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The impression management benefits of humorous self-disclosures: How humor influences perceptions of veracity



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ABSTRACT

Across five studies, we identify humor as a powerful impression management tool that influences perceptions of veracity. In many domains, such as negotiations and interviews, individuals face a challenge with respect to disclosing negative information and managing impressions. For example, an interviewer may ask an applicant to name their greatest weakness. In these settings, disclosures that reveal negative information (e.g., "I am not good at math.") can harm perceptions of warmth and competence. We demonstrate that pairing a humorous statement with a disclosure (e.g., "I am not good at math. Geometry is where I draw the line.") changes perceptions of the veracity of the disclosure; disclosures are less likely to be judged as true when they are accompanied by a humorous statement than when they are not. We introduce the Speaker's Inferred Motive (SIM) Model and consider the possibility that (a) speakers pursue different motives, such as a transmission-of-ideas motive (to convey information) or an entertainment motive (to amuse an audience), (b) audience members infer the speaker's motive, and (c) these inferences influence perceptions of the veracity of proximal disclosures. As a result, by using humor, a speaker may signal a shift in motive and diminish perceptions of the veracity of both the humorous statement and proximal claims. Taken together, when a target discloses negative information, including information that is highly relevant to the conversational partner, the use of humor can boost perceptions of warmth and competence. We discuss implications of our findings with respect to communication, interpersonal perception, and impression management.

1. Introduction

Individuals are frequently in situations, such as interviews, negotiations, and dates, in which they are asked to disclose negative information about themselves. For example, during an interview, a job candidate may be asked, "Why did you leave your last job after one month?" In these situations, providing an answer to the question is important for impression management; impression management is an integral part of our interpersonal interactions (Baumeister, 1982; Goffman, 1959; Leary, 1995; Schlenker, 1975, 1980, 2003) and individuals who decline to answer these questions are viewed poorly (John, Barasz, & Norton, 2016). However, disclosures of negative information may harm perceptions of competence and warmth by making an individual appear less capable and likable (e.g., "I was fired for insubordination.").

In this work, we investigate the use of humor as a tool for navigating these situations. Specifically, we consider the influence of humorous disclosures on two fundamental dimensions of person perception:

warmth and competence (Cuddy, Glick, & Beninger, 2011; Fiske, Cuddy, & Glick, 2007). In our investigation, we consider how humor may reduce the perceived veracity of a disclosure, the extent to which a disclosure is believed to be true, and mitigate the harmful effects of negative disclosures on perceptions of warmth and competence.

Surprisingly, no prior work has examined the impression management benefits of humorous disclosures. This is striking because individuals routinely navigate the challenge of disclosing negative information, and humor is both ubiquitous and very likely to influence interpersonal impressions (Cooper, 2002, 2005, 2008; Huang, Gino, & Galinsky, 2015; Lehmann-Willenbrock & Allen, 2014; Strick, Holland, van Baaren, & van Knippenberg, 2012; Strick, Van Baaren, Holland, & Van Knippenberg, 2009). Whereas prior disclosure research has focused primarily on factors that influence the likelihood of disclosure (Acquisti, John, & Loewenstein, 2012, 2013; John, 2015; John, Acquisti, & Loewenstein, 2011; John, Loewenstein, & Prelec, 2012), relatively little work has examined the factors that influence the way in which a disclosure is perceived. In fact, our work is the first to identify

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how humor mitigates the harmful effects of disclosing negative information. Across our studies, we demonstrate that humor can reduce the perceived veracity of a disclosure and significantly alter the way that communication is perceived. We identify humor as a powerful impression management tool.

2. Self-disclosure and impression management

A substantial literature has documented the beneficial effects of creating positive impressions (Baumeister & Leary, 1995; Baumeister, 1982; Goffman, 1959; Leary, 1995; Schlenker, 2003). To create a positive impression, individuals engage in a wide range of self-presentation strategies; these include wearing specific clothing (e.g., clean clothing, displaying luxury goods), making prosocial statements (e.g., expressing gratitude, delivering apologies), using nonverbal cues (e.g., smiling), engaging in social networking (e.g., posting to social media), reframing emotions (e.g., reappraising anxiety as excitement, framing emotionality as passion), complying with other's requests, and engaging in deception (e.g., telling prosocial lies, such as "you look great" or "I really enjoyed reading your manuscript"; Brooks, 2014; Brooks, Dai, & Schweitzer, 2014; Brooks, Gino, & Schweitzer, 2015; Casciaro, Gino, & Kouchaki, 2014; Gino, Norton, & Ariely, 2010; Huang, Zhao, Niu, Ashford, & Lee, 2013; Levine & Schweitzer, 2014, 2015; Neel, Neufeld, & Neuberg, 2013; Wilcox, Kim, & Sen, 2009; Wiltermuth, 2012a, 2012b; Wiltermuth, Bennett, & Pierce, 2013; Wiltermuth, Newman, & Raj, 2015; Wolf, Lee, Sah, & Brooks, 2016). Effective impression management is important; individuals who create positive impressions gain admiration, status, and power (Anderson & Kilduff, 2009; Anderson, Hildreth, & Howland, 2015; Magee & Galinsky, 2008).

Much of the impression management literature has focused on two key dimensions of person perception: *warmth* and *competence* (Anderson et al., 2015; Fiske et al., 2007; Holoien & Fiske, 2013; Leary, 1995). Individuals are perceived to be warm if they appear to be friendly, helpful, moral and trustworthy (Cuddy et al., 2011; Fiske, Cuddy, Glick, & Xu, 2002; Fiske et al., 2007). Individuals are perceived to be more competent if they appear able, intelligent, creative, and confident (Cuddy et al., 2011; Fiske et al., 2002, 2007). To gain status and power, individuals aspire to project both warmth and competence.

However, individuals are frequently in situations where they are asked direct questions that require disclosing negative information. For example, in interviews, an individual may be asked to reveal their greatest weakness or why they have a gap in their employment history. In these situations, projecting warmth and competence at the same time is difficult (Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; Kervyn, Bergsieker, & Fiske, 2012; Kervyn, Bergsieker, Grignard, & Yzerbyt, 2016; Kervyn, Judd, & Yzerbyt, 2009; Kervyn, Yzerbyt, & Judd, 2010, 2011; Kervyn, Yzerbyt, Judd, & Nunes, 2009). Declining to answer these questions can harm perceptions of warmth (John et al., 2016), but the extant literature has identified a number of risks inherent to selfdisclosure (Bergsieker, Shelton, & Richeson, 2010; Forest & Wood, 2012; Hofstetter, Rüppell, & John, 2017; Holoien & Fiske, 2013; Swencionis & Fiske, 2016). For example, attempting to answer these questions by self-disclosing positive information, instead of negative information, may project competence (e.g., the candidate who says their greatest weakness is, "I'm a perfectionist" or "I care too much"), but diminish perceptions of warmth. In addition, individuals who selfpromote can annoy others, induce envy, and decrease trust (Dunn & Schweitzer, 2005; Dunn, Ruedy, & Schweitzer, 2012; Moran & Schweitzer, 2008; Rogers & Feller, 216; Scopelliti, Loewenstein, & Vosgerau, 2015; Sezer, Gino, & Norton, 2018). There are also costs to disclosing negative information. Disclosing negative information about competence can lead to lower perceptions of warmth (sic; Aronson, Willerman, & Floyd, 1966; Dunn et al., 2012; Judd et al., 2005; Rosenberg, Nelson, & Vivekananthan, 1968; Swencionis & Fiske, 2016; Yzerbyt, Kervyn, & Judd, 2008).

Prior research in impression management suggests that individuals

face a dilemma when asked direct questions about negative information. What they reveal can harm perceptions of their warmth, competence, or both (Judd et al., 2005; Rosenberg et al., 1968). Our findings demonstrate that by using humor during disclosures, individuals can elevate perceptions of warmth and competence.

2.1. Humor

In this work, we manipulate the use of humor in self-disclosures, and explore how humorous disclosures influence impression management. We build on prior humor research to define humor as a benign violation (McGraw & Warner, 2014; McGraw & Warren, 2010; McGraw, Shiro, & Fernbach, 2015; McGraw, Warren, & Kan, 2015; McGraw, Warren, Williams, & Leonard, 2012; McGraw, Williams, & Warren, 2014; Veatch, 1998; Warren & McGraw, 2013, 2015, 2016a, 2016b; Warren, Barsky, & Mcgraw, 2018). According to this definition, humor involves a psychological or physical violation (e.g., something that is perceived as bad, threatening, wrong, illogical, or incorrect), but is also non-threatening (e.g., perceived as inconsequential or unimportant) (Warren & McGraw, 2016).

We postulate that humor will mitigate the harm of disclosing negative information by reducing the perceived veracity of a disclosure. We define *perceptions of the veracity of a disclosure* as the extent to which an observer believes the disclosure to be true. We expect the use of humor to influence perceptions of veracity of both humorous statements and, importantly, statements proximal (e.g., statements within the same speaking turn) to the humorous statement.

In general, individuals use the communication process to transmit ideas (Grice, 1989). However, individuals can also use the communication process to pursue other motives, such as to entertain their audience (Raskin, 1985). Conversational partners search for cues to infer the speaker's motives (Raskin & Attardo, 1994). For example, when a speaker uses humor, their conversational partner may infer that the speaker is pursuing an entertainment motive, rather than a transmission-of-ideas motive. That is, by adding humor to a conversation, an individual may diminish perceptions of the veracity of both the humorous statement and proximal claims by signaling that they are engaging in what linguists term non-bona-fide communication (Raskin & Attardo, 1994; Raskin, 1985). We introduce the Speaker's Inferred Motive (SIM) Model depicting the relationship between perceived motives of the speaker and inferred veracity in Fig. 1. We predict that when an individual includes a humorous statement when they disclose negative information, they will diminish the perceived veracity of their disclosure.

Hypothesis 1. The perceived veracity of a disclosure will be lower when it is accompanied by humorous communication than when it is not.

As a result of directly shifting beliefs about the veracity of proximal claims, the use of humor may also change perceptions of warmth and competence following a disclosure. When evaluating individuals, negative information about competence is associated with lower perceptions of warmth (Judd et al., 2005; Rosenberg et al., 1968). If disclosures accompanied by humorous statements are viewed as less likely to be true than disclosures that are unaccompanied by humorous statements, then individuals who disclose negative information with humor should be viewed as warmer and more competent than individuals who disclose the same information without humor. We postulate that perceptions of the veracity of the disclosure will mediate the relationships among the use of humor, negative disclosures, and perceptions of warmth and competence.

