

# The self-presentational consequences of upholding one's stance in spite of the evidence



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## ABSTRACT

Five studies explore the self-presentational consequences of refusing to “back down” – that is, upholding a stance despite evidence of its inaccuracy. Using data from an entrepreneurial pitch competition, Study 1 shows that entrepreneurs tend not to back down even though investors are more impressed by entrepreneurs who do. Next, in two sets of experiments, we unpack the psychology underlying why actors refuse to publicly back down and investigate observers' impressions of those actors. Specifically, we show that observers view people who refuse to back down as confident but unintelligent, and these perceptions drive consequential decisions about such refusers, such as whether to invest in their ideas (Studies 1 & 2) or whether to hire them (Study 3). Although actors can intuit these effects (Study 4), this understanding is not reflected in their behavior because they are concerned with saving face (Study 5).

## 1. Introduction

From startups to the boardroom, from politics to everyday life, examples abound of people refusing to change their stance in the face of evidence that they should do so. For example, psychologists who infiltrated a cult that believed the world would end on December 21, 1954, found its members clinging to the same belief when December 22 came to be (Festinger, Riecken, & Schachter, 1956). Or take the many well-educated and well-intended individuals who, despite overwhelming factual evidence to the contrary, continue to deny climate change, believe that vaccines cause autism, and insist that President Obama was not born in the United States. Managers, leaders, and individuals often choose to publicly uphold stances they have openly committed to when presented with disconfirming evidence.

Another example is the cautionary tale of Bodega, a startup venture that placed “pantry boxes” of non-perishable food items into gyms, apartment lobbies, and offices—vending machines playing off the idea of traditional New York “bodegas”—where customers could get items that they needed conveniently. Despite numerous investors and advisors telling them that naming their company “Bodega” was culturally insensitive, they dug their heels in. Later, they faced a great deal of backlash, and are now trying again, but only after changing their name to Stockwell.

Yet, despite robust evidence that people are averse to backing down

(e.g., Anderson, 1983; Festinger et al., 1956; Lord, Lepper, & Preston, 1984; Lord, Ross, & Lepper, 1979; Ross, Lepper, & Hubbard, 1975), little is known about the self-presentational consequences of this behavior. What do people think of a leader who steadfastly continues to uphold a stance in the face of contradictory evidence? And how might those impressions, in turn, impact that manager's outcomes? We propose that a person's decision to refuse to back down can lead others to form negative impressions of him—impressions that can translate into negative consequences for the refuser. This proposition raises additional questions: Do people accurately perceive the self-presentational consequences of their refusals to back down? If so, why might they nonetheless refuse to do so? We posit that people refuse to back down in part because publicly changing one's mind is embarrassing. Prioritizing their desire to avoid embarrassment, people may refuse to change their publically-held stances despite intuiting the potential negative consequences of doing so.

Examining these questions is of scholarly importance because although people's aversion to backing down is well-documented, little is known about its self-presentational consequences. From a practical perspective, these questions may also help us understand and better predict the public's inconsistent reactions to those who change their mind. For example, why did John Kerry's change in stance on the Iraq War arguably cost him the 2004 presidential election (Harwood, 2008), while many lauded Supreme Court Justice Kennedy's stance changes,

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with one commentator charitably referring to his reversal on gay marriage as an “evolution” of his thinking (Roberts & Siddiqui, 2015)?

## 2. Conceptual development

### 2.1. Observer perspective

How does a manager’s refusal to back down affect how others perceive her? We argue that it affects perceptions of the manager’s competence—specifically, perceptions of her intelligence and confidence, two key components of competence. The extent to which a manager is deemed competent is of particular interest given that, along with warmth, it is one of two fundamental dimensions of person perception (Cuddy, Fiske, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002). We focus on the competence dimension of person perception because research shows that resisting persuasion attempts affects perceived competence and not perceived warmth (Cialdini, Braver, & Lewis, 1974). Specifically, research has shown that those who resist another person’s persuasion attempts are viewed to be more intelligent than those who are persuaded by those attempts (Cialdini et al., 1974). In this work, observers watched a persuader try to convince someone to change his stance on an issue. There was no objectively correct answer and no “right” opinion to hold, as differing opinions simply reflected different tastes. As a result, the situation may have seemed to observers a kind of “competition of intelligence,” with the person successfully persuading the other deemed the “winner” – the person of superior intellect in the pair.

