.1612865</a>

| + View supplementary material 🗗       | Published online: 16 May 2019. |
|---------------------------------------|--------------------------------|
| Submit your article to this journal 🗷 | Article views: 181             |
| View related articles 🗗               | View Crossmark data 🗗          |



### RESEARCH NOTE



# Not Being Accurate Is Not Quite the Same as Being Inaccurate: Variations in Reported (in)Accuracy of Perceptions of Political Views of Network Members Due to Uncertainty

William P. Eveland, Jr.a, Hyunjin Song 6, Myiah J. Hutchensc, and Lindsey Clark Levitand

<sup>a</sup>School of Communication, The Ohio State University, Columbus, Ohio, USA; <sup>b</sup>Department of Communication, University of Vienna, Vienna, Austria; <sup>c</sup>Department of Public Relations, University of Florida, Gainesville, Florida, USA; <sup>d</sup>Department of Psychology, Shepherd University, Shepherdstown, West Virginia, USA

#### **ABSTRACT**

Most existing evidence suggests that accuracy in perceptions of political preferences within communication networks is reasonably high, but closer examination suggests this may not be true. Perceptions may be accurate, inaccurate, or respondents may offer no perceptions to evaluate for accuracy due to uncertainty. We re-analyze data from several published studies to evaluate whether different treatments of "don't know" (DK) and similar ambiguous responses matters when evaluating accuracy levels. It does, sometimes leading to dramatically altered conclusions regarding accuracy. We also reanalyze recent data to evaluate the individual and group-level factors (with an emphasis on communication and homophily) that lead to such DK responses, and consider the implications of the treatment of DK responses for inferences about the role of communication in producing truly accurate perceptions.

For nearly a century, scholars have empirically evaluated the accuracy of perceptions of the attitudes and behaviors of social network members (e.g., Schanck, 1932). This work has been driven by both theoretical considerations (e.g., What factors increase or decrease accuracy?) and methodological ones (e.g., Are measures of alter opinions based on ego perceptions valid as indicators of actual alter opinions, reducing the need for dyadic data?). Yet largely missing from this literature is a differentiation between the *absence of knowledge* of alters' opinions on the one hand (what we term "uncertainty") and *faulty knowledge* of alters' opinions (what we term "inaccuracy") on the other. While it is often claimed that perception is reality, Huckfeldt, Johnson, and Sprague (2004) have argued that "effective" political communication by definition requires an accurate perception of network alters. Ineffective communication may arise when egos perceive inaccurate information – or they simply have insufficient or conflicting information – about their alters' opinions.

Despite a clear theoretical distinction between perceptions of agreement, disagreement, and not knowing (Cowan & Baldassarri, 2018), in many cases respondents who report they don't know (hereafter, "DK") to alter perception questions may, in fact, be able to guess at better than chance rates based on, for instance, subtle visual cues of strangers (Rule & Ambady, 2010; Tskhay & Rule, 2013). When typical stereotypical cues to partisanship are available such as ethnicity, gender, or geographic regions, individuals should be able to guess partisanship of alters reasonably accurately if forced to do so. On the other hand, if respondents report that they DK the political viewpoints of

CONTACT William P. Eveland, Jr. eveland.6@osu.edu School of Communication, The Ohio State University, 3139 Derby Hall, 154 N. Oval Mall, Columbus, OH 43210

their alters, a perception of DK may be the respondent's reality to which they will respond behaviorally. Thus, even if an individual might be able to guess accurately, the fact that s/he lacks the confidence to make a guess in the very low-cost setting of a survey suggests s/he would choose not to do so in potentially riskier interpersonal interactions. Then, should uncertainty be lumped in with inaccuracy, or thrown out altogether as missing data, when estimating accuracy? Does making a distinction between inaccuracy and uncertainty add value to our understanding of political network perceptions? Moreover, although evidence suggests that communication or frequency of contact is important in producing accuracy (Eveland & Hutchens, 2013), it is not clear due to the confounding of uncertainty and inaccuracy if communication merely decreases perceptions of DK or actually increases accuracy as well. The present study evaluates this distinction of uncertainty vs. inaccuracy, and further, the role of communication in this process.

