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Authors

Kaasa, Suzanne O
Cauffman, Elizabeth
Clarke-Stewart, K Alison
et al.

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False Accusations in an Investigative Context: Differences between Suggestible and Non-suggestible Witnesses

Suzanne O. Kaasa^{*,†}, Elizabeth Cauffman[†], K. Alison Clarke-Stewart[†] and Elizabeth F. Loftus[†]

False sexual abuse allegations have spurred research on suggestibility, on the assumption that leading questions may produce false accusations. Most researchers, however, have not measured the likelihood that those who respond to suggestive questioning will take the next step and make a formal (false) accusation. The present study incorporates both aspects of abuse investigations: suggestibility (i.e., responsiveness to questions in a leading interview) and false accusations (i.e., signing a formal complaint against an innocent suspect). Participants (N=129) were observed in a laboratory session and then interviewed twice about their experiences by an interviewer who suggested that the laboratory assistant had behaved inappropriately. Although only 17% of the participants were suggestible, 39% agreed to sign the complaint. Suggestible participants were significantly more likely to make a false accusation than were non-suggestible participants. However, because of the low rate of suggestibility, most false accusations were made by non-suggestible participants. Implications for the legal system are discussed. Copyright © 2013 John Wiley & Sons, Ltd.

The popularity of research on suggestibility is due, in part, to its potential for increasing our understanding of how innocent people come to be accused of crimes in real-world cases. For example, cases such as the McMartin Preschool investigation offered anecdotal evidence that high pressure and leading interview tactics could produce false allegations of sexual abuse. Children in this case were interviewed repeatedly by parents, police, and social workers using methods that researchers subsequently confirmed are likely to induce false witness statements. Specifically, investigators rewarded children for making accusations against daycare workers and chastised children who did not report wrongdoing. The McMartin Preschool children ended up reporting fantastical events that extensive investigation later proved to be impossible (Garven, Wood, Malpass & Shaw, 1998).

Sexual abuse cases such as this one spurred research on ways to conduct proper investigations (Lamb, Sternberg, & Esplin, 1998; Pipe, Lamb, Orbach, & Esplin, 2004; Raskin & Esplin, 1991) and also on personal characteristics that make some individuals more suggestible than others (for reviews, see Bruck, Ceci, & Melnyk, 1997; Bruck & Melnyk, 2004; Quas, Qin, Schaaf, & Goodman, 1997). Research was even expanded to include adults (for reviews see Loftus, 2005; McNally, 2012), and

*Correspondence to: Suzanne Kaasa, Westat, 1600 Research Boulevard, Rockville, MD, 20850. E-mail: SuzanneKaasa@westat.com

[†]Psychology and Social Behavior, University of California, Irvine

court cases involving adults who falsely accused others of abuse demonstrated that suggestibility can occur at any age (e.g., Shuit, 1994). This line of research primarily examined suggestibility in memory reporting, on the assumption that people who are especially susceptible to suggestion are at risk for making false accusations, whereas those who are resistant to suggestion would not make such mistakes (Bruck & Melnyk, 2004). However, researchers did not explicitly test the link between suggestibility and false accusations. While it is logical to assume that susceptibility to suggestion would increase the chances of accusing an innocent person, we do not know how often suggestible individuals actually make a false accusation. After all, it is one thing to report false details about an event; it is quite another to directly accuse a possibly innocent person of wrongdoing, especially if that person would suffer punishment as a result of this false accusation. Therefore, it is reasonable to expect that a substantial portion of individuals who respond suggestively to questioning might balk at making a formal false accusation.

Conversely, an argument could be made that simply being highly resistant to suggestion is not a guarantee that someone will not make a false accusation. The McMartin Preschool investigation indicated that some children who were able to resist misleading questioning were not able to resist intense pressure to accuse the daycare workers of abuse. One of these children, years after the investigation, admitted that he knowingly made false reports of abuse in order to please his parents and investigators (Nathan, 2005). Without research directly comparing rates of suggestibility and false accusations in an investigation context, the association between these two phenomena remains unclear.

The goal of the present study is to explore suggestibility and false accusations separately to determine how they are related. Participants were asked a series of high-pressure, misleading questions regarding a laboratory study they had previously completed. The interview was conducted in the context of an investigation ostensibly in response to complaints made by other (nonexistent) participants against the research assistant who ran the laboratory study. Negative statements about the research assistant in response to the interview questions were used to assess the participants' suggestibility. At the end of the interview, participants were asked to add their name to a formal complaint that would result in the termination of the (innocent) research assistant's employment. Their willingness to sign the complaint was used to assess false accusations. Rates of suggestibility and false accusations were then compared.

The study also examines the social-cognitive processes that may relate to false accusations. First, transcripts were coded for the reasons participants gave to explain their decision to sign or not sign the complaint. Differences in these reasons were compared between suggestible and non-suggestible participants. We hypothesized that different mental processes might be associated with false accusations made by suggestible participants who behaved consistently by making negative statements and then signing the complaint compared with non-suggestive participants who behaved inconsistently by refusing to make negative statements but ultimately made a false accusation. While suggestibility could reasonably be expected to lead to false accusations through processes such as the creation of false memories (Loftus, 2005), obedience to authority (Milgram, 1974) or the desire to appear consistent (Cialdini, 2009), other processes are needed to explain false accusations made by non-suggestible participants who clearly resisted the suggestion but nonetheless went on to make a false accusation.

