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Brief report

Does it take one to know one? Endorsement of conspiracy theories is influenced by personal willingness to conspire

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We advance a new account of why people endorse conspiracy theories, arguing that individuals use the social–cognitive tool of projection when making social judgements about others. In two studies, we found that individuals were more likely to endorse conspiracy theories if they thought they would be willing, personally, to participate in the alleged conspiracies. Study 1 established an association between conspiracy beliefs and personal willingness to conspire, which fully mediated a relationship between Machiavellianism and conspiracy beliefs. In Study 2, participants primed with their own morality were less inclined than controls to endorse conspiracy theories – a finding fully mediated by personal willingness to conspire. These results suggest that some people think 'they conspired' because they think 'I would conspire'.

Were the September 11 attacks orchestrated by the United States government? Was Diana, Princess of Wales murdered? Alongside mainstream accounts of significant events, there often develop alternative accounts that fall under the banner of the popular term *conspiracy theories*. A conspiracy theory is defined as an attempt to explain the ultimate cause of a significant political or social event as a secret plot by a covert alliance of powerful individuals or organizations (e.g., McCauley & Jacques, 1979). It is important to stress that not all conspiracies are crackpot theories: some have ultimately been verified, such as the Watergate conspiracy of the 1970s. However, in the main conspiracy theories are unproven, often rather fanciful alternatives to mainstream accounts (Allison & Zelikow, 1999).

Whatever psychologists might think of conspiracy theories, there are good reasons to study them. For one, conspiracy theories are capable of influencing people without their awareness. After exposure to conspiracy theories about the death of Diana, Princess of Wales, British participants were more inclined to endorse those theories, but thought that their beliefs had not changed (Douglas & Sutton, 2008). Further, correlational

Karen Douglas and Robbie Sutton have made an equal intellectual contribution to this research.

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studies point to the role of psychological traits such as anomie and a chronic lack of trust in others in the tendency to adopt conspiracy theories (Goertzel, 1994; Leman & Cinnirella, 2005; Swami, Chamorro-Premuzic, & Furnham, 2010). Other studies show that conspiracy theories may allow people to come to terms with a powerless social position (Crocker, Luhtanen, Broadnax, & Blain, 1999; Parsons, Simmons, Shinhoster, & Kilburn, 1999; Whitson & Galinsky, 2008). Further, research also shows that the popularity of conspiracy theories has increased in recent years (McHoskey, 1995), most likely due to the ease with which they are disseminated on the Internet (Coady, 2006). It is therefore surprising that so little research has been attempted to understand the social–psychological processes that underlie conspiracy theorizing.

In this paper, we propose a social–psychological mechanism, which entails that people's endorsement of conspiracy theories depends, in part, on whether they themselves are willing to conspire. Our logic is as follows. People are desirous of explanations for socially significant, emotionally arousing events, such as the deaths of celebrities or major international disasters (Leman & Cinnirella, 2007; Weiner, 1985). For such events, people generally lack direct access to the facts that might help them distinguish correct from incorrect explanations. Instead, they are required to rely on a matrix of often conflicting information from various media sources, ranging from news reports to official inquiries, to rumour and conspiracy on the Internet to understand what people might have done (e.g., Leman & Cinnirella, 2007; Wallace, 2001).

One social–cognitive tool that can help people in such situations is projection (Ames, 2004; Krueger, 2000; McCloskey, 1958). Projection is the process whereby one's own thoughts, feelings, motivations, or action tendencies are attributed to others. Under the influence of Freud (1896), early theorists saw projection as a defence mechanism in which people denied their unwanted desires and motivations by ascribing them to others (McCloskey, 1958). In contrast, contemporary models tend to view projection as a means of making sense of the social environment, informing judgements about others when more reliable or objective information is lacking (Ames, 2004). The crucial point of the proposed theoretical account is that when evaluating a conspiracy theory, people may use projection as a tool to understand what others might have done. Thus, for example, they may be less likely to dismiss the hypothesis that AIDS was created by government scientists if they believe that they personally would be willing to create it. In this way, the observer's perception that 'I would do it' informs his or her perception that 'they did it'. We tested this process in two studies, assuming that individuals' willingness to conspire is determined by their own personal morality (cf. Bandura, 2006; Eagly & Chaiken, 1993). Those who have relatively few moral scruples about conspiring may be less likely to think that others would be deterred from conspiring, at least on moral grounds.