Hypothesis 2a. Perceived warmth and competence will be higher following a humorous disclosure than after a non-humorous disclosure.

Hypothesis 2b. The perceived veracity of the disclosure will mediate the relationships between humorous disclosure and perceived warmth and competence.

Audience's Perception of Speaker's:

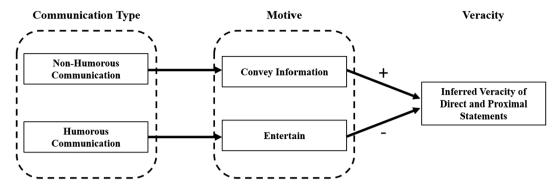


Fig. 1. Speaker's Inferred Motive (SIM) Model. **Fig. 1.** We consider the possibility that speakers pursue different motives, such as a *transmission-of-ideas* motive (to convey information) or an *entertainment* motive (to amuse an audience). Audience members may either accurately or inaccurately perceive the speaker's behavior and motive. We expect these perceptions to guide the inferences audience members make about the veracity of the speaker's statements, including proximal statements. For example, adding a humorous statement to a speaking turn may diminish the perceived veracity of other statements in that same speaking turn. Note that sarcastic comments that are accurately perceived will be judged to have low veracity, but misperceived sarcastic comments may be judged to have high veracity.

Our research advances our theoretical and practical understanding of humor and impression management in several ways. First, we are the first to empirically investigate the link between the use of humor and perceptions of veracity. Second, our investigation is the first to examine how adding a humorous statement changes perceptions of other, non-humorous statements made within the same speaking turn or conversation. In developing these contributions, we integrate linguistic theory (Raskin & Attardo, 1994; Raskin, 1985) and Benign Violation Theory (McGraw & Warren, 2010; McGraw et al., 2015). Third, we are the first to introduce humor to the self-disclosure literature, and fourth, we are the first to document the causal link between humorous disclosures and perceptions of warmth and competence. Taken together, our work identifies humor as a foundational concept in communication and impression management, and broadens our understanding of the mechanics of humor.

3. Overview of current work

We investigate the influence of humor on impression management by testing the effect of humor on perceptions of veracity of disclosures and perceptions of warmth and competence. Across our studies, we vary the nature of the interaction, the context, and the type of disclosure. In Study 1, we examine the influence of humorous disclosures within in-person interactions. In Studies 2, 3, 4, and 5 we explore the impact of humorous disclosures in an interview setting. In Study 2, we compare the humorous disclosure of negative information to both the non-humorous disclosure of negative information and declining to disclose negative information.

In Studies 3, 4, and 5, we explore the underlying mechanism linking humorous disclosures with perceptions of warmth and competence. Specifically, we examine how adding humor to a disclosure influences the perceived veracity of proximal statements. In Study 4, we extend our investigation to consider how affect moderates perceptions of humorous disclosures. In Study 5, we consider the importance of conversational goals. In this study, we examine the effect of humorous disclosure when discerning the truth is a particularly important conversational goal. We present a complete list of the humorous and non-humorous disclosures we used in all of our studies in Appendix A. All data are available on the Open Science Framework (OSF) at: https://osf.io/wux4s/.

4. Study 1

4.1. Method

Participants. We recruited 214 adults from a city in the northeastern United States to participate in a behavioral lab study in exchange for \$10. A total of 188 people completed the study and were included in our analyses (26.7% male, $M_{\rm age} = 22.82$ years, SD = 7.92). Across the 11 sessions we analyzed, the number of participants per session ranged from 12 to 18. The modal session included 18 participants and 2 confederates.

Design and procedure. Participants completed the study in a classroom, where we sat each participant at their own desk with a packet of materials. We instructed participants to imagine that they were writing testimonials for the university's Writing Center, a resource on campus that helps students develop their written communication skills. We asked participants to help attract attention to the Writing Center by answering the question, "How has the Writing Center helped you?" We used this question to create a context where someone could self-disclose negative information about their writing ability. We presented participants with an advertisement for the Writing Center (we include the stimuli in Appendix B), and we gave participants 3 min to write a short (1–3 sentences) testimonial.

We told participants that they would each individually present their testimonials to the entire group. We explained that participants would present in a random order, and we had each participant draw a number from an envelope to determine the order in which they would present. The envelope contained pieces of paper numbered 3–22. We intentionally omitted the numbers 1 and 2 from the envelope so that the first two presenters would be our confederates.

After each participant drew a number, the experimenter instructed the individual who drew the number 1 to come to the front of the room and present their testimonial. The first confederate went to the front of the room, placed their testimonial on a document camera which projected the testimonials in the front of the classroom, and read their testimonial out loud. The first confederate always delivered a non-humorous testimonial, "Using the Writing Center really improved my writing. The staff are very knowledgeable and patient. I highly recommend using this service." The confederate was instructed not to laugh when delivering the testimonial.

Next, the experimenter instructed the individual who drew the

¹ We did not analyze the results of one session because one of our confederates deviated from our protocol and forgot to present.

number 2 to present their testimonial. We varied by session whether the second confederate delivered a non-humorous or a humorous testimonial which contained a negative self-disclosure. Half of the time, the second confederate delivered a non-humorous negative self-disclosure, "I do not write well. The Writing Center helps me communicate my ideas more effectively. It is a great resource on campus!" The confederate was instructed not to laugh when delivering the non-humorous disclosure. For the other half of the sessions, the second confederate delivered a humorous negative self-disclosure, "I don't write good. The Writing Center helps me write more good, and can help you write gooder to! But seriously, the Writing Center helps me communicate my ideas more effectively. It is a great resource on campus!"

After each presentation, participants rated the presenter on the following dimensions: "competent", "confident", "intelligent", "capable", "skillful", "certain", "self-assured", "well-intentioned", "goodnatured", "friendly", and "warm" (7-point Likert, 1= "Not at all", 7= "Extremely"). We used the items "competent", "intelligent", "capable", "confident", "self-assured", "certain", and "skillful" to measure general competence (adapted from Bitterly, Brooks, & Schweitzer, 2017; Fiske et al., 2002; $\alpha=0.96$); and the remaining four items to measure warmth (adapted from Fiske et al., 2002; $\alpha=0.94$).

Participants rated the testimonials on the following qualities: "engaging", "appropriate", "entertaining", "suitable", "succinct", "clear", "memorable", "humorous", "amusing", and "effective" (7-point Likert, 1 = "Not at all", 7 = "Extremely"). We used the items "humorous" and "amusing" to measure funniness (r = 0.96), which served as our manipulation check. We used the items "appropriate" and "suitable" to measure the appropriateness of the testimonials (r = 0.76). We were interested in the appropriateness of the testimonials because perceptions of appropriateness in the joke condition could impact ratings of the joke teller (Bitterly et al., 2017). We included the other items to mask the purpose of the study.

The experimenter stopped presentations after the second confederate and explained to participants that the study needed to be cut short due to time constraints. Before participants left the classroom, we had participants complete attitudinal and behavioral measures of status for the presenters. Each participant had 25 "leader points" to allocate to each of the presenters or themselves, based on the extent to which they would like that individual to be the leader of their group. We used the number of points the participants gave to each presenter as a behavioral measure of status (adapted from Bitterly et al., 2017; Halevy, Chou, Cohen, & Livingston, 2012). We also asked participants to rate the extent to which each presenter was "respected", "admired", and "influential" for an attitudinal measure of status (adapted from Anderson, Kraus, Galinsky, & Keltner, 2012; Bitterly et al., 2017; Kilduff & Galinsky, 2013; $\alpha = 0.94$). Finally, participants provided demographic information.

4.2. Results

We report all results using a random effects model grouping by session (Judd, Westfall, & Kenny, 2012)².

Manipulation Check. The manipulation checks confirmed that our humor manipulation was successful. Participants rated the humorous disclosure (M=6.07, SD=1.10) as significantly funnier than the non-humorous disclosure (M=3.00, SD=1.73), $\beta=3.06$, p<.001, 95% CI [2.42, 3.70]. The humorous disclosure (M=5.35, SD=1.33) was not rated as less appropriate (M=5.28, SD=1.09) than the non-

humorous disclosure, $\beta = 0.06$, p = .762, 95% CI [-0.40, 0.53].

Main Results. We find that the second presenter was rated as higher in warmth, competence, and status after a humorous disclosure than a non-humorous disclosure. We depict our results in Fig. 2 and summarize the results in Table 1.

Warmth. We find that the second presenter was rated as higher in warmth when they delivered a humorous disclosure (M = 6.04, SD = 0.97) than when they delivered a non-humorous disclosure (M = 5.29, SD = 1.12), $\beta = 0.74$, p = .012, 95% CI [0.21, 1.27].

Competence. Ratings of competence of the second presenter were also significantly higher when the confederate delivered the humorous disclosure (M=5.66, SD=1.00) than when the confederate delivered the non-humorous disclosure (M=4.89, SD=1.19), $\beta=0.77$, p=.035, 95% CI [0.07, 1.46].

Status. The number of leader points allocated to the second presenter was marginally higher when the confederate delivered the humorous disclosure (M=10.83, SD=7.29) than when the confederate delivered the non-humorous disclosure (M=8.51, SD=7.20), $\beta=2.36, p=.083, 95\%$ CI [-0.39, 5.10]. Attitudinal ratings of status of the second presenter were also marginally higher when they delivered the humorous disclosure (M=5.23, SD=1.23) than when they delivered the non-humorous disclosure (M=4.63, SD=1.19), $\beta=0.59, p=.058, 95\%$ CI [-0.02, 1.20].

4.3. Discussion

In Study 1, individuals disclosed negative information about their writing ability. Individuals who used humor were viewed as warmer and more competent than those who did not. In addition, compared to individuals who made a non-humorous disclosure of the same negative information, individuals who made a humorous disclosure were accorded higher status and were more likely to be elected as the group leader for a subsequent group task. These findings reveal that humorous disclosure is an essential component of impression management.

A potential concern in this study is that participants were suspicious that the individuals who presented were confederates. We reviewed participant post-experiment comments. We find that very few comments (n=3) reflected suspicion. In fact, comments suggested that participants were highly engaged (e.g., "would have been cool to finish", "Unfortunately, I could not present", "A bit short, was curious for the rest", "This seemed like fun; wish we had more time!"). We did not have every participant present in each session because that would introduce noise into our study.