One such process is the influence of social proof on cognitive decisions. Social proof is the concept that individuals take cues about how to interpret information based on the action of others. Ideas are simply more persuasive if other people believe them, especially if those people are similar to ourselves (Cialdini, 2009). For example, the bystander effect, in which individuals are less likely to help someone in need if there are many others present, can be explained using the idea of social proof. In ambiguous situations, people tend to look to each other for guidance, and the hesitation of others to define the situation as an emergency convinces everyone present that it is not (Latane & Nida, 1981). In a classic demonstration of the power of social proof to define situations, participants were left alone in a room to fill out surveys. During this time, smoke started to slowly leak under the door and into the room. Individuals in the lone condition were likely to define this as a potential emergency and notified the researchers of the smoke. By contrast, participants who were assigned to a condition where confederates ignored the smoke and therefore offered social proof that it was not an emergency only reported the smoke to researchers 10% of the time (Latane & Darley, 1968).

Participants in our study were informed that multiple participants had made accusations against the research assistant. This might be persuasive even to those participants who maintained that nothing inappropriate had occurred in their laboratory session. Events in their own session may have been positive, but they had no first-hand knowledge of what occurred in other sessions, which therefore made the overall situation ambiguous. Through the power of social proof, some participants may be convinced that the research assistant indeed acted inappropriately in other sessions and thus deserved to be fired from the study. These participants would have made an accusation that they knew was false for themselves, but believed to be true for other people. Therefore, we hypothesized that non-suggestible participants would be more likely than suggestible participants to justify their decision to sign the complaint by mentioning the supposed abuse of other complainants. Suggestible participants would explain their decision to sign the complaint by referencing their own mistreatment during the session.

An experimental manipulation was included in the study to test whether the decision to sign the complaint was influenced by conditions of anonymity. In the first interview, participants were asked to sign the complaint and assured that their accusation would remain anonymous. During the second interview, participants were assigned to either an anonymous or an accountable condition. Those in the accountable condition were asked to sign the complaint with their real names. Research indicates that individuals are more susceptible to the influence of situational norms under conditions of public anonymity (Postmes & Spears, 1998). For example, individuals are more likely to participate in a subculture-approved behavior of “flaming” (i.e., posting incendiary and offensive comments on websites) when they are anonymous and cannot be challenged by individuals outside the subculture (Postmes, Spears, & Lea, 1998).

Participants in our study were told that the norm in this particular context was to sign the complaint. However, they could reasonably expect that their false accusation would be challenged by individuals outside of this group (e.g., the accused research assistant) if the accusations were made with their real names. Therefore, we hypothesize that participants in the anonymous condition would be more likely to make a false accusation than participants in the accountable condition.

METHOD

Participants

Participants were students at the University of California, Irvine, and were recruited from the Social Science Subject Pool. They were eligible to participate if they were between 18 and 24 years old and if they answered “no” to the screening question, “Have you ever been a victim of sexual assault?” (This screening question was included because we were concerned that individuals who answered “yes” might be more sensitive to scenarios involving allegations of inappropriate behavior.)

A total of 168 students participated in the university laboratory visit; 145 of these were then successfully contacted for a follow-up interview and were included in preliminary analyses. Preliminary analyses indicated that having friends in the study significantly influenced participant responses; therefore, 16 individuals who had friends in the study were excluded from further analyses. Preliminary analyses were also conducted to determine if previous participation in research studies affected responses (mode = 0 and median = 3 for prior number of studies). No significant differences were found based on prior study experience and thus this variable was not included in subsequent analyses or used to exclude individuals.

The sample in the final analyses consisted of 129 participants. The majority were female (72.1%) and the mean age was 19 years ($SD = 1.28$). Their racial make-up was as follows: 53% Caucasian, 41% Asian, 3% Hispanic, and 3% Filipino/Pacific Islander.

Procedure

In an hour-long laboratory session on personality and health, questionnaires and cognitive tasks were completed by participants with a female research assistant (Lab RA) who measured their height, weight, hip and waist size, skinfold, and blood pressure. The Lab RA maintained a professional demeanor during these procedures and behaved in a standardized and appropriate way. Video recordings were made of the laboratory visits; negative statements about the Lab RA made by participants during later interviews were checked against these videos to verify that they were false.

One month after the laboratory session, participants received a phone call from a male research assistant who referred to himself as the “lab supervisor” (Phone RA). The Phone RA explained that he had received some complaints about the Lab RA from others in the study and asked if the participant would be willing to share what happened during the session.¹ The Phone RA completed a semi-structured interview, asking suggestive questions about the physical assessment. Examples included: “How about when [Lab RA] took your height and weight? The other participants in the study mentioned that she made some inappropriate comments; did she say anything inappropriate to you?” If the participant responded in the negative, the Phone RA followed up with

¹ To ensure that participants had not independently formed negative impressions of the Lab RA during the session, participants were randomly assigned to two different conditions: (1) a neutral introduction; or (2) a biasing introduction that explained the purpose of the call (i.e., complaints about the Lab RA). The Phone RA then asked a general question about the participant’s perception of the Lab RA. Only three participants reported any negative impression at this point (one in the neutral condition, two in the biased condition), indicating that for the vast majority of participants, subsequent negative statements were induced by study procedures and did not reflect pre-existing feelings.

prompts that encouraged the participant to change his or her response (e.g., “Are you sure she didn’t say anything inappropriate? I know this happened a few weeks ago, so why don’t you think about it for a minute?”). The Phone RA asked about each physical measurement separately and about the participant’s impression of the physical assessment as a whole.