The first study took a correlational approach. We predicted that endorsement of a range of conspiracy theories would be positively correlated with participants' perception that, if in the same position themselves, they would personally engage in such conspiracies. We also predicted that because of this relationship, a specific individual differences variable associated with personal morality would be related to conspiracy theorizing. Here, we chose to measure participants' level of Machiavellianism – an individual differences variable associated with willingness to exploit others for personal gain (Christie & Geis, 1970; Hodson, Hogg, & MacInnis, 2009). Machiavellianism is a clear indicator of a person's moral tendencies and is therefore a useful measure to include in our initial investigation. It provides an opportunity to test the prediction that the relationship between a person's moral qualities and their beliefs in conspiracy theories

is mediated by projection of those moral qualities onto others. The second study adopted the same mediational logic in an experimental study. Here, participants were primed with their personal morality by recalling a time they helped someone in a significant way. We expected this prime to render participants temporarily less willing to conspire and thus be more skeptical towards conspiracy theories. In other words, we expected the effect of positive moral priming on conspiracy beliefs to be mediated by willingness to participate in the alleged conspiracies.

STUDY 1

Method

Participants and design

Participants were 189 British undergraduates (163 females and 26 males; mean age 20.13, $SD = 3.87$) who participated for course credit. Machiavellianism was the predictor variable and endorsement of conspiracy theories was the criterion variable. Participants' reported willingness to conspire was measured as the mediator.

Materials and procedure

Participants were asked to complete the MACH-IV scale (Christie & Geis, 1970) where they read 20 statements (e.g., 'Never tell anyone the real reason you did something unless it is useful to do so' $\alpha = .70$) and rated their agreement with each statement on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Participants were then asked to read a series of conspiracy theory statements adapted from previous research (Douglas & Sutton, 2008; Leman & Cinnirella, 2005). There were 17 statements (e.g., 'The attack on the Twin Towers was not a terrorist action but a governmental conspiracy'). For each item, participants were asked to rate the likelihood that, if they were in the position of the alleged conspirators, they would have participated in the actions (e.g., 'If you were in the position of the government, would you have ordered the attack on the Twin Towers?' from 1 (*never under any circumstances*) to 7 (*probably yes*). Across the conspiracy theories, the scale for willingness to conspire was reliable ($\alpha = .82$). Participants were also asked to rate how much they agreed with each statement – that is, to what extent they agreed that a conspiracy occurred – and also to rate how plausible, convincing, worth considering, interesting, and coherent they thought each statement was, each on a scale from 1 (*not at all*) to 7 (*very much*). A total measure of conspiracy theory endorsement was calculated for each statement across these six items and the scale across the 17 conspiracy theories was reliable ($\alpha = .82$).

Results and discussion

Mean conspiracy theory endorsement was 3.45 ($SD = 0.69$) and mean personal willingness to conspire was 1.99 ($SD = 0.79$). To test the predicted pattern of mediation, we used the regression procedures recommended by Baron and Kenny (1986). First, Machiavellianism (predictor) predicted endorsement of conspiracy theories (criterion), $\beta = .237$, $t = 3.28$, $p = .001$, $R^2 = .06$. Further, Machiavellianism was positively associated with participants' perception that they would themselves participate in the alleged conspiracies (mediator), $\beta = .397$, $t = 5.81$, $p < .001$, $R^2 = .16$. When reported

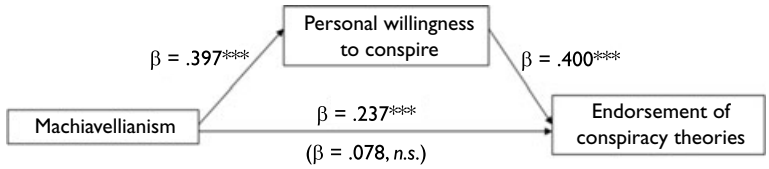

Figure 1. The association between Machiavellianism and endorsement of conspiracy theories is fully mediated by participants' personal willingness to conspire.