# Existing Evidence on "Don't Know" in Political Networks

While data on the question of accuracy are relatively scarce, evidence has suggested that in general people are accurate in their perceptions of their alters' political preferences. For instance, Mutz (2006) reports an accuracy rate of 78%, which is very close to the accuracy level found in Huckfeldt and Sprague's (1995) South Bend study and in Goel, Mason and Watts' (2010) Facebook study. Levitan and Visser (2009) report inaccuracy (on two different political topics) in the range of 10%. Such findings often are cited as evidence in favor of using an ego's perception as a valid measure of actual alter viewpoints. However, Eveland and Hutchens (2013) report accuracy of only about 30%, which leads to an entirely different conclusion.

Why is this last finding so anomalous? In some cases DK responses are lumped in with explicitly inaccurate perceptions; in others, DK responses viewed as missing data and dropped from analysis. This decision can have a substantial impact on reported accuracy rates. And in either case, these decisions produce an implied or explicit dichotomy of accurate vs. inaccurate. However, "not being accurate is not quite the same as being inaccurate" (Eveland & Hutchens, 2013, p. 20). Being confidently wrong (or right) in perceptions of an alter is likely to produce different behavioral consequences than being uncertain (Cowan & Baldassarri, 2018). Nonetheless, the implications of this are rarely, if ever, considered. Many studies do not even make explicit reference to how DK responses are treated (e.g., White & Watkins, 2000).

In one example of the implications of question design and coding decisions on reported accuracy rates, Goel et al. (2010) did not offer a DK option. However, they note that respondents who "did not know the person well enough" (p. 612) or thought the person didn't have an opinion, could skip the question on perception of alters' attitude. Rather than treat these effective DK responses as inaccurate or a third category, Goel and colleagues appear to have simply excluded them from the accuracy calculation. This treatment of DK responses as missing data - a whopping 63% of their responses from our calculations - could explain the relatively high rate of accuracy they reported (74% overall). In this - and some other cases we describe below - treating DK as inaccurate would dramatically reduce the level of accuracy they reported.

## Study 1: Rates of Accuracy, Inaccuracy, and Uncertainty

In order to evaluate the implications of specific analytical decisions regarding DK responses on rates of accuracy, we re-analyzed data from several published studies: Huckfeldt and Sprague's (1995) South Bend (SB) study, Huckfeldt et al.'s (2004) Indianapolis-St. Louis (ISL) study, Levitan and Visser's (2009) University of Chicago (UC) study, and Eveland and Hutchens' (2013) Ohio State University (OSU) network study. Figure 1 summarizes best and worst-case scenarios for accuracy levels based on this re-analysis.

SB study participants reported the 1984 vote choice of three alters. Our analysis of the SB Study raw data (Huckfeldt & Sprague, 2006) - only focusing on non-relatives as in the original study reveals about 10% of respondents reported DK, with another 5% believing their alter did not vote (which itself was only 33% accurate). If we only include alters who voted for Reagan or Mondale and

# Accuracy of Alter Perceptions

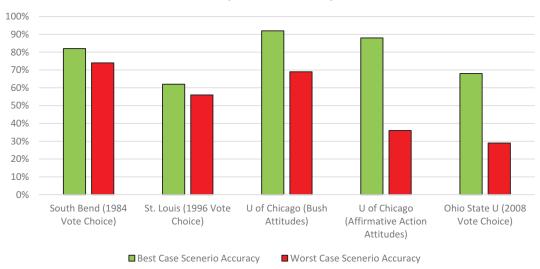


Figure 1. Best and worst case scenario interpretations of accuracy depending on data coding decisions.

count explicit DK or refusal as inaccuracies, accuracy in the South Bend data is 74%. Dropping the DK and refuse answers increases accuracy to 82%. Here, the treatment of DK matters – by 8% – but does not alter the fundamental conclusion of high accuracy. Finally, it is worth noting that Reagan won the 1984 election in a landslide (by 18% in the popular vote), possibly making accurate assessments of support for Reagan (also high in these data) a simple matter.