After the suggestive questions, the Phone RA asked the participant to sign an official complaint against the Lab RA. This complaint would disallow the Lab RA from conducting further laboratory visits. If the participant did not initially agree to sign the complaint, the Phone RA encouraged the participant to reconsider by stressing that the process would be confidential and that nothing bad would happen to the participant as a result. The Phone RA also encouraged individuals to sign the complaint as a way of helping other participants in the study. If participants did not agree to sign the complaint after the first request, they were assured the complaint would be anonymous and that “a number of participants” had already signed. The Phone RA then thanked the participant for talking with him and ended the conversation.

Two weeks after the initial phone call, the Phone RA called the participant again for a follow-up. The follow-up interview was shorter and included less leading questions and pressure (although it was not entirely neutral in tone). Its purpose was to investigate consistency of participant responses after a 2-week period under lower-pressure conditions. Although follow-up prompts were included, they were meant to gather more information rather than pressure participants to change their answers. An example of a question and a prompt from the second interview was the following: “Can you tell me about when [Lab RA] took your height and weight?” “Did [Lab RA] make any inappropriate comments?” The participant was again asked if he or she would sign the official complaint.

For the follow-up call, participants were randomly assigned to anonymous ($n = 64$) or accountable ($n = 65$) false accusation conditions. In the anonymous condition, the participant was asked to sign the complaint providing only a study ID number. In the accountable condition, however, participants were asked to sign the complaint with their names. Participants were told that they needed to add identifying information in order to move forward with the complaint process. This was done to introduce a higher level of accountability. As the manipulation was introduced *after* all leading questions had been asked, it was not intended to test the effect of accountability on suggestible responses. Specifically, this condition was included to determine whether increased accountability affected false accusation rates.

At the end of the follow-up call, the Lab RA explained the true purpose of the study, and care was taken that participants were not left with negative feelings about the study. All procedures were approved by the university’s institutional review board.

Measures

Suggestibility

Interviews from the first and second phone calls were coded separately for evidence of suggestibility. Both interviews were coded for the overall tone of the participant’s responses. Participants were considered to be non-suggestible if they repeatedly denied any problems with the Lab RA during the session. Participants were coded as displaying evidence of suggestibility if they indicated there were problems with the

Lab RA's behavior during the session (e.g., "Some parts kind of felt uncomfortable, more than they should. It was like... she was touching me, you know, more than seemed necessary.") or described a (false) instance of inappropriate behavior by the Lab RA (e.g., "I was stripped down to my boxers eventually."² Coding was performed by two independent raters who were blind to the hypotheses of the study. Discrepancies were resolved through discussion. Inter-rater reliability was high: first interview kappa = 1.00, second interview kappa = 0.97. Two suggestibility variables were created: (1) separate variables reflecting some versus no suggestible responses for each interview; and (2) a combined variable reflecting some versus no suggestible responses at either interview. Suggestibility variables were dichotomous rather than continuous due to issues of skew (i.e., few participants displayed high levels of suggestibility).

False accusations

False accusations were measured by whether or not the participant agreed over the phone to add his/her name or ID number to the complaint. In the first interview, participants were told that when the Phone RA had enough names added to the list he would be able to "stop [Lab RA] from running sessions with other participants" and remove her from the study. The request to sign the complaint at the second interview was more neutral in tone. Participants were reminded of their decision at the last interview to "make an official complaint about [Lab RA]" and were simply asked if they were "still willing to do this" or would be "willing to make one now?".

Reasons for signing or not signing the complaint

Transcripts were coded to investigate why participants chose to sign or not sign the complaint. Two independent raters coded transcripts of the phone calls to determine whether participants: (1) chose to sign the complaint to help protect other subjects; (2) chose to sign because they disliked the Lab RA's behavior during their own session; or (3) chose not to sign because the Lab RA had done nothing inappropriate in their own session. Kappas were 1.00 for the first interview and 0.98 for the second interview. Transcripts were also coded for the amount of conflict a participant felt over the decision to sign or not to sign the complaint. Indicators of conflict included statements supporting both sides or actual expressions of uncertainty. Kappas were 1.00 for both interviews.

RESULTS

Suggestibility

Of the 129 participants, 17.1% gave suggestible responses at some point during the study (i.e., in one or both interviews) and 10.7% were suggestible at both interviews. More participants were suggestible at only the second interview (4.1%) than at only the first interview (2.5%).

² No participants' pants were actually removed during this study.

False Accusations

In the first interview (in which all complaints were anonymous), 38.8% of participants made false accusations. At the second interview, 32.2% of the participants in the anonymous condition signed the complaint, which was significantly higher than in the accountable condition (14.8%) [$\chi^2(1, N = 120) = 5.11, p = 0.02$]. This effect size was moderately strong (Cramer's $V = 0.21$).