We extend this work by exploring situations in which there is an objectively correct stance to be taken and the instrument of persuasion is the dispassionate presentation of facts (as opposed to impassioned arguments by a person holding an opposing viewpoint, as in previous work; Cialdini et al., 1974).<sup>1</sup> In such situations, unlike those that are “taste-based,” we predict that observers will view a person who backs down in response to factual evidence as intelligent because responding rationally to a rational argument for backing down is something that intelligent people do (Baron, 2005).

In contrast, we posit the effects of backing down on perceived confidence to be influenced by cues related to consistency and steadfastness. Studies have shown that, as compared to uncertain opinions, confidently held opinions are more resistant to change (Bassili, 1996) and less receptive to counter-arguments (Tormala & Petty, 2002; Wu & Shaffer, 1987; Zuwerink & Devine, 1996). This relationship between certainty in opinions and consistency over time suggests that observers might infer confidence from mere consistency, even when that consistency is misplaced, as it is when a person is confronted with valid evidence contradicting their initial stance. As such, we posit that observers will perceive a person who backs down as lacking confidence.

To summarize, we predict that refusing to back down makes a person seem confident, which is beneficial, because being perceived as confident can confer status and influence (Anderson, Brion, Moore, & Kennedy, 2012; Sah, Moore, & MacCoun, 2013). However, we predict that alongside this benefit comes a drawback – that refusing to back down makes a person come across as having bad intelligence-based judgment.

How do these impressions shape observers’ consequential choices about those who refuse to back down? Given that general intelligence is considered an important element of success, even accounting for the recognition that a complex array of factors affect organizational

<sup>1</sup> Indeed, when we test observer perceptions of targets who back down, we find a moderating effect of the factual nature of the contradictory information (see Appendix A). Specifically, when issues are fact-based, observers view targets who back down as displaying better intelligence and judgment than those who do not back down. But the opposite pattern was observed when the issue was opinion-based, consistent with prior research (Cialdini et al., 1974).

achievement (Gagné & St Père, 2001), we expect observers to have a lay belief that intelligence is more important than confidence. Intelligence is seen as a more direct and reliable proxy for merit than confidence, which is a noisier signal of underlying performance (Tenney, Meikle, Hunsaker, Moore, & Anderson, 2018). Therefore, we predict that observers’ consequential decisions about a person who has refused to back down will be more strongly affected by their (negative) perceptions of his intelligence than by their (positive) perceptions of his confidence.

This is not to say that observers are always more impressed by those who back down relative to those who do not. For example, in contexts or professions where confidence is particularly valued, such as public speaking, we predict that observers’ overall disdain for those who refuse to back down may be lessened or even reversed.

### 2.2. Actor perspective

If refusing to back down makes a bad impression, then why do people do it? One possibility, which we explore and do not find evidence of, is that people simply do not intuit the negative consequences of refusing to back down. A second possibility is that people are averse to changing their beliefs. Indeed, a large literature on belief perseverance has documented that once formed, beliefs are resistant to change. This literature has also documented a host of psychological reasons for belief perseverance, including: valuing autonomy of thought (Brehmer & Hagafors, 1986); susceptibility to sunk cost bias (Arkes & Blumer, 1985; Staw, 1976, 1981); motivated reasoning (Epley & Gilovich, 2016; Kunda, 1990); disdain for psychological uncertainty (Festinger, 1954); being persuaded (Petty & Cacioppo, 1979); the need for self-justification (Brockner et al., 1986; Sivanathan, Molden, Galinsky, & Ku, 2008); and the desire to be consistent (Russo, Carlson, Meloy, & Yong, 2008) and to maintain a coherent identity (Giddens, 1991).