For the ISL Study (Huckfeldt & Sprague, 2007), participants were asked about candidate preferences of up to five discussion partners. Accuracy across alters by any measure was considerably lower than in the SB Study. When respondents who answered DK for alter candidate preference were treated as missing (roughly 12% of respondents), accuracy was approximately 62%. When DKs were classified as inaccurate, accuracy declined to 56% – barely higher than a coin flip. Given the relatively low DK rates, the implications for accuracy are not dramatic here, yet the overall accuracy rates are at least 15% lower than reports in the literature from other similar name generator studies (e.g., Huckfeldt & Sprague, 1995; Mutz, 2006). Another historical note: in 1996 Clinton beat Dole by a margin of about 8% in the popular vote, but in the ISL data, candidate support was relatively evenly split, probably making it more difficult to guess candidate support of network alters.

The UC Study asked participants to report attitudes about President Bush and affirmative action on bipolar scales (7-point scales for self-reports, 5-point scales for alters) for up to five alters. Levitan and Visser (2009) report only 8% of respondents were unambiguously inaccurate for the Bush opinion item by placing their alter on the wrong side of the scale. This might imply the inverse – 92% accuracy – to readers. However, 18% of responses included either egos misperceiving the alter to be at the midpoint (14%), or alters reporting the midpoint when egos perceived them to hold a directional opinion (4%). The former – an ego reporting an alter neither likes nor dislikes the president – is one way of egos reporting DK (Sturgis, Roberts, & Smith, 2014). Another 5.5% refused to answer the perception question, effectively reporting DK. Thus, by the most conservative assessment (treating missing data, along with non-matching midpoint responses, as inaccurate), accuracy on this question was only 69% instead of 92%. Again, while either number would suggest relatively high accuracy, the 23% difference is considerable. Additionally, the strong uniformity of opinion toward Bush in this population – less than 17% of the alters reported positive evaluations of Bush – could be a major factor in the high level of accuracy on this question relative to the SB and ISL studies when coded similarly.

For the affirmative action item in the UC Study, the results of differences in coding are even more dramatic. As reported in the paper (Levitan & Visser, 2009), only 12% of respondents were unambiguously incorrect, which may lead readers to infer that 88% were accurate. However, 16% of alters reported the midpoint position without it being perceived as such by the egos, and 24% of egos misperceived the alter to be at the midpoint. Moreover, 15% of egos left the perception question blank, possibly as a form of DK response. Therefore, by the most conservative estimate, accuracy on affirmative action in the UC study was only 36%; by the most generous inference, accuracy was 88%. Here, we see a 52% difference in how one would interpret accuracy based on the treatment of DK and evaluation of midpoint vs. directional assessments. Is accuracy extremely high, or is it incredibly low, or perhaps somewhere between? We should note that, on this question among these alters, opinion was relatively split by comparison to the Bush attitude question, thus making accurate guessing more difficult.

Lastly, a return to the OSU data finds that nearly 60% of ego's perceptions of network alters were DK responses, in part a function of offering an explicit DK option as well as asking political preferences of a large number of (probably) weak ties. While there was considerable variation (see Figure A1 in the appendix), average accuracy was only 28-29% across the 25 groups in the study when DK responses are treated as inaccurate. If DK responses are considered missing, accuracy skyrockets to 67-68%, completely altering the conclusion. Although Obama support was the majority in this student sample, Ohio was a battleground state in 2008 and this may have made accuracy more difficult to achieve by guessing while also produced more guessing.

Overall, our findings suggest we may need to explicitly separate accuracy, inaccuracy, and uncertainty (i.e., DKs and other non-responses) on perceptions of political viewpoints among alters. This also would argue for revisiting findings that predict the role of communication in producing accuracy of political perceptions, especially when the treatment of DK and other ambiguous responses (such as midpoints) leads to significant variation in dichotomous accuracy rates. Moreover, distinguishing between uncertainty and explicit inaccuracy permits a closer examination of the social psychological process of coming to accuracy (or not) in political perceptions. To this end, we more closely consider the results of Eveland and Hutchens (2013), who focused on the role of communication in producing accuracy, yet this time taking into consideration the distinction between uncertainty and truly inaccurate responses.