Consistency of false accusations was compared across the two interviews. Participants were categorized as being accusers (making a false accusation at both interviews; 23.3%), refusers (refusing to make a false accusation at both interviews; 60.8%), or retractors (making a false accusation at the first interview and then refusing to do so again at the second interview; 15.8%). No participant made a false accusation at the second interview if he or she had not already done so at the first.

Association of Suggestibility with False Accusations

The following transcript examples from the first interview illustrate the association between participant suggestibility and willingness to make a false accusation. Four patterns were possible: suggestible responses with a false accusation; suggestible responses without a false accusation; non-suggestible responses with a false accusation; and non-suggestible responses without a false accusation (see Figure 1).

Figure 1. Percentage of participants during the first and second interviews with co-occurring suggestibility and false accusations.

Non-suggestible responses without a false accusation

Interviewer: Ok, well how did you like [Lab RA] in general? Do you think she behaved the way a researcher should? Some of the other participants didn't like her at all.

Participant: ...I've done a lot of participating in the research experiments over the years and she didn't seem any less professional or more professional than anybody else. It was just like, the standard researcher. She actually like, kinda seemed more friendly than I've experienced before.

Interviewer: Are you sure? The other participants really didn't want to be around her.

Participant: Well, no [laugh], I definitely felt pretty comfortable.

Interviewer: Ok, well – I don't want to keep [Lab RA] around if she's making people feel uncomfortable or hurting them. I have official complaints about her from several other participants, but I just need a few more before I can remove her from this part of the study. Would you be willing to be added to the list? Then I can stop her from running sessions with other participants.

Participant: ...no, I really don't feel like any of that was in my particular session. So, I would feel really uncomfortable being added to that list [laugh].

Interviewer: Well, so you don't want to be on the list?

Subject: No, definitely not. I don't, I don't have any complaints.

Suggestible responses with a false accusation

Interviewer: The other participants told me that [Lab RA] touched them in a way that made them feel uncomfortable when she was taking these measurements. Did this happen to you?

Participant: I considered part of it to be. I don't know if it was anything in particular, but... she had a smile on her face, I don't know if that was to trick me in some way, but... there was times it was kind of like, is she just measuring? ... It was kind of like a measurement, you know, should be just a measurement. Some parts kind of felt uncomfortable, more than they should. It was like... she was touching me, you know, more than seemed necessary. I haven't been measured before like that, so I'm not absolutely sure... it was kind of... kind of awkward. Like, a little more awkward than I thought it would be...

Interviewer: Ok, well I'm sorry that you had to be in the session with her. She's new, and we've never had problems with research assistants before and I don't want to keep [Lab RA] around if she's making people feel uncomfortable or hurting them. And I have official complaints about her from several other participants but I need a few more before I can remove her from this part of the study. Would you be willing to be added to the list? And then I can stop her from running sessions with other participants.

Participant: Um, like, personally, I don't know if it was that big of an issue for me. I don't know... where the line would be. I mean, there were a couple of parts where I felt awkward... if other people felt awkward, I think it could be run better...

Interviewer: Ok, so do you want to sign up- sign the list, then? So that, you know, it shouldn't have to make other people feel awkward...

Subject: Alright, that's fine. As long as it's fully confidential.

Suggestible responses without a false accusation

Participant: Um, it's just strange because nothing really stands out for me that was particularly offensive. I mean she really didn't say anything that was unusual. Nothing that really stuck out. If you understand... like there was nothing, no very obvious touching of anywhere personal that went over the limit for me or for any normal person I'd imagine. And there was really no comments, negative comments or anything, really any comments that I can recall...

Interviewer: Okay. Well, I don't want to keep [Lab RA] around if she's making people feel uncomfortable or hurting them. I have official complaints about her from several other participants, but I need a few more before I can remove her from this part of study. Would you be willing to be added to the list and then I can stop her from running sessions with other participants?

Participant: Well, I mean I don't have any reason to be on that list. That's the issue here. You understand? ... I can understand where other people are coming from and if that makes them feel uncomfortable and perhaps the tests she performed on them, maybe I was an exception, but I can't think of anything that she did to make me feel uncomfortable then, um, I'm afraid that I can't. I have nothing against her. It just doesn't seem like something I need, you understand? ... And, I understand that you are trying to do something and trying to get her out of whatever experiment she's doing, but I honestly have to say she didn't do anything offensive to me and because of that I find no reason for me to be on that list.

Interviewer: Alright, well even though I won't include you as part of the complaint, do you think that anything that happened during your visit should be mentioned in the list?

Participant: Um, lets see. I'm not sure if this is what happened to all the participants, I don't know if you know this, but I was stripped down to my boxers eventually. I don't know what test that was for, but that's eventually how it ended up. I don't know if you know that.

Interviewer: Uh, no. I've never heard of that happening to any participant. Could you explain about that some more? How did that happen?

Participant: Yeah. Like I said I don't remember the specific test, but eventually I was down there. Maybe it was weight. I was wearing some heavy pants, um so I was down to that point, but there was nothing that went beyond that. Uh, so, like I said I was fine with it.