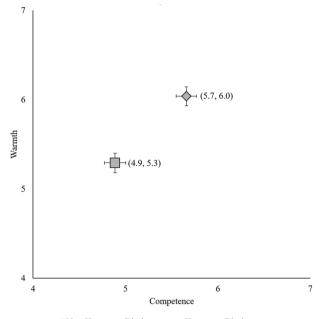
5. Study 2

In Study 2, we extend our investigation of humorous disclosure in three ways. First, we examine the effects of humorous disclosure in a different context, an interview setting, in which disclosing negative information is common and possibly unavoidable. We manipulate how a candidate responds to a question about their greatest weakness and observe the effects of humorous disclosure on perceptions of warmth and competence. Second, we examine the effects of humorous disclosure using a new sample. Third, we compare the effects of humorous disclosure to a new control condition in which individuals decline to disclose negative information. Prior research has demonstrated that declining to disclose negative information can harm perceptions of warmth (John et al., 2016), but has not examined the effects of declining to disclose on perceptions of competence. We extend prior work by examining how humorous disclosure may have beneficial effects on perceptions of warmth and competence compared to non-humorous disclosures and to those who decline to disclose.

5.1. Method

Participants. We recruited 300 participants via Amazon's

²We grouped by session because the randomization occurred at the session level and the responses of the participants in each session may not be independent (e.g., hearing another participant laugh might impact the response of a participant). Our results are not significantly different if we control for confederate fixed effects by running our regressions with dummy variables for the confederate that presented the second testimonial.



■Non-Humorous Disclosure ♦ Humorous Disclosure

Fig. 2. Study 1 Results.

Table 1 Summary of Results for Study 1.

		Disclosure						
		Non-humorous		Humorous				
Variable	F	М	(SD)	М	(SD)			
Warmth Competence Leader Points Status Funniness Appropriateness	F(1, 8.21) = 10.37° F(1, 6.82) = 6.83° F(1, 8.65) = 3.83° F(1, 8.90) = 4.75° F(1, 7.69) = 124°** F(1, 8.84) = 0.10	5.29 _a 4.89 _a 8.51 _a 4.63 _a 3.00 _a 5.28 _a	(1.12) (1.19) (7.20) (1.19) (1.73) (1.09)	6.04_{b} 5.66_{b} 10.83_{a} 5.23_{a} 6.07_{b} 5.35_{a}	(0.97) (1.00) (7.29) (1.23) (1.10) (1.33)			

Means in each row with different subscripts were significantly different at the p<.05 level. $^+p<.10$ $^*p<.05$, $^{**}p<.01$, $^{***}p<.001$.

Mechanical Turk to complete a short study in exchange for \$0.25. A total of 302 people completed the study and were included in our analyses (60.2% male, $M_{\rm age} = 34.17$ years, SD = 10.36).

Design and procedure. We randomly assigned participants to one of three between subjects conditions: *Decline to Disclose* vs. *Non-humorous Disclosure* vs. *Humorous Disclosure*.

Across all conditions, we asked participants to imagine a scenario that takes place between a manager and a job candidate. Then, we asked participants to imagine, "It is Monday morning at 9:00 am. A job candidate is about to have an interview with a manager for an open position. They are in the manager's office and about to start the interview." Then, we showed participants pictures of a conversation between the manager and the candidate. During the conversation, the manager tells the candidate, "Tell me one of your strengths and a weakness." Across all conditions, the candidate began their response with, "My strength is that I'm a hard worker." We then manipulated how the candidate responded about their weakness. In the Decline to Disclose condition, the candidate says, "But I really can't think of a weakness." In the Non-humorous Disclosure condition, the candidate says, "But I really don't have a good memory." In the Humorous Disclosure condition, the candidate says, "But I really don't have a good memory. So remind me... what was the question?" To ensure that participants knew the comment was intended to be humorous, we then informed participants in the Humorous Disclosure condition, "The manager and candidate both laugh." We include sample stimuli in $\ensuremath{\mathsf{Appendix}}$ C.

We then had participants rate the extent the candidate possesses the following qualities: "Competent", "Capable", "Intelligent", "Confident", "Friendly", "Warm", and "Good-Natured" (7-point Likert, 1= "Not at all", 7= "Extremely"). We combined the first four items into a competence index (adapted from Fiske et al., 2002; $\alpha=0.87$). We combined the last three items into a warmth index (adapted from Fiske et al., 2002; $\alpha=0.95$). Next, we asked participants, "Imagine that you are the manager. Please select how likely you would be to give the candidate a job offer." (7-point Likert, 1= "Not at all", 7= "Extremely").

Next, we had participants complete our manipulation checks. We asked participants to rate to what extent the candidate possessed the following qualities: "Funny", "Humorous", "Appropriate", and "Suitable" (7-point Likert, 1= "Not at all", 7= "Extremely"). We combined the items "Funny" and "Humorous" to assess the extent to which participants perceived the candidate's response to be funny (r=0.95). We combined the items "Appropriate" and "Suitable" to assess the extent participants perceived the candidate's response to be appropriate (r=0.82).

5.2. Results

Manipulation check. The manipulation checks confirmed that our humor manipulation was successful. Participants rated the humorous disclosure (M = 5.67, SD = 1.14) as significantly funnier than the non-humorous disclosure (M = 2.61, SD = 1.59), t(299) = 16.02, p < .001, and declining to disclose (M = 2.04, SD = 1.30), t(299) = 18.99, p < .001. The non-humorous disclosure was rated as significantly funnier than declining to disclose, t(299) = 2.93, p < .01.

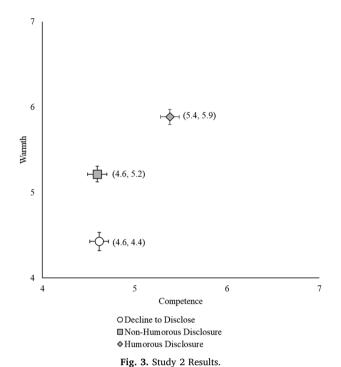
The humorous disclosure (M = 4.80, SD = 1.42) was not rated as less appropriate than the non-humorous disclosure (M = 4.77, SD = 1.37), t(299) = 0.16, p = .87, but declining to disclose (M = 3.92, SD = 1.44) was rated as significantly less appropriate than the humorous disclosure, t(299) = 4.44, p < .001, and non-humorous disclosure, t(299) = 4.27, t = 0.001.

Main results. We find that the candidate was rated as higher in warmth and competence for a humorous disclosure than for a non-humorous disclosure and for declining to disclose information. We depict these results in Fig. 3 and summarize them in Table 2.

Warmth. We find that the candidate was rated as higher in warmth when they delivered a humorous disclosure (M = 5.88, SD = 0.89) than when they delivered a non-humorous disclosure (M = 5.21, SD = 0.92), t(299) = 4.89, p < .001, or declined to disclose (M = 4.43, SD = 1.09), t(299) = 10.65, p < .001. The candidate was rated as higher in warmth when they delivered a non-humorous disclosure than when they declined to disclose, t(299) = 5.74, p < .001.

Competence. We find that the candidate was rated as higher in competence when they delivered a humorous disclosure (M=5.38, SD=1.00) than when they delivered a non-humorous disclosure (M=4.60, SD=1.04), t(299)=5.46, p<.001, or declined to disclose (M=4.62, SD=1.01), t(299)=5.32, p<.001. We find no significant difference in the candidate's ratings of competence when they delivered a non-humorous disclosure than when they declined to disclose, t(299)=0.15, p=.882.

Offer. We find that participants were significantly more likely to report that they would hire the candidate when they delivered a humorous disclosure (M = 5.06, SD = 1.30) than when they delivered a non-humorous disclosure (M = 4.16, SD = 1.24), t(299) = 4.88, p < .001, or declined to disclose (M = 3.60, SD = 1.38), t(299) = 7.91, p < .001. We find that participants were significantly more likely to hire the candidate when they delivered a non-humorous disclosure than when they declined to disclose, t(299) = 3.01, p < .01.



5.3. Discussion

In Study 2, we find that humorous disclosure can have beneficial effects on perceptions of warmth and competence compared to non-humorous disclosure and declining to disclose. In our next studies, we examine the mechanism by which humorous disclosure may boost perceptions of warmth and competence.

6. Study 3: Perceived veracity of humorous and non-humorous disclosures

In Study 3, we extend our investigation in two ways. First, we explore the effects of different humorous and non-humorous disclosures. Second, we explore the underlying mechanism linking humorous disclosures with perceptions of warmth and competence. We expect observers to perceive the veracity of a negative disclosure to be lower when it is humorous than when it is non-humorous, which, in turn, will have beneficial effects on perceptions of warmth and competence.

Participants. We recruited 300 participants from Amazon's Mechanical Turk platform to complete a short study in exchange for \$0.25. A total of 302 people completed the study and were included in our analyses (53.3% male, $M_{\rm age} = 39.16$ years, SD = 12.72).

Design and procedure. We randomly assigned participants to one of three between subjects conditions: *Concise Non-humorous Disclosure* vs. *Matched Non-humorous Disclosure* vs. *Humorous Disclosure*.

Table 2
Summary of Results for Study 2.

The design was similar to Study 2 with a few differences. First, we asked participants to imagine a scenario in which a candidate was interviewing with a manager for a chef position. Second, the manager asked the candidate, "What would you say is your greatest weakness?" In the Matched Non-humorous Disclosure condition, the candidate responds, "I've been told that my food lacks seasoning when I cook in a rush. It's hard when there's never enough time." The Matched Nonhumorous Disclosure was designed to be matched with the Humorous Disclosure in word count and type of information revealed. In the Humorous Disclosure condition, the candidate responds with, "I've been told that my food lacks seasoning when I cook in a rush. It's hard when there's never enough THYME." In contrast to Study 2, after the joke, we did not inform participants of how the manager and candidate responded. In the Concise Non-humorous Disclosure condition, the candidate simply responds, "I've been told that my food lacks seasoning when I cook in a rush." We added the Concise Non-humorous Disclosure to contrast the Humorous Disclosure with a more conservative and less revealing non-humorous disclosure. In addition, in this study we directly test how the addition of a humorous statement ("It's hard when there's never enough THYME.") influences the perceived veracity of the proximal, serious statement ("I've been told that my food lacks seasoning when I cook in a rush.").