willingness to conspire was entered into the equation with Machiavellianism, the effect of Machiavellianism on conspiracy beliefs was obviated, $\beta = .078$, $t = 1.07$, $p = .285$, $R^2 = .01$, whereas the effect of willingness to conspire remained significant, $\beta = .400$, $t = 5.46$, $p < .001$, $R^2 = .19$. This complete mediation was confirmed by a Sobel test ($z = 3.98$, $p < .001$) and is presented in Figure 1. Therefore, as expected these results revealed that personal willingness to engage in the conspiracies predicted endorsement of conspiracy theories. Machiavellianism also predicted endorsement of conspiracy theories. Finally, the relationship between Machiavellianism and conspiracy beliefs was fully mediated by participants' willingness to engage in the conspiracies themselves. In other words, for example, highly Machiavellian individuals were seemingly more likely to believe that government agents staged the 9/11 attacks because they were more likely to perceive that they would do so themselves, if in the government's position.

The present results are important because they provide the first evidence to suggest that people endorse conspiracy theories because they project their own moral tendencies onto the supposed conspirators. Of course, however, this is a correlational study and so causality cannot be inferred. In Study 2, we therefore aimed to investigate the causal relationship between a person's morality, willingness to conspire, and conspiracy beliefs in an experimental study.

STUDY 2

Method

Instead of measuring participants' moral tendencies, we directly manipulated participants' perception of their own personal morality. Participants were randomly assigned to one of two conditions. An experimental group was asked to think of, and write about, a time when they behaved in a moral and decent manner, by helping another person. According to self-perception theory (Bem, 1967, 1972), people infer their attitudes and dispositions by observing their own behaviour. So, we reasoned that by recalling a time when they behaved in a moral and decent manner, people would therefore perceive themselves as less likely to participate in conspiracies. A control group completed dependent measures without being exposed to this procedure.

Participants were then asked to read the conspiracy theory statements as in Study 1 and again rate (a) their willingness to engage in each conspiracy and (b) how much they endorse each theory. It was predicted that participants in the positive moral prime condition would endorse conspiracy theories to a lesser degree than those in the control condition. It was also predicted that willingness to engage in the conspiracies would predict endorsement of conspiracy theories. Finally, it was predicted that the effect of

moral prime on conspiracy beliefs would be mediated by willingness to engage in the conspiracies.

Participants and design

Sixty British undergraduates (48 females and 12 males) participated for course credit (mean age $= 19.83$, $SD = 2.37$). The independent variable was the moral prime (vs. control) condition and endorsement of conspiracy theories was again the dependent variable. Participants' reported willingness to conspire was again measured as the mediator.

Materials and procedure

Participants in the experimental condition were asked to think of, and write about a time where they helped another person while participants in the control group proceeded directly to the next section. The specific wording of the instruction for the experimental group was as follows:

> In the first part of this experiment, we would like you to spend a few minutes thinking of a time when you helped someone out. For example, you may have gone out of your way to help a friend in need, or gave them emotional support at a difficult time, made them feel better about themselves or their situation, or donated a significant amount of money or time to help someone solve a problem. It doesn't matter how you helped them exactly – what we are interested in is any case in which you helped someone in some significant way. Please, write about this time below. We are interested in the details of this experience, so (without naming names), please write down some of the details of this experience.

Participants then wrote their responses. To establish that the experimental condition did not influence participants' mood and potentially confound the results, all participants then completed the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) where they were asked to indicate from 1 (*very slightly or not at all*) to 5 (*extremely*), the extent to which they were, at that moment, experiencing 10 positive (e.g., 'excited', $\alpha = .85$) and 10 negative (e.g., 'upset', $\alpha = .82$) emotions. Participants were then asked to read the 17 conspiracy statements as in Study 1 and were again asked to indicate how likely it is that, if they had been in the position of the alleged conspirators, they would have participated in the conspiracies. As in Study 1, participants were asked to rate their endorsement of each statement.

Results and discussion

The moral prime condition had no effect on positive affect, $F(1,59) = 0.99$, $p = .323$, $\eta^2 = .02$ or negative affect, $F(1,59) = 0.41$, $p = .525$, $\eta^2 = .01$, so participants' PANAS results were not included in subsequent analyses.