Interviewer: You didn't find that inappropriate at all?

Participant: No. Like I said, when visiting the doctor it is usually pretty standard do that.

Non-suggestible responses with a false accusation

Participant: I don't think anything she did made me feel uncomfortable... I don't know, maybe it's that's just me but I didn't think she was doing anything wrong...

Participant: I'm sorry, I just really can't think of anything. It was a while ago but I just don't remember anything being out of the ordinary or her saying anything or doing anything or looking at me weird. I felt fine with the experiment and I walked out of there completely fine and went on with my day like, it didn't have an effect on me at all...

Participant: ... she seemed like she was still nice and professional about stuff... I've done a lot of those experiments... and everyone seems about the same...

Interviewer: Alright. Now, I don't want to keep [Lab RA] around if she's making people feel uncomfortable or hurting them. And I have official complaints about her from several other participants, but I need a few more before I can remove her from this part of the study... Would you be willing to be added to the list and then I can stop her from running sessions with other participants?

Participant: Um, I don't... really have something to complain about. I mean, I totally understand it's serious but you don't want to keep her if she's making people feel uncomfortable and doing something wrong, but I did not feel like I was uncomfortable because of her.

Interviewer: So, you don't want to be added to the list?

Participant: I – should I be added to the list? Like, I don't know.

Interviewer: It's up to you.

Participant: Like I would have never thought anything about complaining about her until you said something where other people felt uncomfortable... I guess I'm going to say no, that I wouldn't complain about her and I don't know, I – I feel bad for the other girls who felt uncomfortable or anything, but I don't know, I felt fine with the experiment and fine around her, so I don't think I would complain.

Interviewer: Well, are you sure? I already have official complaints from a number of other participants and I just need a few more before I can remove her from the study. You won't be alone. And nothing bad will happen to you as a result, I promise. No one is going to be able to drag you into court or anything. I don't even need your name. I'm just going to use the confidential number we used to identify you in the study.

Participant: OK, well, she won't know our names or anything?

Interviewer: Right.

Participant: OK. Well, I guess go ahead and add me then, so just make sure it doesn't happen to any other girls or anyone. But um, I don't know... sure.

Interviewer: Alright, thank you. I will add you to the list.

To investigate the association between suggestibility and false accusation empirically, rates of suggestibility (suggestible vs. non-suggestible) were compared with rates of false

accusations (signed on to complaint vs. did not sign) at each interview. After the first interview, suggestible participants were significantly more likely to make a false accusation than non-suggestible participants [$\chi^2(1, N = 128) = 24.96, p < 0.001$]. The effect size was strong, Cramer's $V = 0.44$. Almost all suggestible participants (94.1%) agreed to sign the complaint, whereas fewer than half of non-suggestible participants did (30.6%). Because of the low rate of suggestibility, most individuals who signed the complaint were non-suggestible (68%).

After the second interview, most individuals who signed the complaint were again non-suggestible (67.7%). However, the rate at which suggestible participants made false accusations differed from the first interview; only 52.9% of participants who were suggestible at the second interview agreed to sign the complaint. Despite this decrease, the rate of false accusations remained significantly higher for suggestible than for non-suggestible participants (18.4%) [$\chi^2(1, N = 120) = 9.7, p = 0.002$]. The effect size was moderately strong (Cramer's $V = 0.28$).

Finally, the association between suggestibility (suggestible at either interview vs. non-suggestible at both interviews) and false accusations was compared for accusers, refusers, and retractors. Suggestible participants were more likely to become accusers (60%), than refusers (20%) or retractors (20%) [$\chi^2(2, N = 120) = 20.67, p < 0.001$]. The effect size was strong (Cramer's $V = 0.42$). However, due to the low rate of suggestibility, over half of the accusers (57.1%) and most refusers (94.5%) and retractors (78.9%) were non-suggestible.

Post-hoc Analyses of Transcripts: Why Participants Did (or Did Not) Sign the Complaint

Of the individuals who signed the complaint and explained why, 38.8% indicated that they did so to help other participants. Only 12.2% of participants said that they signed the complaint because they did not like the Lab RA. Reasons were then analyzed by participant suggestibility level to test whether suggestible participants ($n = 16$) had different reasons for signing the complaint than non-suggestible participants ($n = 33$). Findings indicated that non-suggestible participants (51.5%) were significantly more likely to indicate that they were making the accusation during the first interview to help their peers than were suggestible participants (12.5%) [$\chi^2(1, N = 49) = 6.9, p = 0.009$]. This effect size was strong (Cramer's $V = 0.38$). Suggestible participants were marginally more likely to indicate that they signed the complaint during the first interview because they disliked the Lab RA than were non-suggestible participants (25% vs. 6.1%, respectively) [$\chi^2(1, N = 49) = 3.6, p = 0.06$]. This effect size was moderately strong (Cramer's $V = 0.27$).

When the reasons for being unwilling to sign the complaint were compared for retractors and refusers, 94.5% of refusers initially explained their behavior by stating that the Lab RA had done nothing inappropriate in their session. At the second interview, 38.9% of refusers repeated this reason when they again declined to sign the complaint; 66.7% of retractors also indicated that this was the reason they would like to be removed from the complaint list.