After reading this exchange, participants rated the candidate's competence ($\alpha=0.92$) and warmth ($\alpha=0.93$) using the same scales as we used in Study 2 (7-point Likert, 1= "Not at all", 7= "Extremely"). As in Study 2, we then asked participants to, "Imagine that you are the manager. Please select how likely you would be to give the candidate a job offer." (7-point Likert, 1= "Not at all", 7= "Extremely"). Next, we asked participants, "Imagine that you are the manager. Please rate to what extent you think the candidate can season his food well." (7-point Likert, 1= "Not at all", 7= "Extremely"). We reverse coded this item to calculate the perceived veracity of the disclosure.

Next, for our manipulation checks, we had participants rate to the extent to which the candidate's response was, "Funny", "Humorous", "Appropriate", "Suitable", "Boring", and "Dull". We combined the first two items into an index of funniness (r=0.93). We combined the next two items into an index of appropriateness (r=0.83). We combined the last two items into an index of boringness (r=0.88). We used these manipulation checks to ensure that the candidate's response in the joke condition was perceived as funny but was not perceived as inappropriate or too boring. We measured boringness as a secondary manipulation check in order to ensure that the humorous self-disclosure was perceived as humorous. Finally, we asked participants to fill out demographics questions (age and gender) before being dismissed from the study.

6.1. Results

Manipulation check. The manipulation checks confirmed that our humor manipulation was successful. Participants rated the Humorous Disclosure (M = 5.18, SD = 1.44) as significantly funnier than the

Variable		η^2	Disclosure							
			Decline		Non-humorous		Humorous			
	F		M	(SD)	M	(SD)	M	(SD)		
Warmth	$F(2, 299) = 56.82^{***}$	0.28	4.43 _a	(1.09)	5.21 _b	(0.92)	5.88 _c	(0.89)		
Competence	$F(2, 299) = 19.40^{***}$	0.11	4.62_{a}	(1.01)	4.60_{a}	(1.04)	5.38 _b	(1.00)		
Offer	$F(2, 299) = 31.86^{***}$	0.18	3.60 _a	(1.38)	4.16 _b	(1.24)	5.06 _c	(1.30)		
Funniness	$F(2, 299) = 208.80^{***}$	0.58	2.04 _a	(1.30)	$2.61_{\rm b}$	(1.59)	5.67 _c	(1.14)		
Appropriateness	$F(2, 299) = 12.66^{***}$	0.08	3.92 _a	(1.44)	4.77 _b	(1.37)	4.80 _b	(1.42)		

Means in each row with different subscripts were significantly different at the p < .05 level. *p < .05, **p < .01, ***p < .001.

Matched Non-humorous Disclosure (M = 2.15, SD = 1.54), t (299) = 14.22, p < .001, and the Concise Non-humorous Disclosure (M = 2.41, SD = 1.52), t(299) = 13.15, p < .001. Participants did not rate the Matched Non-humorous Disclosure and Concise Non-humorous Disclosure as significantly different on funniness, t(299) = 1.21, p = .226.

Participants did not rate the Humorous Disclosure (M=4.16, SD=1.54) as significantly more or less appropriate than the Matched Non-humorous Disclosure (M=4.25, SD=1.70), t(299)=0.41, p=.679, but did rate it as less appropriate than the Concise Non-humorous Disclosure (M=4.75, SD=1.48), t(299)=2.68, p<.01. Participants rated the Concise Non-humorous Disclosure as more appropriate than the Matched Non-humorous Disclosure, t(299)=2.25, p=.025.

Participants rated the Humorous Disclosure (M=2.37, SD=1.61) as significantly less boring than the Matched Non-humorous Disclosure (M=3.39, SD=1.56), t(299)=4.60, p<.001, and the Concise Non-humorous Disclosure (M=3.15, SD=1.56), t(299)=3.55, p<.001. Participants did not rate the Matched Non-humorous Disclosure and Concise Non-humorous Disclosure as significantly different on boringness, t(299)=1.10, p=.274.

Main results. Consistent with our prior studies, we find that the candidate was rated as higher in warmth and competence following a humorous disclosure than following a non-humorous disclosure. We also find that humor reduces the perceived veracity of a proximal statement. We depict our results in Fig. 4 and summarize the results in Table 3.

Warmth. We find that the candidate was rated as higher in warmth when they delivered a Humorous Disclosure (M=5.67, SD=0.92) than when they delivered a Matched Non-humorous Disclosure (M=5.00, SD=1.01), t(299)=4.70, p<.001, or the Concise Non-humorous Disclosure (M=5.08, SD=1.07), t(299)=4.19, p<.001. Ratings of warmth were not significantly different between the Matched Non-humorous Disclosure condition and the Concise Non-humorous Disclosure condition, t(299)=0.55, p=.585.

Competence. We find that the candidate was rated as higher in competence when they delivered a Humorous Disclosure (M = 5.24, SD = 0.96) than when they delivered a Matched Non-humorous Disclosure (M = 4.55, SD = 1.21), t(299) = 4.49, p < .001, or the Concise Non-humorous Disclosure (M = 4.91, SD = 1.05), t = 1.05

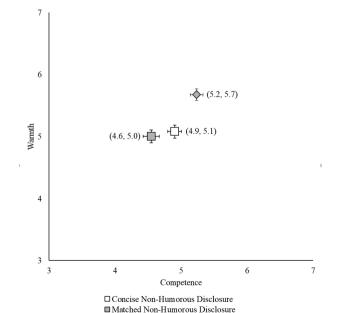


Fig. 4. Study 3 Results.

♦ Humorous Disclosure

(299) = 2.19, p = .029. Ratings of competence were lower in the Matched Non-humorous Disclosure condition than in the Concise Non-humorous Disclosure condition, t(299) = 2.34, p = .020.

Offer. We find that participants were more likely to give the candidate an offer when the candidate responded with a Humorous Disclosure (M = 4.76, SD = 1.22) than when they delivered a Matched Non-humorous Disclosure (M = 3.88, SD = 1.59), t(299) = 4.49, p < .001, or the Concise Non-humorous Disclosure (M = 4.31, SD = 1.32), t(299) = 2.31, p = .021. We find that participants were significantly less likely to give the candidate an offer in the Matched Non-humorous Disclosure condition than in the Concise Non-humorous Disclosure condition, t(299) = 2.22, p = .027.

Veracity of the disclosure. We find that perceived veracity of the disclosure was significantly lower after a Humorous Disclosure (M=3.22,SD=1.37) than after a Matched Non-humorous Disclosure (M=4.20,SD=1.56), $t(299)=4.82,\ p<.001$, or a Concise Non-humorous Disclosure (M=3.95,SD=1.37), $t(299)=3.62,\ p<.001$. We find that perceptions of the veracity of the disclosure were not significantly different between the Matched Non-humorous Disclosure and Concise Non-humorous Disclosure conditions, t(299)=1.24, p=.217.

Mediation. We conducted both Baron and Kenny (1986) and bootstrap analyses (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008). We examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on warmth. We conducted ordinary least squares regression analysis on warmth as a function of Humorous Disclosure (1 = Humorous Disclosure, -0.5 = Matched Non-humorous Disclosure, -0.5 = Concise Non-humorous Disclosure) and type of Non-humorous Disclosure (0 = Hu-Non-humorous morous Disclosure. 1 = MatchedDisclosure. -1 = Concise Non-humorous Disclosure). When we included veracity of the disclosure in our model, we find that the effect of Humorous Disclosure was reduced (from $\beta = 0.39$, p < .001 to $\beta = 0.26$, p < .01) and the effect of veracity remained significant ($\beta = -0.28$, p < .001). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.14, 95% CI [0.07, 0.22]). Together the results of our mediation analyses indicate complementary mediation (Zhao, Lynch, & Chen, 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to higher perceptions of warmth.

Next, we examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on competence. We conducted ordinary least squares regression analysis on competence as a function of Humorous Disclosure (1 = Humorous Disclosure, -0.5 = Matched Non-humorous Disclosure, -0.5 = Concise Non-humorous Disclosure) and type of Non-humorous (0 = Humorous Disclosure, 1 = Matched Non-humorous Disclosure,-1 = Concise Non-humorous Disclosure). When we included veracity of the disclosure in our model, we find that the effect of Humorous Disclosure was reduced (from $\beta = 0.22$, p = .029 to $\beta = 0.01$, p = .895) and the effect of veracity remained significant ($\beta = -0.43$, p < .001). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.21, 95% CI [0.10, 0.34]). Together the results of our mediation analysis indicate indirectonly mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to higher perceptions of competence.

Finally, we examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on likelihood of giving the candidate an offer. We conducted ordinary least squares regression analysis on willingness to give the candidate an offer as a function of Humorous Disclosure (1 = Humorous Disclosure, -0.5 = Matched Non-humorous Disclosure, -0.5 = Concise Non-humorous Disclosure) and type of Non-humorous Disclosure

Table 3
Summary of Results for Study 3 and 4.

		η^2	Concise Non	Concise Non-humorous		Matched Non-humorous		Humorous	
Variable	F		M	(SD)	M	(SD)	M	(SD)	
STUDY 3									
Warmth	$F(2, 299) = 13.27^{***}$	0.08	5.08_{a}	(1.07)	5.00_{a}	(1.01)	5.67 _b	(0.92)	
Competence	$F(2, 299) = 10.09^{***}$	0.06	4.91 _a	(1.05)	4.55 _b	(1.21)	5.24_{c}	(0.96)	
Offer	$F(2, 299) = 10.08^{***}$	0.06	4.31 _a	(1.32)	3.88_{b}	(1.59)	4.76 _c	(1.22)	
Veracity	$F(2, 299) = 12.58^{***}$	0.08	3.95 _a	(1.37)	4.20_{a}	(1.56)	$3.22_{\rm b}$	(1.37)	
Funniness	$F(2, 299) = 125.25^{***}$	0.46	2.41 _a	(1.52)	2.15_{a}	(1.54)	5.18_{b}	(1.44)	
Appropriateness	$F(2, 299) = 4.17^*$	0.03	4.75 _a	(1.48)	4.25 _b	(1.70)	4.16 _b	(1.54)	
Boringness	$F(2, 299) = 11.60^{***}$	0.07	3.15 _a	(1.56)	3.39 _a	(1.56)	$2.37_{\rm b}$	(1.61)	
STUDY 4									
Warmth	$F(2, 597) = 24.23^{***}$	0.08	4.78_{a}	(1.06)	4.69 _a	(1.38)	5.44 _b	(1.06)	
Competence	$F(2, 597) = 18.15^{***}$	0.06	4.26 _a	(1.23)	$4.00_{\rm b}$	(1.53)	4.78_{c}	(1.19)	
Offer	$F(2, 597) = 7.01^{**}$	0.02	3.91 _a	(1.54)	3.63_{a}	(1.74)	4.23_{b}	(1.54)	
Veracity	$F(2, 597) = 20.92^{***}$	0.07	5.59 _a	(1.64)	5.69 _a	(1.68)	4.68 _b	(1.83)	
Affect	F(2, 597) = 0.25	0.00	5.09 _a	(0.88)	5.11 _a	(0.89)	5.15 _a	(0.87)	
Funniness	$F(2, 597) = 49.39^{***}$	0.14	3.26 _a	(1.83)	3.63 _b	(1.80)	4.89 _c	(1.53)	
Appropriateness	$F(2, 597) = 5.67^{**}$	0.02	4.01 _a	(1.64)	3.57 _b	(1.73)	3.48 _b	(1.66)	
Boringness	$F(2, 597) = 23.33^{***}$	0.07	3.29 _a	(1.64)	3.05_{a}	(1.69)	2.25_{b}	(1.46)	

Means in each row with different subscripts were significantly different at the p < .05 level. *p < .05, **p < .01, ***p < .001.