A third possibility is that publicly changing one’s stance is an embarrassing admission of error that may wound a person’s pride. Consistent with this idea, sociologist and social theorist Goffman has argued that when people receive feedback or information that disconfirms the image—aka “face”—they aspire to portray, they experience discomfort, in the form of embarrassment or shame (Goffman, 1955). Our situation of interest—receiving evidence contradicting a publicly taken stance—is likely to prompt such feelings of discomfort. This is because the beliefs we publicly express contribute to this notion of face, which Goffman defined as the “positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact.” Further, Goffman posited that to cope with this discomfort, people engage in certain “social rituals” in an attempt to uphold or restore their desired face. For example, they may publicly discredit or minimize the incongruent information, or disparage its source. Goffman described many possible such restoration rituals, none of which entail publicly acquiescing to the incongruent information (e.g., by openly acknowledging its accuracy).

As a theory of social rituals, Goffman’s is about how people act publicly; it is not a theory of belief change (1955). Thus, whereas other, complementary psychological accounts, such as motivated reasoning, cover situations in which people maintain their private beliefs in spite of contradictory evidence, our perspective allows for the possibility that people may privately update their beliefs to be in line with the evidence, despite publicly upholding their initial stance—it is the public upholding of the stance that is integral to the “social ritual” of salvaging one’s pride and mitigating embarrassment. In other words, our account covers the case where a person outwardly continues to endorse a given stance, despite privately eschewing it. Thus, on top of intrapersonal barriers impeding belief change, we propose that actors are subject to an interpersonal barrier to changing their stance: the desire to save face.

Based on this theorizing, we posit that when people are presented with information that contradicts a stance to which they have publicly committed, they are inclined to publicly reinforce that stance in an

attempt to save face. Moreover, to the extent that refusals to back down reflect the desire to save face, we would expect that allowing people to back down in private – i.e., to confidentially change their stances – would increase their likelihood of backing down, presumably bringing their public stances in line with their (updated) private beliefs. Indeed, the belief perseverance literature points to people’s reluctance to change their beliefs as opposed to a complete unwillingness to do so.

### 3. Overview of studies

We test these ideas in five studies. First, we use field data to document how an individual’s decision to back down (or not) can, as predicted, impact subsequent outcomes. Specifically, in Study 1, we use data from an entrepreneurial pitch competition to demonstrate that startup founders tend to uphold their stances when their arguments are challenged. However, this tendency is counterproductive because investors are more impressed by entrepreneurs who do the opposite: all else equal, those who back down are more likely to advance to the next round of the competition relative to those who do not back down.

Then, in two sets of experiments, we unpack the psychology underlying individuals’ refusal to back down, on the one hand, and observers’ judgments and subsequent decisions of those individuals on the other. First, we examine the facets of person perception that impact observers’ judgments of those who refuse to back down. Specifically, we show that observers view people who refuse to back down as intelligent but lacking confidence, and these perceptions drive consequential decisions about such refusers, such as whether to invest in their ideas (Study 2) or whether to hire them (Study 3). Second, focusing on the actors, we explore what drives—and does not drive—actors’ decisions to back down. We show that refusals to back down appear not to be driven by a failure to understand the self-presentational consequences of doing so: Study 4 indicates that actors do anticipate the effects of backing down on observers’ perceptions of their intelligence and confidence. Consistent with our face-saving account, Study 5 tests whether actors’ propensity to back down is insensitive to whether their pay is determined by others’ ratings of their intelligence versus confidence. We find that it is sensitive to a factor that lessens the “ego blow” of backing down: the ability to do so in relative privacy.

In online studies, we targeted a sample size of 100 participants per condition for non-factorial designs (Study 3) and at least 150 participants per condition for factorial designs (Studies 2, 4, and 5) to have sufficient power to detect our hypothesized differences. In the field study (Study 1), we used the full data set (i.e., all pitches in the given competition). We analyzed our data only after data collection was complete. No observations were excluded unless otherwise indicated. Attrition rates were low (never above 3.6%), and we included data of those who dropped out up to the point at which they exited. We report all manipulations and measures (data and stimuli: [https://osf.io/drr6g/?view\\_only=0820053aada04dcf89eca7b008100815](https://osf.io/drr6g/?view_only=0820053aada04dcf89eca7b008100815)).