A final analysis comparing the amount of conflict each participant displayed when deciding whether to sign the complaint revealed significant differences. In the first interview, refusers ($n = 73$) displayed less conflict than accusers ($n = 28$) or retractors ($n = 19$) [$\chi^2(2, N = 120) = 16.43, p < 0.001$], who were similar to each other (see Figure 2). This effect size was strong (Cramer's $V = 0.37$). In the second interview, although

Figure 2. Percentage of participants displaying conflict in their decision about whether or not to sign the complaint.

retractors actually made a different choice from accusers, they again displayed similar levels of conflict about their decision [χ^2 (2, $N = 119$) = 8.29, $p < 0.02$]. Both groups displayed more conflict than refusers. This effect size was moderately strong (Cramer's $V = 0.26$). Suggestibility was not significantly related to level of conflict in either the first or second interview.

DISCUSSION

Although it is generally assumed that false accusations are likely to be a consequence of suggestibility, our findings reveal a more complex picture. In the present study, substantially more participants made a false accusation against an innocent research assistant (39%) than displayed suggestibility in the form of negative comments about the research assistant in response to leading questions (17%). In fact, almost one-third (27%) of the participants signed a complaint after repeatedly denying that the accused research assistant had behaved inappropriately during their own encounter. Thus it appears that suggestibility is not a requirement for making a false accusation.

Suggestible participants were relatively *more* likely than non-suggestible ones to make false accusations, however. With the exception of one individual, all suggestible participants agreed to sign the complaint when asked during the first interview. At the second interview, suggestible participants were again significantly more likely to make a false accusation than non-suggestible ones, although false accusation rates for both groups decreased. This reduction in false accusations at the second interview was most likely due to the introduction of an accountable condition in which participants were asked to sign the complaint with their real names, as well as the overall more neutral tone of the interview. Across both interviews, suggestible participants were significantly more likely to make an accusation and stick with it than to refuse to make any false accusations or to make an initial accusation and then retract it (60% were accusers).

These findings suggest that there are two different pathways to making a false accusation in an investigative context. The first is through suggestibility, after an interviewer presents misleading information and social pressure. Although the exact mechanism underlying this pathway was not assessed in the current study, several well-established phenomena may explain the process. Memory studies have consistently demonstrated that leading questions can produce inaccurate reports and false memories (Loftus, 2005), and studies of obedience show that individuals often have difficulty disobeying requests from authority (Milgram, 1974). Human beings also have a desire to be seen as consistent (Cialdini, 2009), and signing a complaint against someone they have just described as behaving inappropriately is a logical extension of suggestible responses.

Non-suggestible participants who resisted memory distortion and social pressure from the leading interview but still signed the complaint followed a different pathway to making false accusations. Evidence from the current study suggests that these participants were persuaded to sign the complaint through the power of social proof and adherence to situational norms (Postmes & Spears, 1998). The interviewer created an investigation context for the participant by describing a number of fake accusations that other participants had supposedly made against the research assistant. According to the interviewer, the situational norm was for participants to sign the complaint. Even though non-suggestible participants knew that nothing inappropriate had occurred in their own session, these accusers appeared to believe the interviewer's claim that *other* participants had been mistreated. In the ambiguous context of this investigation, non-suggestible participants appeared to rely on social proof and situational norms when making their decision, as illustrated by one participant's comment: "I would have never thought anything about complaining about her until you said something where other people felt uncomfortable." As previous research has shown, individuals are more likely to rely on social proof to determine their own behavioral responses when situations are ambiguous (Latane & Darley, 1968; Latane & Nida, 1981).

In fact, in the investigation context created by the interviewer, making a false accusation was actually a prosocial act. Participants were urged to sign the complaint even if they did not have any specific instances of misbehavior to report in order to help protect future participants. This argument appeared to resonate with a substantial number of non-suggestible participants. Of participants who described their reason for signing the complaint, non-suggestible participants were significantly more likely than suggestible participants to say they did so to help their peers, as illustrated by statements such as: "I guess go ahead and add me then, so just make sure it doesn't happen to any other girls or anyone." It appears that an important difference between non-suggestible participants who made a false accusation and non-suggestible participants who did not was whether they made their decision by focusing on their own non-ambiguous session or by focusing on the ambiguous events in other sessions. Transcripts revealed that 95% of participants who refused to sign the complaint at the first interview (and explained why) did so because nothing inappropriate had happened to them.

These findings have important implications for the legal system, and specifically for expert testimony regarding suggestibility in abuse cases. Previous research has focused on factors that increase or decrease suggestibility on the assumption that false accusations are a result of suggestibility. This extension leads to the related assumption that witnesses who show no signs of suggestibility, or who were interviewed under conditions designed

to minimize leading influences, are unlikely to make false accusations. However, the current study demonstrates that non-suggestible individuals may also make false accusations. In fact, due to the low rate of suggestibility in the study, over half of the false accusations were made by non-suggestible participants. Testimony meant to inform the trier of fact regarding witness credibility should therefore reflect the possibility that non-suggestible witnesses may also be inaccurate under certain circumstances.