To test the predicted pattern of mediation, we used the regression procedures recommended by Baron and Kenny (1986) as in Study 1. First, moral prime (independent variable) predicted endorsement of conspiracy theories (dependent variable), $\beta = .272$, $t = 2.15$, $p = .036$, $R^2 = .07$, such that participants in the positive moral prime condition endorsed conspiracy theories to a lesser extent ($M = 3.17$, $SD = .76$), than participants in the control condition ($M = 3.59$, $SD = .75$) – see Figure 2. Moral prime also predicted participants' reported likelihood of willingness to conspire (mediator),

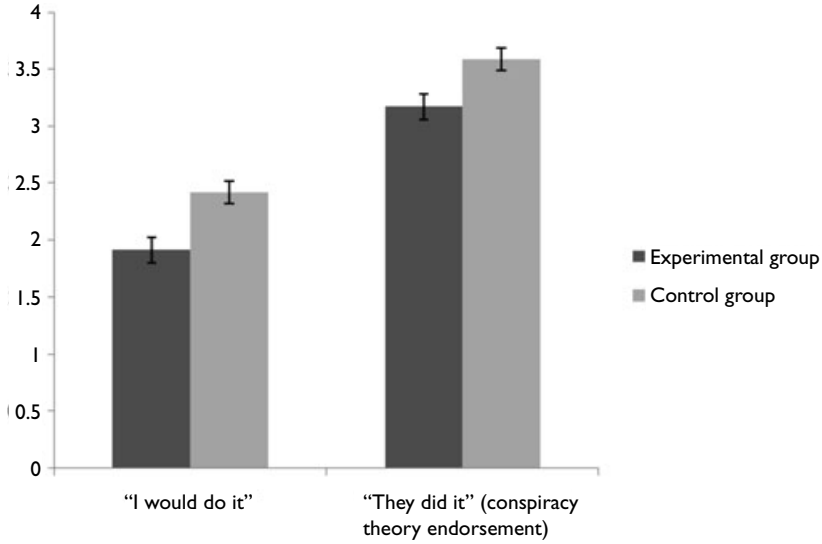

Figure 2. Mean willingness to conspire and mean conspiracy theory endorsement as a function of experimental condition.

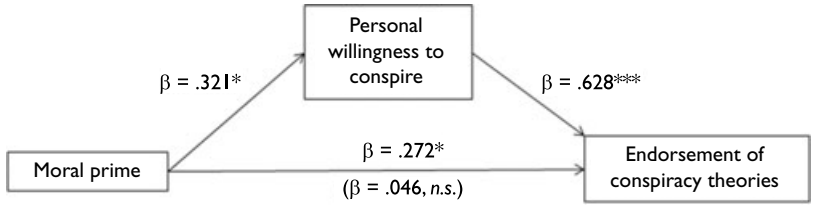

Figure 3. The effect of moral prime on endorsement of conspiracy theories is fully mediated by participants' personal willingness to conspire.

$\beta = .321$, $t = 2.71$, $p = .022$, $R^2 = .10$, where participants in the positive moral prime condition rated that, if they were in the position of the alleged conspirator, they would be less likely to perform the conspiratorial behaviour ($M = 1.91$, $SD = .69$) than participants in the control condition ($M = 2.42$, $SD = .85$) – see Figure 2. When the proposed mediator was added to the model, the effect of the positive moral prime on endorsement of conspiracy theories was obviated, $\beta = .046$, $t = 0.37$, $p = .717$, $R^2 = .002$ while the effect of the mediator remained strongly significant, $\beta = .628$, $t = 4.96$, $p < .001$, $R^2 = .39$. This complete mediation was confirmed by a Sobel test, $z = 2.14$, $p = .032$ and is presented in Figure 3. Therefore, the effect of participants' primed morality on their conspiracy beliefs was fully mediated by their own personal willingness to conspire.

GENERAL DISCUSSION

The present two studies were designed to test a new explanation for why people endorse conspiracy theories. Specifically, drawing on the literature on projection (e.g., Ames, 2004), we argued that people would be more likely to endorse conspiracy theories to the

extent that they project their own willingness to conspire onto the alleged conspirators. We found support for this account. In Study 1, the relationship between an indicator of personal moral tendencies (Machiavellianism) and endorsement of conspiracy theories was fully mediated by the participants' own reported willingness to engage in the conspiracies. In Study 2, we experimentally manipulated a proxy for participants' personal morality and found that the effect of this prime on conspiracy beliefs was fully mediated by participants' reported willingness to engage in the conspiracies. Together, these studies suggest that people who have more lax personal morality may endorse conspiracy theories to a greater extent because they are, on average, more willing to participate in the conspiracies themselves.