# Study 2: Implications of Communication and Homophily for Uncertainty and Inaccuracy

Our goal here is to examine the predictors – at the individual and group level – of the tendency to provide the uncertainty response (i.e., DK vs. all others), and then predicting accuracy (with DK coded as inaccurate) while controlling for uncertainty responses. We expect that discussion frequency, following uncertainty reduction theory (Berger & Calabrese, 1975), simultaneously reduces both inaccurate responses and uncertain responses. Support for these predictions would both ameliorate concerns Eveland and Hutchens' findings were driven largely by DK responses coded as inaccurate in the data, and help us better understand any possible differences in communication effects on uncertainty compared to inaccuracy. We do so by predicting aggregated DK responses ("uncertainty") and perceptual accuracy ("perceptiveness") using a standard multilevel linear modeling (MLM) technique. Here, we classify an ego's perception of candidate preference of all other members in their group as DK vs. explicitly inaccurate vs. explicitly accurate. Then, following Eveland and Hutchens (2013), we created individual summary measures of "perceptiveness" (i.e., how accurate an ego is regarding political preferences aggregated across all of his or her alters) and summary measures of "uncertainty" (the proportion of one's alters rated by ego as DK: see Appendix for a methodological detail and full results).

The results revealed that general discussion frequency (as expected) was the strongest negative predictor of uncertainty. Among the group-level variables, homophily was the only significant negative predictor of uncertainty (the first column of Table 1). When we turn our attention to the results predicting ego's perceptiveness, the models revealed that only general discussion frequency is a consistent and positive predictor. When aggregated uncertainty was included in the model



**Table 1.** Models predicting "uncertainty" (DK response) and "perceptiveness" with and without uncertainty (DK) controlled (Group N = 25).

|                       | Uncertainty (DK)     | Perceptiveness (w/o DK) | Perceptiveness (w/DK) |
|-----------------------|----------------------|-------------------------|-----------------------|
| Fixed component       |                      |                         |                       |
| Intercept             | . <b>898</b> (.182)* | .070 (.125)             | . <b>559</b> (.063)*  |
| L2 predictors         |                      |                         |                       |
| Group size            | 001 (.007)           | .000 (.006)             | .000 (.003)           |
| Politicalness         | 016 (.053)           | 014 (.040)              | 025 (.015)            |
| Homophily             | <b>545</b> (.223)*   | 153 (.342)              | 422 (.260)            |
| L1 predictors         |                      |                         |                       |
| Uncertainty           |                      |                         | <b>543</b> (.036)*    |
| Network size          | .012 (.008)          | 007 (.007)              | 001 (.003)            |
| White                 | .074 (.045)          | 022 (.027)              | .015 (.014)           |
| Black                 | 054 (.086)           | 038 (.037)              | 069 (.066)            |
| Female                | . <b>076</b> (.025)* | 035 (.025)              | .007 (.017)           |
| Interest              | <b>055</b> (.021)*   | . <b>037</b> (.014)*    | .007 (.006)           |
| Preference Str        | .000 (.001)          | .000 (000)              | .000 (.000)           |
| Participation         | .007 (.015)          | .002 (.011)             | .008 (.010)           |
| Knowledge             | .007 (.010)          | 008 (.007)              | 005 (.004)            |
| Avoidance             | 015 (.025)           | 013 (.016)              | <b>024</b> (.011)*    |
| Obama support         | 027 (.037)           | .015 (.025)             | .000 (.014)           |
| General freq          | <b>294</b> (.059)*   | . <b>257</b> (.038)*    | . <b>107</b> (.028)*  |
| Freq x Homo           |                      | . <b>834</b> (.304)*    | . <b>808</b> (.222)*  |
| Variance components   |                      |                         |                       |
| Intercept $\tau_{00}$ | .014*                | .011*                   | .002*                 |
| Level 1 $(\sigma^2)$  | .072                 | .034                    | .014                  |
| ICC (from null model) | .306                 | .459                    | .459                  |
| Level 1 N             | n = 438              | n = 424                 | n = 424               |

predicting perceptiveness, discussion frequency remained significant although the magnitude of its effect was somewhat attenuated (see the last two columns in Table 1). Among group-level predictors, only the main effect of homophily was significant without any interaction (results shown in Table A3 in the Appendix), presumably because a biased distribution of political preference increases the chance of being "right" when the majority preference is used as a reasonable predictor of one's alter's political preferences. When the cross-level interaction between general discussion frequency and group homophily is added to the model (see the last two columns in Table 1), the effect of general discussion frequency in predicting perceptiveness is stronger in groups that are more rather than less homophilous in terms of candidate preferences.