 $(0 = \text{Humorous Disclosure}, \ 1 = \text{Matched Non-humorous Disclosure}, \ -1 = \text{Concise Non-humorous Disclosure})$. When we included veracity of the disclosure in our model, we find that the effect of Humorous Disclosure was reduced (from $\beta = 0.30$, p = .021 to $\beta = 0.02$, p = .849) and the effect of veracity remained significant ($\beta = -0.57$, p < .001). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.28, 95% CI [0.13, 0.44]). Together the results of our mediation analysis indicate indirect-only mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to a higher likelihood of giving the candidate an offer.

6.2. Discussion

In Study 3, we compared disclosing negative information using humor with two non-humorous disclosures. Consistent with our prior studies, we find that an individual who makes a humorous disclosure is perceived as both warmer and more competent than an individual who makes a non-humorous disclosure. Importantly, we find that disclosing information with humor reduced the perceived veracity of the disclosure. Specifically, adding a humorous statement to the disclosure ("It's hard when there's never enough THYME.") reduced the perceived veracity of the proximal statement ("I've been told that my food lacks seasoning when I cook in a rush."), which elevated perceptions of warmth, competence, and the likelihood that participants would give the discloser an offer.

7. Study 4: The effect of affect on humorous disclosures

In Study 4, we extend our investigation to consider how affect might moderate perceptions of individuals who make humorous disclosures. Prior work has found that, compared to individuals in neutral or positive affective states, individuals in negative affective states are less trusting (Dunn & Schweitzer, 2005) and more critical (Wiltermuth & Tiedens, 2011). In this study, we consider how an individual's initial affective state might influence their perceived veracity of the disclosure.

Participants. We recruited 600 participants via Amazon's Mechanical Turk to complete a short study in exchange for \$0.30. A total of 600 people completed the study and were included in our analyses (56.4% male, $M_{\rm age} = 37.10$ years, SD = 12.65).

Design and Procedure. We randomly assigned participants to one

of three between subjects conditions: Concise Non-humorous Disclosure vs. Matched Non-humorous Disclosure vs. Humorous Disclosure.

Across all conditions, at the beginning of the study, we had participants complete the Positive and Negative Affect Schedule (PANAS; $\alpha=0.87;$ Watson, Clark, & Tellegen, 1988). The rest of the design was identical to Study 3 except for our manipulation and the question about the candidate's ability. As in Study 3, the manager asks a candidate the question, "What would you say is your greatest weakness?" In the Matched Non-humorous Disclosure condition, the candidate responds with, "I can't make Italian food. I feel like an imposter." In the Humorous Disclosure condition, the candidate responds with, "I can't make Italian food. I feel like an imPASTA." In the Concise Non-humorous Disclosure condition, the candidate responds with only, "I can't make Italian food."

After reading the scenario, participants rated the candidate's competence ($\alpha=0.92$) and warmth ($\alpha=0.96$) using the same scales we used in our prior studies, as well as, the likelihood that they would give the candidate an offer. Next, we asked participants, "Imagine that you are the manager. Please rate how well you think the candidate can make Italian food." (7-point Likert, 1= "Not at all", 7= "Extremely"). We reverse coded this item to calculate the perceived veracity of the disclosure.

Next, for our manipulation checks, we had participants rate to the extent to which the candidate's response was, "Funny", "Humorous", "Appropriate", "Suitable", "Boring", and "Dull". We combined the first two items into an index of funniness (r=0.89). We combined the next two items into an index of appropriateness (r=0.85). We combined the last two items into an index of boringness (r=0.83). We used these manipulation checks to ensure that the candidate's response in the joke condition was perceived as funny, but was not perceived as inappropriate. As in Study 3, we measured boringness as a secondary manipulation check in order to ensure that the humorous self-disclosure was perceived as humorous. Finally, we asked participants to fill out demographics questions before being dismissed from the study.

7.1. Results

Manipulation check. The manipulation checks confirmed that our humor manipulation was successful. Participants rated the Humorous Disclosure (M = 4.89, SD = 1.53) as significantly funnier than the Matched Non-humorous Disclosure (M = 3.63, SD = 1.80), t (597) = 7.35, p < .001, and the Concise Non-humorous Disclosure (M = 3.26, SD = 1.83), t(597) = 9.46, p < .001. Participants rated the

Matched Non-humorous Disclosure as significantly funnier than the Concise Non-humorous Disclosure, t(597) = 2.10, p = .036.

Participants did not rate the Humorous Disclosure (M = 3.48, SD = 1.66) as significantly less appropriate than the Matched Nonhumorous Disclosure (M = 3.57, SD = 1.73), t(597) = 0.52, p = .602. Participants did rate the Concise Non-humorous Disclosure (M = 4.01, SD = 1.64) as significantly more appropriate than the Humorous Disclosure, t(597) = 3.14, p < .01, and the Matched Non-humorous Disclosure, t(597) = 2.62, p < .01.

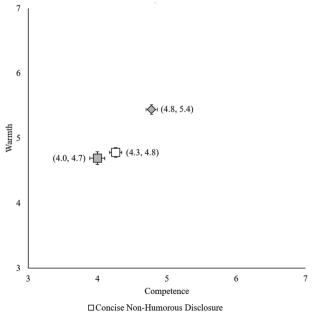
Participants rated the Humorous Disclosure (M=2.25, SD=1.46) as significantly less boring than the Matched Non-humorous Disclosure (M=3.05, SD=1.69), t(597)=4.99, p<.001, and the Concise Non-humorous Disclosure (M=3.29, SD=1.64), t(597)=6.53, p<.001. Participants did not rate the Matched Non-humorous Disclosure and Concise Non-humorous Disclosure as significantly different on boringness, t(597)=1.53, p=.127.

Main results. Consistent with our prior studies, we find that humor reduces the perceived veracity of a proximal statement, and that the candidate was rated as higher in warmth and competence following a humorous disclosure than following a non-humorous disclosure. We depict our results in Fig. 5 and summarize these results in Table 3.

Warmth. We find that the candidate was rated as higher in warmth when they delivered a Humorous Disclosure (M=5.44, SD=1.06) than when they delivered a Matched Non-humorous Disclosure (M=4.69, SD=1.38), t(597)=6.37, p<.001, or the Concise Non-humorous Disclosure (M=4.78, SD=1.06), t(597)=5.61, p<.001. Ratings of warmth were not significantly lower in the Matched Non-humorous Disclosure condition than in the Concise Non-humorous Disclosure condition, t(597)=0.76, p=.446.

Competence. We find that the candidate was rated as higher in competence when they delivered a Humorous Disclosure (M=4.78, SD=1.19) than when they delivered a Matched Non-humorous Disclosure (M=4.00, SD=1.53), t(597)=5.92, p<.001, or the Concise Non-humorous Disclosure (M=4.26, SD=1.23), t(597)=3.93, p<.001. Ratings of competence were significantly lower in the Matched Non-humorous Disclosure condition than in the Concise Non-humorous Disclosure condition, t(597)=1.99, p=.047.

Affect. We find no significant difference in ratings of affect across all conditions. Ratings of affect were not significantly different across the



■ Matched Non-Humorous Disclosure

♦ Humorous Disclosure

Fig. 5. Study 4 Results.

Humorous Disclosure condition (M = 5.15, SD = 0.87), the Matched Non-humorous Disclosure condition (M = 5.11, SD = 0.89), and the Concise Non-humorous Disclosure condition (M = 5.09, SD = 0.88).

Offer. We find that participants were more likely to give the candidate an offer when the candidate responded with a Humorous Disclosure (M = 4.23, SD = 1.54) than when they responded with a Matched Non-humorous Disclosure (M = 3.63, SD = 1.74), t (597) = 3.74, p < .001, or a Concise Non-humorous Disclosure (M = 3.91, SD = 1.54), t(597) = 2.02, p = .044. We find that participants were marginally less likely to give the candidate an offer in the Matched Non-humorous Disclosure condition than in the Concise Non-humorous Disclosure condition, t(597) = 1.72, p = .086.

Veracity of the disclosure. We find that perceived veracity of the disclosure was significantly lower after a Humorous Disclosure (M=4.68,SD=1.83) than after a Matched Non-humorous Disclosure (M=5.69,SD=1.68), t(597)=5.86, p<.001, or a Concise Non-humorous Disclosure (M=5.59,SD=1.64), t(597)=5.29, p<.001. We find that perceptions of the veracity of the disclosure were not significantly different between the Matched Non-humorous Disclosure and Concise Non-humorous Disclosure conditions, t(597)=0.57, p=.567.

Mediation. We conducted both Baron and Kenny (1986) and bootstrap analyses (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008). We examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on warmth. We conducted ordinary least squares regression analysis on warmth as a function of Humorous Disclosure (1 = Humorous Disclosure, -0.5 = Matched Non-humorous Disclosure, -0.5 = Concise Non-humorous Disclosure) and type of Non-humorous Disclosure (0 = Hu-Disclosure. 1 = MatchedNon-humorous morous Disclosure. -1 = Concise Non-humorous Disclosure). When we included veracity of the disclosure in our model, we find that the effect of Humorous Disclosure was reduced (from $\beta = 0.47$, p < .001 to $\beta = 0.35$, p < .001) and the effect of veracity remained significant ($\beta = -0.19$, p < .001). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.12, 95% CI [0.07, 0.17]). Together the results of our mediation analysis indicate complementary mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to higher perceptions of warmth.