Researchers to date have been concerned with individual differences in conspiracy beliefs (e.g., Crocker *et al.*, 1999; Goertzel, 1994; Leman & Cinnirella, 2005; Parsons *et al.*, 1999; Swami *et al.*, 2010; Whitson & Galinsky, 2008) and indeed there is a growing psychological 'profile' of the typical conspiracy theorist. Our findings extend this literature by highlighting the role that projection, a well-documented social–cognitive process, plays in conspiracy beliefs. This process was able to account for the effect of both an individual difference (Study 1) and a situational variable (Study 2) on conspiracy theorizing. Notably, in our studies, participants consciously acknowledged their personal willingness to conspire, which led them to endorse conspiracy theories. This pattern of results suggests that participants did not project their unacknowledged and unwanted psychological states onto others. Rather, it is consistent with the contemporary understanding of projection as a social–cognitive mechanism that helps perceivers make sense of a complex social environment and to understand other people's behaviours (e.g., Ames, 2004).

Our explanation is also a significant advance on previous research, which has typically treated conspiracy beliefs as a direct consequence of individual deficits (e.g., mistrust; Goertzel, 1994) or pathologies (e.g., paranoia; Knight, 2002). Consistent with that research, we found that an individual difference variable (in this case Machiavellianism) significantly predicted conspiracy beliefs ($\beta = .237$ in Study 1). However, reported willingness to participate in the conspiracy was a stronger predictor ($\beta = .400$ in Study 1 and $\beta = .628$ in Study 2) and fully accounted for the link between Machiavellianism and conspiracy beliefs.

Future research may extend this new account to explain the links between other individual differences variables and conspiracy beliefs. Theoretically, we expect projection to mediate the effects on conspiracy theorizing of other individual differences that influence personal willingness to conspire. For example, conscientiousness and empathic concern may be inversely related to willingness to conspire and because of this, to endorsement of conspiracy theories.

Future research may also examine the influence of other variables on conspiracy beliefs, adopting the current methodology and focus on the role of projection. Future research may also extend the current account by testing different samples (e.g., non-undergraduate students) or a broader range of conspiracy theories. Related to this last point, although the conspiracy theories tested in the current study are concerned with powerful, malign forces and negative motives, not all conspiracy theories fall into this category. For example, it could be argued that alleged conspiracies about the existence of aliens result from a protective motive to avoid mass panic. We do not characterize projection specifically as the attribution of unwanted tendencies of the self to others, so we would expect beliefs even in these benign conspiracies to be predicted by personal willingness to participate in them. However, we would not expect beliefs in such

conspiracy theories nor willingness to participate in relatively benign conspiracies to be predicted by Machiavellianism nor by our moral prime. This is because their moral implications are very different from the malign conspiracies presented in the present studies. Future research could examine these possibilities.

Further, the use of alternative dependent measures may enable researchers to examine potentially more complex relationships between personal morality and conspiracy beliefs. Specifically, we found that priming morality leads people to perceive that they are less likely to conspire (Study 2). This is consistent with the notion that these sorts of manipulations allow people to establish their moral credentials (e.g., Harber, Stafford, & Kennedy, 2010). We also found that this strengthened sense of personal morality leads people to perceive that others were less likely to conspire. Ironically, however, affirming personal morality can sometimes give people an unconscious ethical license to *behave* negatively (Monin & Miller, 2001). So, it is possible that measuring conspiratorial behaviour may reveal that affirming personal morality is a double-edged sword, which at once makes people feel that they would be less likely to engage in conspiracies and makes them actually more likely to conspire, should an opportunity present itself.

Finally, we do not argue that projection alone explains why people believe in conspiracy theories. Although the relationship between personal willingness to conspire and endorsement of conspiracy theories was strong in both studies presented here, other psychological processes may also influence beliefs in conspiracy theories. It may be that projection explains beliefs in some conspiracy theories and for some people better than others. It will therefore be important in future research to examine the role of psychological processes other than projection in influencing beliefs in conspiracy theories.

In summary, the present studies provide the first evidence that at least among some samples and for some conspiracy theories, the perception that 'they did it' is fuelled by the perception that 'I would do it'. This research opens up new possibilities for understanding people's beliefs in conspiracy theories.

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References

Allison, G. T., & Zelikow, P. (1999). *Essence of decision: Explaining the Cuban missile crisis*. New Jersey: Longman.