### **General Discussion**

The present article makes a number of contributions to the literature. First, through a close reading of published work and secondary analysis, it finds that the common claim that accuracy rates of political perceptions are consistently high is subject to revision. The availability of explicit DK or question-skipping options, the use of attitudinal midpoints, and/or settings in which questions are easily skipped due to lack of personal interviewing (Eveland & Hutchens, 2013; Goel et al., 2010; Levitan & Visser, 2009), lead to the need for ambiguous coding decisions that can have dramatic implications for reported accuracy rates. We find that depending solely on the treatment of missing data and midpoint responses, multiple studies show dramatic swings of 40% to 60% across accuracy measures, altering conclusions from majority accuracy to majority inaccuracy. Clearly, the treatment of DKs, non-responses, and midpoint positions are potentially crucial decisions in making descriptive conclusions about the ability of the public to perceive political preferences of their network members accurately. A simple conclusion that most people accurately perceive the political viewpoints of their discussants – as is prevalent in the current political discussion literature – is not viable based on our detailed review of the data. This has potentially troubling implications for the treatment of unverified perceptions of network agreement as roughly accurate – which also is common in the literature.

Moreover, accuracy rates clearly vary across studies even when definitions of accuracy are held constant. Figure 1 reveals that across five cases, the best case scenario definitions of accuracy ranged from roughly 60-90%, whereas worst case scenario definitions of accuracy ranged from roughly 30-70%. Even comparisons of the two Huckfeldt studies show accuracy roughly 20% higher in the South Bend study compared to the Indianapolis-St. Louis study (82% vs. 62% or 74% vs. 56%, depending on definitions). Therefore, even if largely consistent definitions of accuracy are employed, accuracy is not likely to be consistently high or consistently low. Rather, accuracy appears much higher when there is a clear majority climate of opinion (such as in South Bend in 1984, or in University of Chicago student attitudes toward Bush). By contrast, in closer elections (1996 and 2008) and in swing states (Missouri but not Indiana in 1996, Ohio in 2008), accuracy is lower. In short, a skewed opinion environment makes accuracy easier (as shown with the group-level data in Eveland & Hutchens, 2013 and here), whereas balanced environments make it more difficult, and therefore, have much lower accuracy rates (as shown in the ISL study, and in the affirmative action item in the UC study). Our analyses (see also Eveland & Hutchens, 2013) suggest that one factor is the contextual variation of how skewed vs. balanced the local political climate is, even when definitions of accuracy are held constant. Although this has important implications regarding underlying determinants of perceptual accuracy regarding network alters, this has been a relatively hidden factor in the political communication literature. For instance, the act of guessing is much simpler in a two-party system than in multi-party systems in which votes or preferences are distributed across a larger number of candidates or parties. In the U.S., guessing in the closely contested elections of the past two decades gives one a 50/50 chance of accuracy. As the number of viable options (i.e., parties or candidates) increases, chance accuracy declines, and, we would surmise, uncertainty should increase as well. This is an important avenue for future research.