Next, we examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on competence. We conducted ordinary least squares regression analysis on competence as a function of Humorous Disclosure (1 = Humorous Disclosure, -0.5 = Matched Non-humorous Disclosure, -0.5 = Concise Non-humorous Disclosure) and type of Non-humorous (0 = Humorous Disclosure, 1 = Matched Non-humorous Disclosure,-1 = Concise Non-humorous Disclosure). When we included veracity of the disclosure in our model, we find that the effect of Humorous Disclosure was reduced (from $\beta = 0.43$, p < .001 to $\beta = 0.21$, p < .01) and the effect of veracity remained significant ($\beta = -0.35$, p < .001). When we conducted a 5000 sample bootstrap analysis (Haves & Preacher, 2014; Pieters, 2017; Preacher & Haves, 2004, 2008), we found a significant indirect effect (IE = 0.23, 95% CI [0.15, 0.31]). Together the results of our mediation analysis indicate complementary mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to higher perceptions of competence.

Finally, we examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on likelihood of giving the candidate an offer. We conducted ordinary least squares regression analysis on willingness to give the candidate an offer as a function of Humorous Disclosure (1 = Humorous Disclosure, -0.5 = Matched Non-humorous Disclosure, -0.5 = Concise Non-humorous Disclosure) and type of Non-humorous Disclosure

 $(0 = \text{Humorous Disclosure}, \ 1 = \text{Matched Non-humorous Disclosure}, \ -1 = \text{Concise Non-humorous Disclosure})$. When we included veracity of the disclosure in our model, we find that the effect of Humorous Disclosure was reduced (from $\beta = 0.31, p < .01$ to $\beta = 0.03, p = .715$) and the effect of veracity remained significant ($\beta = -0.43, p < .001$). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.28, 95% CI [0.18, 0.38]). Together the results of our mediation analysis indicate indirect-only mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to a higher likelihood of giving the candidate an offer.

Moderated mediation. We examined to what extent affect may moderate the relationship between humorous self-disclosure and perceived veracity of the disclosure, and consequently moderate the indirect effect of humorous self-disclosure on warmth, competence, and willingness to give the candidate an offer. We tested the moderating effect of affect on the relationship between humorous self-disclosure and perceived veracity of the disclosure. We conducted ordinary least squares regression analysis on perceived veracity of the disclosure as a function of Humorous Disclosure (1 = Humorous Disclosure, -0.5 = Matched Non-humorous Disclosure, -0.5 = Concise Non-humorous Disclosure), type of Non-humorous Disclosure (0 = Humorous Disclosure, 1 = Matched Non-humorous Disclosure, -1 = ConciseNon-humorous Disclosure), affect, and the interaction between Humorous Disclosure and affect. We find no significant effect of Humorous Disclosure, $\beta = 0.12$, p = .841, no significant effect of type of Non-humorous Disclosure, $\beta = 0.05$, p = .596, a significant effect of affect, $\beta = 0.26$, p < .01, and no significant interaction between affect and Humorous Disclosure, $\beta = -0.15$, p = .186. These results indicate that affect does not moderate the effect of Humorous Disclosure on perceived veracity of the disclosure. When we conducted a 5000 sample bootstrap analyses (Hayes & Preacher, 2014; Hayes, 2015; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found an insignificant index of moderated mediation for the relationship between Humorous Disclosure and warmth (Index = 0.03, 95% CI [-0.02, 0.07]), an insignificant index of moderated mediation for the relationship between Humorous Disclosure and competence (Index = 0.05, 95% CI [-0.03, 0.15]), and an insignificant index of moderated mediation for the relationship between Humorous Disclosure and the likelihood of giving the candidate an offer (Index = 0.06, 95% CI [-0.04, 0.18]).

7.2. Discussion

In Study 4, we again find that humorous disclosures, compared to non-humorous disclosures, diminished perceptions of the veracity of the disclosure, increased the likelihood of receiving an offer, and boosted perceptions of both warmth and competence. In addition, we find that adding a humorous statement to the disclosure ("I feel like an imPASTA.") reduced the perceived veracity of the proximal statement ("I can't make Italian food."). Perceptions of the veracity of the candidate's disclosure mediates the effect of a humorous disclosure on warmth, competence, and wanting to give the candidate an offer. In other words, participants viewed the disclosure as less true when it was humorous, which had beneficial effects on interpersonal perceptions.

We also examined the extent to which the affect of the audience might moderate our key relationships. We conducted moderated mediation analysis, and found no significant effects, suggesting that the mood of the audience did not significantly moderate the influence of humor in this setting. That is, humor influenced perceptions of veracity of disclosures and perceptions of warmth and competence irrespective of the affect of observers.

8. Study 5: Core violations

In Study 5, we extend our investigation to consider the importance

of the conversational goal of a counterpart. Specifically, we examine the effect of humor when the disclosure is about a core competency, an essential trait for effective performance within a specific context (Galinsky & Schweitzer, 2015). We focus on core disclosures for two reasons. First, these represent disclosures where the audience may be particularly interested in receiving an answer. Second, core disclosures may be particularly harmful to perceptions of warmth and competence. For example, in an interview, discerning the truth about a core competency is the primary conversational goal of an interviewer, and a candidate who discloses that they lack a key competence required to do the position that they are interviewing for may appear less capable and likable. Humor, however, may be particularly beneficial in mitigating the harmful effects of these disclosures, because the use of humor may reduce the perceived veracity of these disclosures.

8.1. Method

Participants. We recruited 402 adults from Amazon Mechanical Turk to participate in a short study in exchange for \$0.30 (52.74% male, $M_{\rm age} = 36.37$ years, SD = 11.72).

Design and procedure. We randomly assigned participants to one of four between-subjects conditions from a 2 (Humorous v. Non-humorous) \times 2 (Core v. Non-Core) design: *Humorous-Core-Disclosure* vs. *Non-humorous-Core-Disclosure* vs. *Humorous-Non-core-Disclosure* vs. *Non-humorous-Non-core-Disclosure*.

As in Studies 2, 3, and 4, we asked participants to imagine a job candidate interviewing with a manager. In the core-disclosure conditions, we asked participants to imagine a scenario in which a manager is about to interview a candidate for an open architect position. In the non-core-disclosure conditions, we asked participants to imagine a scenario in which a manager is about to interview a candidate for an open veterinarian position.

As in Studies 2, 3, and 4, across all conditions, the manager asked the candidate a question, "What would you say is your greatest weakness?" In the non-humorous conditions, the candidate responds with, "Math. I can add and subtract. But I struggle with Geometry." In the humorous disclosure conditions, the candidate responds with, "Math. I can add and subtract. But Geometry is where I "draw the line"."

Next, we had participants in all conditions rate the candidate on warmth and competence. We used the same items to measure warmth $(\alpha=0.94)$ and competence $(\alpha=0.93)$ that we used in Studies 2, 3, and 4. Next, we had participants rate the likelihood that they would give the candidate an offer. Then, we asked participants, "Imagine that you are the manager. To what extent do you think the candidate is able to do Math well?" (7-point Likert, 1= "Not at all", 7= "Extremely"). We reverse coded this item to calculate the perceived veracity of the disclarate

Next, we had participants complete our manipulation checks. To assess the perceived centrality of the disclosure, whether or not participants perceived the disclosure to reflect a core versus non-core topic, we asked participants, "Imagine that you are the manager. To what extent do you think difficulty with Math would negatively impact someone's ability to do the job the candidate is interviewing for?" (7-point Likert, 1 = "Not at all", 7 = "Extremely"). As in Studies 3 and 4, we asked participants to rate the funniness (r = 0.91), appropriateness (r = 0.84), and boringness of the candidate's response (r = 0.83). Finally, we asked participants demographic questions (age and gender).

8.2. Results

Manipulation check. The manipulation checks confirmed that participants perceived the centrality of the disclosure to be higher after the core disclosure than after the non-core disclosure. Participants rated the Non-humorous-Core-Disclosure (M = 5.14, SD = 1.66) and the Humorous-Core-Disclosure (M = 5.41, SD = 1.58) as significantly more likely to negatively impact the candidate's ability to do the job than the

Non-humorous-Non-core-Disclosure (M=3.49, SD=1.61) and the Humorous-Non-core-Disclosure (M=3.16, SD=1.47), p's < 0.001. The Humorous-Core-Disclosure was not rated as significantly more likely to negatively impact the candidate's ability to do the job than the Non-humorous-Core-Disclosure, t(398)=1.19, p=.234, and the Non-humorous-Non-core-Disclosure was not rated as more likely to negatively impact the candidate's ability to do the job than the Humorous-Non-Core-Disclosure, t(398)=1.52, p=.130.

The manipulation checks confirmed that our humor manipulation was successful. Participants rated the Humorous-Core-Disclosure $(M=4.03,\ SD=1.81)$ and the Humorous-Non-core-Disclosure (M=4.41,SD=1.80) as significantly funnier than the Non-humorous-Core-Disclosure $(M=2.40,\ SD=1.49)$ and the Non-humorous-Non-core-Disclosure $(M=2.59,\ SD=1.72),\ p$'s < 0.001. The Humorous-Core-Disclosure was not rated as significantly funnier than the Humorous-Non-core-Disclosure, $t(398)=1.57,\ p=.117$, and the Non-humorous-Non-core-Disclosure was not rated as funnier than the Non-humorous-Core-Disclosure, $t(398)=0.79,\ p=.431$.

Participants did not rate the Non-humorous-Core-Disclosure (M=3.42, SD=1.63) and Humorous-Core-Disclosure (M=3.18, SD=1.75) as significantly different on appropriateness, t(398)=1.02, p=.307. Participants did not rate the Non-humorous-Non-core-Disclosure (M=4.06, SD=1.47) and the Humorous-Non-core-Disclosure (M=3.80, SD=1.69) as significantly different on appropriateness, t(398)=1.11, p=.268.