Ames, D. R. (2004). Inside the mind reader's tool kit: Projection and stereotyping in mental state inference. *Journal of Personality and Social Psychology*, *87*, 340–353. doi:10.1037/0022-3514.87.3.340

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, *1*, 164–180. doi:10.1111/j.1745-6916.2006.00011.x

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.

Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, *74*, 183–200.

Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York: Academic Press.

Coady, D. (Ed.), (2006). *Conspiracy theories: The philosophical debate*. Ashgate: Hampshire, England.

Christie, R., & Geis, F. I. (Eds.), (1970). *Studies in Machiavellianism*. New York: Academic Press.

Crocker, J., Luhtanen, R., Broadnax, S., & Blaine, B. E. (1999). Belief in U.S. government conspiracies against Blacks among Black and White college students: Powerlessness or system blame? *Personality and Social Psychology Bulletin*, *25*, 941–953. doi:10.1177/01461672992511003

Douglas, K. M., & Sutton, R. M. (2008). The hidden impact of conspiracy theories: Perceived and actual influence of theories surrounding the death of Princess Diana. *Journal of Social Psychology*, *148*, 210–221. doi:10.3200/SOCP.148.2.210-222

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Orlando: Harcourt Brace.

Freud, S. (1896). Further remarks on the neuro-psychoses of defence. *The standard edition of the complete psychological works of Sigmund Freud, Volume III (1893–1899)*. Early Psycho-Analytic Publications, London: Hogarth press, 157–185.

Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology*, *15*, 731–742.

Harber, K. D., Stafford, R., & Kennedy, K. A. (2010). The positive feedback bias as a response to self-image threat. *British Journal of Social Psychology*, *49*, 207–218. doi:10.1348/014466609X473956

Hodson, G., Hogg, S. M., & MacInnis, C. C. (2009). The role of "dark personalities" (narcissism, Machiavellianism, psychopathy), Big-Five personality factors, and ideology in explaining prejudice. *Journal of Research in Personality*, *43*, 686–690. doi:10.1016/j.jrp.2009.02.005

Knight, P. (Ed.) (2002). *Conspiracy nation: The politics of paranoia in postwar America*. New York: New York University Press.

Krueger, J. (2000). Distributive judgments under uncertainty: Paccioli's game revisited. *Journal of Experimental Psychology: General*, *129*, 546–558.

Leman, P. J., & Cinnirella, M. (2005). *Beliefs in conspiracy theories and need for cognitive closure*. Unpublished manuscript, Royal Holloway University of London.

Leman, P. J., & Cinnirella, M. (2007). A major event has a major cause: Evidence for the role of heuristics in reasoning about conspiracy theories. *Social Psychological Review*, *9*, 18–28.

McCauley, C., & Jacques, S. (1979). The popularity of conspiracy theories of presidential assassination: A Bayesian analysis. *Journal of Personality and Social Psychology*, *37*, 637–644.

McHoskey, J. W. (1995). Case closed? On the John F. Kennedy assassination: Biased assimilation of evidence and attitude polarization. *Basic and Applied Social Psychology*, *17*, 395–409.

McCloskey, H. (1958). Conservatism and personality. *The American Political Science Review*, *52*, 22–45.

Monin, B., & Miller, D. T. (2001). Moral credentials and the expression of prejudice. *Journal of Personality and Social Psychology*, *81*, 33–43. doi:10.1037//0022-3514.81.1.33

Parsons, S., Simmons, W., Shinhoster, F., & Kilburn, J. (1999). A test of the grapevine: An empirical examination of conspiracy theories among African Americans. *Sociological Spectrum*, *19*, 201–222.

Swami, V., Chamorro-Premuzic, T., & Furnham, A. (2010). Unanswered questions: A preliminary investigation of personality and individual difference predictors of 9/11 conspiracist beliefs. *Applied Cognitive Psychology*, *24*, 749–761. doi:10.1002/acp.1583

Wallace, P. M. (2001). *The psychology of the internet*. Cambridge: Cambridge University Press.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063–1070.

Weiner, B. (1985). "Spontaneous" causal thinking. *Psychological Bulletin*, *97*, 74–84.

Whitson, J. A., & Galinsky, J. D. (2008). Lacking control increases illusory pattern perception. *Science*, *322*, 115–117. doi:10.1126/science.1159845

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