### 4. Study 1: Backing down in an entrepreneurial competition

In Study 1, we examined backing down in a real-world context with consequential outcomes – a pitch competition in which startup founders, or entrepreneurs, vied for investor funding. Consistent with prior research, we predicted that entrepreneurs would avoid backing down (McGee, Peterson, Mueller, & Sequeira, 2009)—that is, avoid changing their stance in response to the venture capitalists’ counter-arguments. We tested whether, all else equal, backing down would be positively or negatively associated with investors’ recommendation that the given entrepreneur advance in the pitch competition. We predicted that entrepreneurs would tend to not back down and that this tendency would be counterproductive because investors are likely to be more impressed by entrepreneurs who do the opposite.

#### 4.1. Method

The sample consisted of 84 entrepreneurs competing in a pitch competition held in the United States. Entrepreneurs selected to participate in the first round of the pitch competition were chosen out of 368 total applicants on the basis of pre-submitted materials, such as a business plan and financial statements. Therefore, our final sample of entrepreneurs had previously been vetted based on an intensive screening selection, ensuring that our sample only consisted of startups that met minimum and consistent standards of business viability.

Entrepreneurs gave short pitches, each of which was followed by a two-minute question-and-answer period during which a panel of venture capitalist investors asked questions ( $M_{\text{number of questions}} = 2.66$ ;  $\text{min} = 2$ ;  $\text{max} = 3$ ) and sometimes presented facts contradicting the stances the entrepreneurs had taken. The structure of this competition was such that only one of the 84 entrepreneurs would receive funding in the final round – insufficient variation to study the impact of backing down on obtaining funding in the final round. Therefore, we analyzed the pitches from the prior, semi-final round, testing whether backing down in this round predicted which 22 of the 84 entrepreneurs advanced to the final round.

Using full transcriptions of the pitch presentations and corresponding question-and-answer sessions, two independent coders who were familiar with entrepreneurial pitches, but blind to the purpose and design of the study, coded whether entrepreneurs backed down. The coders began by assessing a randomly selected portion of the presentations (10 out of the 84 pitches) and agreeing on how to operationalize “backing down” in this particular context—the entrepreneurship setting—while still relying on our operational definition of backing down (i.e. upholding a stance despite evidence of its inaccuracy). Next, the coders independently coded each pitch for whether the given entrepreneur had backed down (see Appendix B for sample coding, whereby coders first identified an initial position, followed by a prompt, and in turn, a demonstration of backing down). Finally, a third coder independently coded a subset of the presentations for additional validity. There was 100% agreement between coders.

#### 4.2. Results

##### 4.2.1. Entrepreneurs

Twenty out of 84 (23.8%) entrepreneurs backed down (76.2%, or 64 out of 84, did not back down). Therefore, entrepreneurs generally refused to back down.

##### 4.2.2. Observers

Binary logistic regression was used to analyze the effect of backing down on the outcome measure (see Table 1). Backing down significantly predicted pitch success ( $\beta = 1.77$ ,  $SE = 0.56$ ,  $p < .01$ ). Specifically, entrepreneurs who backed down by changing their stance in response to the venture capitalists’ counter-arguments were 5.87 times more likely to advance to the final round relative to those who maintained their initial stance. The effect holds when controlling for age and gender. To put this effect into context, it is over four times as large as that of men’s attractiveness on success in a similar entrepreneurial pitch competition (Brooks, Huang, Kearney, & Murray,

**Table 1**  
Logistic regression predicting advancement to final round.

Variables	Model 1	Model 2
Dependent variable: pitch success rate		
Backing Down	5.87**	6.42**
Age		0.98
Gender		0.20

Reported coefficients are odds ratios. \* $p < .05$ .

\*\*  $p < .01$ .

2014).

In sum, Study 1 provides field evidence that entrepreneurs are apt to stay resolute. In line with our predictions, investors, on the other hand, are more impressed by contestants who back down, as demonstrated by their higher likelihood of advancing those entrepreneurs. Despite this evidence, however, our initial study did not allow us to gain a nuanced understanding of why this occurred, in part because it was not an experiment. Therefore, in the remaining studies, we unpack the differential processes that underlie actors' decisions to back down on the one hand and the consequential decisions made about those actors on the other. We begin by addressing the latter, unpacking what observers, such as entrepreneurial investors, infer from an individual's decision to back down.