Participants rated the Humorous-Core-Disclosure (M=2.65, SD=1.60) and the Humorous-Non-core-Disclosure (M=2.31, SD=1.53) as significantly less boring than the Non-humorous-Core-Disclosure (M=3.31, SD=1.71) and the Non-humorous-Non-core-Disclosure (M=3.24, SD=1.71), p's < 0.05. The Humorous-Core-Disclosure was not rated as significantly more boring than the Humorous-Non-core-Disclosure, t(398)=1.48, p=.140, and the Non-humorous-Core-Disclosure was not rated as significantly more boring than the Non-humorous-Non-core-Disclosure, t(398)=0.29, p=.771.

Main results. Consistent with our prior studies, we find that humor reduces the perceived veracity of a proximal statement, and that the candidate was rated as higher in warmth and competence after a humorous disclosure than a non-humorous disclosure. This is true for both core and non-core disclosures. We find that perceptions of warmth and competence were lowest after a non-humorous-core-disclosure, and highest after a humorous-non-core-disclosure. We depict our results in Fig. 6 and summarize the results in Table 4.

Warmth. We find that the candidate was rated as higher in warmth after a humorous disclosure than after a non-humorous disclosure. Participants rated the candidate significantly higher in warmth after the Humorous-Core-Disclosure (M=5.14, SD=1.07) than after the Non-humorous-Core-Disclosure (M=4.72, SD=1.18), t(398)=2.61, p<.01, and significantly higher in warmth after the Humorous-Non-core-Disclosure (M=5.44, SD=1.16) than after the Non-humorous-Non-core-Disclosure (M=5.05, SD=1.06), t(398)=2.51, p=.012. We find no significant difference in ratings of warmth after a Humorous-Core-Disclosure and a Non-humorous-Non-core-Disclosure, t(398)=0.56, p=.578.

Competence. We find that the candidate was rated as higher in competence after a humorous disclosure than after a non-humorous disclosure. Participants rated the candidate significantly higher in competence after the Humorous-Core-Disclosure (M=4.38, SD=1.38) than after the Non-humorous-Core-Disclosure (M=3.94, SD=1.28), t(398)=2.41, p=.017, and significantly higher in competence after the Humorous-Non-core-Disclosure (M=5.03, SD=1.36) than after the Non-humorous-Non-core-Disclosure (M=4.56, SD=1.24), t(398)=2.54, p=.011. We find no significant difference in ratings of competence after a Humorous-Core-Disclosure and a Non-humorous-Non-core-Disclosure, t(398)=0.98, p=.329.

Offer. We find that participants were more likely to give the candidate an offer when the candidate responded with a humorous

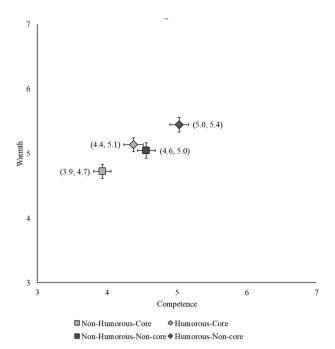


Fig. 6. Study 5 Results.

disclosure than when the candidate delivered a non-humorous disclosure. Participants were marginally more likely to give the candidate an offer after the Humorous-Core-Disclosure (M=3.48, SD=1.72) than after the Non-humorous-Core-Disclosure (M=3.11, SD=1.54), t (398) = 1.68, p=.094, and significantly more likely to give the candidate an offer after the Humorous-Non-core-Disclosure (M=4.65, SD=1.45) than after the Non-humorous-Non-core-Disclosure (M=4.04, SD=1.44), t(398)=2.79, p<.01. We find participants were more likely to give the candidate an offer after a Non-humorous-Non-core-Disclosure than after a Humorous-Core-Disclosure, t (398) = 2.59, p=.010.

Veracity of the disclosure. We find that participants thought the candidate's ability to do math well was significantly higher after a humorous disclosure than after a non-humorous disclosure. In other words, the veracity of the disclosure was significantly lower after a humorous disclosure than after a non-humorous disclosure. Participants rated the veracity of the disclosure significantly lower after a Humorous-Core-Disclosure ($M=4.32,\ SD=1.62$) than after a Non-humorous-Core-Disclosure ($M=4.96,\ SD=1.36$), $t(398)=3.12,\ p<0.1$, and significantly lower after a Humorous-Non-core-Disclosure ($M=4.48,\ SD=1.31$), $t(398)=3.21,\ p<0.1$. We find no significant difference in the veracity of the disclosure after a Humorous-Core-Disclosure and a Non-humorous-Non-core-Disclosure, $t(398)=0.81,\ p=0.416$.

Mediation. We conducted both Baron and Kenny (1986) and bootstrap analyses (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008). We examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on warmth. We conducted ordinary least squares regression analysis on warmth as a function of disclosure type (1 = humorous disclosure, -1 = non-humorous disclosure), competency type (1 = core, -1 = non-core), and the interaction between disclosure type and competency type. When we included veracity of the disclosure in our model, we find that the effect of disclosure type was reduced (from β = 0.20, p < .001 to β = 0.12, p = .025) and the effect of veracity remained significant (β = -0.25, p < .001). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.08, 95% CI [0.04, 0.13]). Together the results of our mediation analysis indicate

Table 4
Results from Study 5.

Variable		η^2	Core Disclosure				Non-Core Disclosure			
			Non-humorous		Humorous		Non-humorous		Humorous	
	F		M	(SD)	M	(SD)	M	(SD)	M	(SD)
Warmth	$F(3, 398) = 7.08^{***}$	0.05	4.72 _a	(1.18)	5.14 _b	(1.07)	5.05 _b	(1.06)	5.44 _c	(1.16)
Competence	$F(3, 398) = 12.09^{***}$	0.08	3.94	(1.28)	4.38 _b	(1.38)	4.56 _b	(1.24)	5.03_{c}	(1.36)
Offer	$F(3, 398) = 19.21^{***}$	0.13	3.11 _a	(1.54)	3.48 _a	(1.72)	4.04 _b	(1.44)	4.65 _c	(1.45)
Veracity	$F(3, 398) = 10.44^{***}$	0.07	4.96 _a	(1.36)	4.32 _b	(1.62)	4.48 _b	(1.31)	3.82_{c}	(1.52)
Disclosure Centrality	$F(3, 398) = 52.23^{***}$	0.28	5.14 _a	(1.66)	5.41 _a	(1.58)	3.49 _b	(1.61)	3.16 _b	(1.47)
Funniness	$F(3, 398) = 35.52^{***}$	0.21	2.40	(1.49)	4.03 _b	(1.81)	2.59 _a	(1.72)	4.41 _b	(1.80)
Appropriateness	$F(3, 398) = 5.69^{***}$	0.04	3.42 _{ab}	(1.63)	3.18 _a	(1.75)	4.06 _c	(1.47)	$3.80_{\rm bc}$	(1.69)
Boringness	$F(3, 398) = 8.63^{***}$	0.06	3.31 _a	(1.71)	2.65 _b	(1.60)	3.24 _a	(1.71)	$2.31_{\rm b}$	(1.53)

Means in each row with different subscripts were significantly different at the p < .05 level. p < .05, p < .01, p < .01, p < .001.

complementary mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to higher perceptions of warmth.

Next, we examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on competence. We conducted ordinary least squares regression analysis on competence as a function of disclosure type (1 = humorous disclosure, -1 = non-humorous disclosure), competency type (1 = core, -1 = non-core), and the interaction between disclosure type and competency type. When we included veracity of the disclosure in our model, we find that the effect of disclosure type was reduced (from $\beta = 0.23$, p < .01 to $\beta = 0.07$, p = .238) and the effect of veracity remained significant ($\beta = -0.50$, p < .001). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.16, 95% CI [0.09, 0.24]). Together the results of our mediation analysis indicate indirectonly mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to higher perceptions of competence.

Finally, we examined the extent to which the veracity of the disclosure mediated the effects of humorous disclosure on likelihood of giving the candidate an offer. We conducted ordinary least squares regression analysis on willingness to give the candidate an offer as a function of disclosure type (1 = humorous disclosure, -1 = non-humorous disclosure), competency type (1 = core, -1 = non-core), and the interaction between disclosure type and competency type. When we included veracity of the disclosure in our model, we find that the effect of disclosure type was reduced (from $\beta = 0.24$, p < .01 to $\beta = 0.03$, p = .620) and the effect of veracity remained significant ($\beta = -0.65$, p < .001). When we conducted a 5000 sample bootstrap analysis (Hayes & Preacher, 2014; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found a significant indirect effect (IE = 0.21, 95% CI [0.12, 0.31]). Together the results of our mediation analysis indicate indirectonly mediation (Zhao et al., 2010), where humor reduces the perceived veracity of the disclosure, and the lower veracity of the disclosure leads to a higher likelihood of giving the candidate an offer.

Moderated mediation. We examined to what extent competency type may moderate the relationship between humorous self-disclosure and perceived veracity of the disclosure, and consequently moderate the indirect effect of humorous self-disclosure on warmth, competence, and willingness to give the candidate an offer. We tested the moderating effect of competency type on the relationship between humorous self-disclosure and perceived veracity of the disclosure. We conducted ordinary least squares regression analysis on perceived veracity of the disclosure as a function of disclosure type (1 = humorous disclosure, -1 = non-humorous disclosure), competency type (1 = core, -1 = non-core), and the interaction between disclosure type and competency type. We find a significant effect of disclosure type (β = -0.33, p < .001), a significant effect of competency type

 $(\beta=0.24,\,p<.01)$, and no significant interaction between disclosure type and competency type $(\beta=0.00,\,p=.950)$. When we conducted a 5000 sample bootstrap analyses (Hayes & Preacher, 2014; Hayes, 2015; Pieters, 2017; Preacher & Hayes, 2004, 2008), we found an insignificant index of moderated mediation for the relationship between humorous self-disclosure and warmth (Index = $-0.00,\,95\%$ CI [$-0.08,\,0.07$]), an insignificant index of moderated mediation for the relationship between humorous self-disclosure and competence (Index = $-0.00,\,95\%$ CI [$-0.16,\,0.14$]), and an insignificant index of moderated mediation for the relationship between humorous self-disclosure and the likelihood of giving the candidate an offer (Index = $-0.01,\,95\%$ CI [$-0.21,\,0.19$]).

8.3. Discussion

As in Studies 1, 2, 3, and 4, we find that the use of humor profoundly shapes perceptions of veracity as well as of warmth and competence. By adding a humorous statement, the candidate reduced the perceived veracity of the proximal statement about their weakness with math. By reducing the perceived veracity of the disclosure, humor had beneficial effects on perceptions of the candidate's warmth and competence.