Our findings also highlight the important theoretical value of considering perceptions of others' opinions as a trichotomy - accurate, inaccurate, or uncertain - rather than as a dichotomy of inaccurate vs. accurate. According to uncertainty reduction theory (Berger & Calabrese, 1975), discussion should decrease uncertainty - or increase accuracy if DK responses are defined as inaccurate. Moreover, our results reveal general communication frequency as one of the most consistent and strongest drivers of accuracy of alter political perceptions – both explicit accuracy and the reduction of uncertainty. Thus, while confirming key findings from Eveland and Hutchens (2013), our results highlight the importance of careful consideration in consciously choosing an approach for operationalizing accuracy, and carefully reporting that information. Do we need to know how well people know all their network members' attitudes? Or do we need to know if people are correct only when they think they know their network members' attitudes? In the former case, DK responses may be considered incorrect, whereas in the latter, they are irrelevant and the appropriate action may be to omit them and then carefully report this omission and its justification. And, as recent work by Cowan and Baldassarri (2018) has shown, in many cases it may be important to place greater emphasis on those who express uncertainty as a category unto itself. Estimates of accuracy can vary widely depending on method, and so interpretation of results can vary widely as well. Future research should strive to be as explicit as possible in reports of findings, and to justify these decisions based on theory and study goals.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## Note

1. In the SB and ISL studies, we treat perceptions that the alter would not vote or was ineligible to vote as missing data because these confound candidate preference perceptions with legal matters (eligibility) and behavioral matters (choosing to cast a vote vs. preferring a candidate if voting). Had we included these perceptions as inaccurate when they did not match, accuracy would further decline.



### **ORCID**

Hyunjin Song (b) http://orcid.org/0000-0001-7752-3035

## References

- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. Human Communication Research, 1, 99–112. doi:10.1111/j.1468-2958.1975. tb00258.x
- Cowan, S. K., & Baldassarri, D. (2018). "It could turn ugly": Selective disclosure of attitudes in political discussion networks. Social Networks, 52, 1-17. doi:10.1016/j.socnet.2017.04.002
- Eveland, W. P., Jr., & Hutchens, M. J. (2013). The role of conversation in developing accurate political perceptions: A multilevel social network approach. Human Communication Research, 39, 422-444. doi:10.1111/hcre.12011
- Goel, S., Mason, W., & Watts, D. J. (2010). Real and perceived attitude agreement in social networks. Journal of Personality and Social Psychology, 99, 611-621. doi:10.1037/a0020697
- Huckfeldt, R., Johnson, P., & Sprague, J. (2004). Political disagreement: The survival of diverse opinions within communication networks. New York, NY: Cambridge University Press.
- Huckfeldt, R., & Sprague, J. (1995). Citizens, politics and social communication: Information and influence in an election campaign. New York, NY: Cambridge University Press.
- Huckfeldt, R., & Sprague, J. (2006). Presidential election campaign study, 1984: [South Bend, Indiana]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2006-01-12, doi:10.3886/ICPSR06522.v1
- Huckfeldt, R., & Sprague, J. (2007). Indianapolis-St. Louis election study, 1996-1997. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]. doi:10.3886/ICPSR02962.v2
- Levitan, L. C., & Visser, P. S. (2009). Social network composition and attitude strength: Exploring the dynamics within newly formed social networks. Journal of Experimental Social Psychology, 45, 1057-1067. doi:10.1016/j. jesp.2009.06.001
- Mutz, D. C. (2006). Hearing the other side: Deliberative versus participatory democracy. New York, NY: Cambridge University Press.
- Rule, N. O., & Ambady, N. (2010). Democrats and republicans can be differentiated from their faces. PLoS One, 5, e8733. doi:10.1371/journal.pone.0008733
- Schanck, R. L. (1932). A study of a community and its groups and institutions conceived of as behaviors of individuals. Psychological Monographs, 43(2), i-133. doi:10.1037/h0093296
- Sturgis, P., Roberts, C., & Smith, P. (2014). Middle alternatives revisited: How the neither/nor response acts as a way of saying "I don't know"? Sociological Methods & Research, 43, 15-38. doi:10.1177/0049124112452527
- Tskhay, T. O., & Rule, N. O. (2013). Accuracy in categorizing perceptually ambiguous groups: A review and meta-analysis. Personality and Social Psychology Review, 17, 72-86. doi:10.1177/1088868312461308
- White, K., & Watkins, S. C. (2000). Accuracy, stability and reciprocity in informal conversational networks in rural Kenya. Social Networks, 22, 337-355. doi:10.1016/S0378-8733(00)00030-7