The Effect of Anonymity on Making False Accusations

Importantly, participants were significantly more likely to make a false accusation when they were anonymous than when they were asked to use their real name on the complaint. This finding is consistent with literature on adherence to situation norms, such as in Internet chat rooms (Postmes et al., 1998). When individuals are anonymous, they are more likely to participate in “flaming” (i.e., overtly aggressive posting) than when their identities are known and they can thus be held accountable by the victims of their egregious behavior. In the current study, participants were more likely to adhere to the situational norm of signing the complaint if they were assured that the research assistant would not know their identity and could not challenge their accusation. In addition to the experimental support for this finding in different false accusation rates for anonymous versus accountable conditions, some participants spontaneously verbalized this point when making their decision: “Alright, that’s fine. [I’ll sign the complaint.] As long as it’s fully confidential.” Interestingly, both suggestible and non-suggestible participants made such statements and suggestibility did not moderate false accusation differences between these conditions.

These results indicate that one method for reducing rates of false accusations is to increase witness accountability. In the legal system, defendants have the constitutional right to confront their accusers, which results in a high level of accountability for those witnesses whose statements are used in trials. However, not all interviews are conducted under such stringent standards. While the most severe form of false accusations result in criminal prosecutions, false accusations can occur in more mundane situations, such as the current context of employment decisions. In any situation involving potential negative consequences to an individual based on statements from a second party, our findings indicate that accountability will likely decrease the probability of false accusations of negative behavior. As a caveat, the current study did not examine the extent to which accountability affects rates of true accusations. This is an important question for future research.

Consistency of False Accusations: Accusers, Refusers, and Retractors

Of special interest to the legal system is the issue of retracting accusations. In sexual abuse cases, some individuals make statements indicating abuse and then later claim these statements were untrue. An important debate is whether these individuals are retracting their statements of abuse as a result of social pressure (e.g., from family members) or because the statements themselves were products of social pressure from the investigation and are actually untrue. Prior research suggests that these instances may reflect retraction of true accusations due to social pressure. For example, researchers have found that some characteristics of a situation are associated with retractions of seemingly true allegations of sexual abuse (e.g., the child’s age, the child’s

relationship with the perpetrator, supportiveness of the non-offending caregiver, and initial foster care placement; Malloy, Lyon & Quas, 2007). However, there is also evidence to support the claim that sometimes retractions are the result of false accusations. London, Bruck, Ceci, & Shuman (2005) found that rates for recantations of abuse are higher in samples that lack rigorous corroboration of abuse status (i.e., “proof” that the abuse occurred), thus leading to the hypothesis that many recantations are actually true denials of abuse.

The current findings offer some insight into the phenomenon of retracting accusations. Although 39% of participants made a false accusation at the first interview, many took themselves off the complaint when given an opportunity to do so at the second interview; only 23% made a false accusation at both interviews, and 16% retracted their accusation. These results indicate that some individuals who make false accusations may come to regret their actions later and attempt to rectify the damage they have done. This supports the contention that individuals in the legal system who have been unduly influenced by investigations or other biasing sources should have their retractions taken seriously. Of course, these results do not speak to the issue of individuals retracting true accusations, as the study did not include conditions with actual abuse.

Analysis of transcripts offers some insight into the characteristics of accusers and retractors. Accusers were more likely to be suggestible (43%) than were retractors (21%). However, the levels of conflict displayed when making their decision were very similar, even when they were making different decisions. This suggests that level of conflict is related to factors other than the actual decision made. It is likely that retractors and accusers in the current study appeared conflicted about their decisions because they were reacting to an ambiguous situation (i.e., accusations from other participants about their sessions), whereas refusers were not conflicted because they were focused on their own unambiguously positive session. Refusers displayed almost no suggestibility (< 1%) and showed little conflict in making their decision not to sign the complaint.

Level of conflict in making an accusation may therefore be an indicator of the veracity of an initial accusation, but not the veracity of a retraction. In other words, if an individual appears conflicted about making the initial accusation, this may indicate that the accusation is not true. However, the same cannot be said for retractions, as many individuals who retracted their false accusations were also highly conflicted. Therefore apparent conflict could be considered evidence that an initial accusation, but not a subsequent retraction, is false. As stated previously, this study cannot speak to levels of perceived conflict in decision-making for true accusations. Comparison of perceived conflict in true versus false accusations is an important question for future research.

Limitations and Strengths

There are a few aspects of the current research that limit our conclusions. Interviews were intentionally conducted against best-practice guidelines in order to facilitate suggestible and false accusation responses. An important future direction for research, therefore, is to examine how individuals react to more subtle forms of bias and more neutral interviews. Also, although an attempt was made to create an investigation scenario that resembled an abuse investigation, there are obviously differences between the current study procedures and how a real investigation would be conducted. For

example, interviews were conducted exclusively over the phone rather than in person. While police do contact individuals via phone, in-person interviews are likely to produce heightened pressure to conform due to situational constraints imposed on those being interviewed and proximity to the authority figure (Milgram, 1974). Improvements in external validity are always a goal for continuing research efforts.