In Study 5, we find no moderating effect of competency type and show that this is true even when the disclosure relates to a core competency. When a disclosure relates to a core competency, discerning the truth is the primary conversational goal of the question asker. We find that negative disclosures about a core competency substantially harmed perceptions of warmth, competence, and the willingness to make the job candidate an offer, but *humorous* disclosures boosted perceptions of warmth and competence and muted the harmful effects of a disclosure about both core and non-core competencies. That is, humor mutes the harmful effects of a negative disclosure even when a conversational partner's goal is to learn accurate information about the disclosure.

9. General discussion

We investigate humor and the impression management consequences of disclosing negative information. In many settings, individuals balance the potentially competing goals of revealing information and managing impressions. Our work is the first to document the impression management benefits of humor in these settings. Specifically, we find a robust and positive relationship between the use of humor and perceptions of both warmth and competence as individuals disclose information. In Study 1, we demonstrate that individuals project greater warmth and greater competence when they disclose negative information using humor than when they disclose the same information without humor. In Study 2, we find that the use of humor boosts perceptions of warmth and competence compared to a non-humorous disclosure and declining to disclose information. In

Studies 3 and 4 we again find that humorous disclosures boost perceptions of warmth and competence compared to both concise and extended non-humorous disclosures. We also find that when a job candidate made a disclosure using humor, participants reported that they were more likely to give the candidate an offer.

Importantly, we also document a significant link between humor and the perceived veracity of proximal statements. Across Studies 3, 4, and 5, we find that a negative disclosure (e.g., "I can't make Italian food.") is perceived to be less true when the speaker adds a humorous statement (e.g., "I feel like an imPASTA.") to the speaking turn. We find that perceptions of the veracity of the disclosure mediate the relationships among humor and warmth, competence, and the willingness to give the candidate an offer. Ultimately, diminished perceptions of the veracity of a disclosure when it is accompanied by a humorous statement led to more favorable impressions of the candidate's warmth, competence, and participants' willingness to give the candidate a job offer.

We also find that the effects of humorous disclosure are robust across multiple contexts and conversational partners. In Study 4, we investigated the potential moderating role of affect in the relationship between the use of humor and impression formation. Though we did not find evidence for this in our investigation, it is possible that a conversational partner's mood may influence how receptive they are to the use of humor and the extent to which humor will influence impression formation.

In Study 5, we examine the effects of humorous disclosure when a counterpart is highly motivated to learn the truth. In this study, we consider the centrality of the disclosure, whether the negative disclosure is about a core or a non-core competency. In some settings, such as interviews, a conversational partner's primary goal is to discover the truth about a target's core competency. We find that disclosing negative information about a core competency can be particularly detrimental in these settings. Interestingly, we find the same pattern of results for the use of humor in this setting as we did in our other studies. That is, the use of humor significantly mitigates the harmful effects of disclosing negative information, even when a conversational partner is highly motivated to determine the truth.

10. Theoretical implications

Our findings inform a number of important theoretical contributions. First, we document a powerful connection between humor and impression management. We identify humor as an influential tool in mitigating impression management harm caused by a negative disclosure. We call for future work to broaden and deepen our understanding of the relationship between humor and impression management.

Second, our findings advance our understanding of humor and perceptions of veracity. Across our studies, we find that by using humor, an individual reduces the perceived veracity of negative disclosures made within the same speaking turn. We postulate that the use of humor shapes perceptions of the speaker's motives, which in turn fundamentally alters the way in which observers encode the speaker's non-humorous statements. Humor pervades our social interactions, and these findings suggest that the use of humor may have broad implications for understanding communication, miscommunication, and interpersonal perceptions.

We also make an important contribution to the self-disclosure literature. We are the first to experimentally manipulate humor during self-disclosure to examine its impact on perceptions of both warmth and competence. Prior work has conjectured that negative information about a core competency is more detrimental to interpersonal perceptions than negative information about a non-core competency (e.g., Galinsky & Schweitzer, 2015), and we are the first to demonstrate that this is true. Interestingly, we find that the use of humor substantially mitigates the harmful effects of disclosing negative information about

both core and non-core competencies. This result underscores the potential generality of our findings, because some of our most consequential disclosures involve revealing negative information about core weaknesses.

10.1. Prescriptive advice

Our findings highlight the importance of humor to impression management. Individuals frequently seek to create a positive impression, but also contend with the challenge of disclosing negative information (e.g., job interviews, negotiations, dates). We identify humor as a powerful tool for navigating these situations.

Our findings also highlight an important relationship between the use of humor and perceptions of veracity of proximal statements. More specifically, we find that humor makes proximal statements appear less true. This relationship can have beneficial effects when disclosing negative information, but may harm the speaker when they disclose positive information that they want the audience to interpret as true. More broadly, speakers should recognize that their use of humor may, in conversational claims proximal to their use of humor, reduce their credibility.

The ability of humor to reduce the perceived veracity of statements also has important practical implications for the audience. It may be prudent for audiences to be aware that humorous statements appear less true, since there are times when the audience may want to avoid discounting the veracity of humorous assertions (e.g., when the speaker is making a disclosure about a core competency). In such situations, the audience may want to assess the veracity of a statement explicitly and use questioning tactics that limit the use of humor (e.g., asking "yes" or "no" questions). The ability of humor to alter the way comments are perceived underscores the importance of both crafting questions and remaining vigilant in interpreting the responses received.

10.2. Future directions

We call for future research to deepen our understanding of the relationships among humor, perceptions of veracity, and impression management. This work should explore what influences whether an individual will use humor, and how different types of humor moderate the relationships we identify in this work. Factors such as the disclosure context (e.g., formal versus casual setting, culture), whether other individuals are using humorous self-disclosure, the power of the discloser (e.g., are they senior or junior in the organization), the discloser's selfimage (e.g., do they see themselves as a serious or moral individual), the discloser's current state (e.g., their current affect, the presence of alcohol), and the discloser's dispositional traits (e.g., the degree to which they are extraverted or guilt-prone) are all likely to influence the way a discloser thinks and behaves (Cuddy et al., 2015; Dunn & Schweitzer, 2005; Gino & Schweitzer, 2008; Gino, Schweitzer, Mead, & Ariely, 2011; John, 2015; Levine, Bitterly, Cohen, & Schweitzer, 2018; Schaumberg & Wiltermuth, 2014; Schweitzer & Gomberg, 2001; Schweitzer & Kerr, 2000; Wiltermuth & Cohen, 2014; Wiltermuth & Flynn, 2013; Wiltermuth, Raj, & Wood, 2018), and the way humor and disclosures are likely to be encoded.

Across our studies, the use of humor influenced perceptions of the veracity of statements within the same speaking turn. Future work should extend our investigation to explore how the use of humor changes perceptions of the speaker's motives and veracity more broadly. For example, the use of humor may shift perceptions of both prior and distal future claims that the speaker makes. In our studies, we focus on perceptions of veracity of negative, proximal disclosures, but we call for future work to broaden this line of inquiry to consider a wider set of claims and a broader set of humor attempts.

We also call for future work to disentangle the effects of humor attempts from the successful use of humor. If an audience fails to find humor in a negative disclosure, they may infer that the disclosure reflects accurate information. Quite possibly, unsuccessful humor may fail to diminish the perceived veracity of a negative self-disclosure. Alternatively, perceptions of the veracity of the disclosure may merely require an accurate perception that the speaker intended to be humorous. That is, merely disclosing negative information—as long as the humorous intent is clear—may still shift perceptions of veracity, warmth, and competence.

In our studies, we focused on the perceptions of individuals who witness a humorous disclosure. Future work may also explore the effects humorous disclosure has on disclosers. For example, the extent to which humorous disclosers view the humor they use as positive and self-enhancing or negative and self-defeating may influence the impact humorous disclosure has on their own well-being and self-perceptions (Kuiper, Grimshaw, Leite, & Kirsh, 2004; Martin, 2007; Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003; Samson & Gross, 2012). Prior work has shown that individuals who engage in negative and self-defeating humor tend to have lower psychological well-being than individuals who engage in positive and self-enhancing humor (Kuiper et al., 2004; Martin et al., 2003; Martin, 2007; Samson & Gross, 2012). However, future work might investigate if individuals who self-disclose using self-defeating humor have greater psychological well-being than individuals who non-humorously self-disclose.

11. Conclusion

Humor significantly influences how we perceive others and how we perceive the veracity of their claims. Across our studies, the use of humor altered beliefs about a target's warmth and competence by diminishing perceptions of the veracity of a speaker's negative statements. Though humor pervades our daily communication, we have a great deal to learn about the crucial role humor plays in how we form beliefs and our impressions of others.

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Appendix A. Disclosures used in studies

In Study 1, a participant (who was actually a confederate) made either a non-humorous or humor negative self-disclosure while delivering a testimonial for the university writing center. In Studies 2–5, participants were presented with a scenario of a meeting between a manager and a job candidate. During the scenario, the candidate either made a non-humorous or humorous disclosure of negative information.

Study 1

Humorous Disclosure: I don't write good. The Writing Center helps me write more good, and can help you write gooder to! But seriously, the Writing Center helps me communicate my ideas more effectively. It is a great resource on campus!

Non-humorous Disclosure: I do not write well. The Writing Center helps me communicate my ideas more effectively. It is a great resource on campus!

Study 2

Humorous Disclosure: My strength is that I'm a hard worker. But I really don't have a good memory. So remind me... what was the question? **Non-humorous Disclosure:** My strength is that I'm a hard worker. But I really don't have a good memory. **Decline to Disclose:** My strength is that I'm a hard worker. But I really can't think of a weakness.

Study 3

Humorous Disclosure: I've been told that my food lacks seasoning when I cook in a rush. It's hard when there's never enough THYME. **Matched Non-humorous Disclosure:** I've been told that my food lacks seasoning when I cook in a rush. It's hard when there's never enough time.

Concise Non-humorous Disclosure: I've been told that my food lacks seasoning when I cook in a rush.

Study 4

Humorous Disclosure: I can't make Italian food. I feel like an imPASTA. **Matched Non-humorous Disclosure:** I can't make Italian food. I feel like an imposter. **Concise Non-humorous Disclosure:** I can't make Italian food.

Study 5

Humorous Disclosure: Math. I can add and subtract. But Geometry is where I "draw the line". **Non-humorous Disclosure:** Math. I can add and subtract. But I struggle with Geometry.

Appendix B. Sample stimuli (Study 1)



How has the Writing Center helped you?

Appendix C. Sample stimuli (Study 2)







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