In both studies, the Lab RA was female and the Phone RA was male. As males are more likely to be perpetrators of sexual abuse, a research design with a male Lab RA “suspect” might have produced higher rates of suggestibility and false accusations. Participants may simply have found it difficult to believe that a female Lab RA would behave inappropriately. Similarly, the gender of the Phone RA may have affected results. It is possible that participants may have felt more pressure to conform to a male authority figure than a female “lab supervisor.” These issues concerning gender role expectations and reactions are interesting to consider, and would make an excellent line of follow-up research.

Despite these limitations, there are several strengths of the current research. It employed a novel experimental approach to examine issues of suggestibility and false accusations in abuse investigations. This study was designed to approximate an actual investigation into allegations of misconduct. Although some previous studies have included questions about events and behaviors that are analogous to abuse, the questions are often asked in a disconnected manner and do not reflect actual abuse investigations. The current research included several real-world aspects, including an explanation of the reason for the questioning and probing by the interviewer, leading questions implying that the abuse occurred, telling the participant what others supposedly reported, and inducing negative stereotypes about the Lab RA. The Phone RA also challenged participants who failed to endorse the suggestive questions, reinterpreted neutral or ambiguous statements as negative, and encouraged participants to report abuse and sign the complaint in order to help others in the same situation. These are all techniques that have been documented in real-life abuse investigations and have been experimentally shown to increase suggestibility (Bruck et al., 1997; Ceci & Bruck, 1993; Clarke-Stewart, Malloy, & Allhusen, 2004; Garven et al., 2000; Leichtman & Ceci, 1995; Lepore & SESCO, 1994; Peterson, Kaasa, & Loftus, 2009; Roediger, Meade, & Bergman, 2001; Thompson, Clarke-Stewart, & Lepore, 1997).

Transcripts suggest that the interviews were believable and that participants treated the situation as serious. Although a few participants were suspicious of the true purpose of the study ($n = 6$), they did not give significantly different responses than the majority of participants who showed no signs of suspicion. This finding supports other research that indicates that suspicion does not tend to lead to demand characteristics in memory distortion studies (Laney, Kaasa, Morris, Berkowitz, Bernstein, & Loftus, 2008).

The current research was also innovative in that we examined both suggestibility and false accusations. Although participants in most suggestibility studies can report untrue events without fear of serious negative consequences, participants in our study were asked to sign a complaint against the Lab RA that would result in her removal. This was a real, negative, and salient consequence, and extended the study of suggestibility in a new and important direction. The design of the study allowed participants' reactions to the investigative context to be measured, instead of assuming that suggestible participants would be more likely to endorse a false accusation. Our findings affirm that this is a crucial distinction that should be incorporated in future studies, as rates of suggestibility and false accusations differed substantially.

Implications for Investigations

One overarching goal of suggestibility research is to improve the legal system's handling of investigations so that the interview process does not taint witness reports. Our findings offer some insight into how false accusations may be avoided. The most obvious method for reducing false accusations is to avoid high-pressure, biased, and suggestive interview techniques; proper interviewing techniques have already been outlined in previous articles (Lamb *et al.*, 1998; Pipe *et al.*, 2004; Raskin & Esplin, 1991).

A substantial minority of participants in the current study who made an initial false accusation at the first interview retracted their complaint when offered the opportunity to do so. Advocates for victims of adult sexual assault and child sexual abuse have voiced concern about these "retractors" in real-world investigations, pointing out that individuals may deny true allegations for a multitude of reasons, including threats from family members (Malloy *et al.*, 2007). It is important to note that our study only included adults and false accusations; sexual assault and child sexual abuse are extremely complex phenomena with many influences that may affect reporting of both true and false accusations. However, the current research indicates that, in at least situations similar to the present study, retractions may not always be denials of real victimization. Although future research is needed to understand false accusations with other ages and in other contexts (such as with child and adolescent samples), investigators should remain open to the possibility that someone may retract an accusation because it should never have been made in the first place.

Investigators should also be careful when conducting interviews to avoid pressuring a witness to make an accusation solely to protect future "victims" of the suspect. In the current study, participants reported signing on to the complaint against the innocent Lab RA to protect their peers. An undue burden may be placed on witnesses when they are made to feel that they personally are responsible for ending a suspect's abuse of others; this argument appears to be difficult to resist, even for non-suggestible individuals. Finally, although even non-suggestible participants may come to make a false accusation, results indicate that suggestible individuals are particularly at risk for this mistake and should be treated with special care.

Although it may be tempting to dismiss the concerns raised in the current research because of the extremely biased nature of the interviews we conducted, this would be inadvisable. Many investigators and interrogators know that biased information can produce biased reports and therefore conduct interviews in a responsible and neutral manner; however, the use of techniques by some professionals that increase suggestible responses have been documented even after proper interviewing guidelines had been established (Lamb, Sternberg, Esplin, Hershkowitz, & Orbach, 1997). In addition, an investigation may, by its very nature, contain biasing factors. It may be difficult to conduct a real interview without revealing to a witness that the person of interest is under investigation or asking questions that would lead the witness to the conclusion that someone has accused the suspect of wrongdoing. The current study provides an initial examination of the important but under-studied real-world phenomenon of false accusations. Further research on this topic is encouraged to broaden our understanding of factors that increase or decrease one's likelihood of making a false accusation. In addition, future research comparing true versus false accusations is essential for informing the legal system in its handling of abuse investigations.

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