## 5. Study 2: Experimental replication and extension of Study 1

Study 1 indicated that, all else being equal, investors were more impressed by entrepreneurs who changed their minds after their initial stances were contradicted. Study 2 sought to replicate and extend this finding in a controlled experimental context that mirrored the entrepreneurial pitch competition from Study 1. Specifically, we tested the prediction that refusing to back down leads a person to be viewed as confident but as lacking intelligence and that this perception of diminished intelligence can fuel observers' decisions, such that entrepreneurs who do not back down in a pitch competition are less likely to advance relative to those who do back down.

In Study 2, participants played the role of investors at a pitch competition. They were directed to evaluate entrepreneurs and indicate whether they thought a given entrepreneur should advance in the competition. Participants were told that after the target entrepreneur presented a pitch about his novel business idea, a moderator interrupted with factual evidence of a flaw in the entrepreneur's business plan. Between subjects, we manipulated what happened next: the entrepreneur either backed down – i.e., changed his stance to be in line with the new factual information – or did not back down – i.e., maintained his initial stance despite the new information. Participants rated the extent to which they perceived the entrepreneur as intelligent and confident, and indicated whether they thought the entrepreneur should advance in the competition. Thus, unlike in Study 1, in which investors evaluated entrepreneurs as a function of those entrepreneurs' actual decisions of whether to back down, in Study 2, we manipulated whether participants, taking on the role of investors, read about an entrepreneur who backed down versus did not back down. Doing so afforded us the necessary internal validity to explore the facets of person perception that drive observers' decisions about the actors.

### 5.1. Method

Participants ( $N = 311$  mTurk workers;  $M_{age} = 37.4$  years,  $SD = 11.7$  years, 50% male) were told:

“In this study, you will take on the role of an investor at an entrepreneurial pitch competition. The pitch competition is an event where entrepreneurs take turns presenting their new business idea to a group of investors. All of the investors have experience evaluating entrepreneurial pitches and investing money to fund entrepreneurs. Imagine that you are one of these investors. After each pitch, you will be evaluating the entrepreneur and deciding whether he/she will advance in the competition. The winner of the pitch competition will receive a large financial award to fund his/her new business.”

Further, participants were told about the moderator:

“There is also a moderator at the competition who is responsible for detecting errors and weaknesses in the entrepreneurs' business plans. Who is the moderator? The moderator is a very successful

entrepreneur - he has founded over 10 successful businesses during his career. He is very experienced at assessing business plans.”

Participants were told that the moderator had discovered a flaw in the entrepreneur's business plan:

“After one of the entrepreneurs presents a pitch about his new business idea, the moderator points out a mistake in the entrepreneur's business plan. Specifically, the moderator notes that the projected profits do not take labor costs into account - in other words, what the entrepreneur will have to pay their staff. The moderator further explains that when this is taken into account, the projected profits are actually 5% lower than what the entrepreneur calculated.”

Next, half of participants were randomized to read that the entrepreneur backed down; these participants were told that “the entrepreneur changes his initial business plan by updating the projected profits in light of the moderator's comment.” The other half of participants read that the entrepreneur did not back down; these participants were told that “the entrepreneur sticks to his initial business plan, insisting that he has correctly calculated the projected profits.”

Participants indicated their agreement with the statement, “I think this entrepreneur should advance to the next round of the pitch competition” on a 7-point scale ranging from “*Strongly disagree*” to “*Strongly agree*.” We also measured our hypothesized mediators: the extent to which participants viewed the entrepreneur as intelligent and as confident. For perceived intelligence (Cialdini et al., 1974), participants rated the extent to which the target entrepreneur appeared “intelligent,” “knowledgeable of current events,” “perceptive,” “intellectual,” and “thoughtful” ( $\alpha = 0.96$ ). Confidence was measured using items adapted from The Confidence in Thoughts & Knowledge scale (Fast, Sivanathan, Mayer, & Galinsky, 2012). Specifically, participants rated the extent to which the target entrepreneur “feels confident in his thoughts,” “feels confident in his beliefs,” “is certain of his knowledge,” and “is very sure about what he knows” ( $\alpha = 0.94$ ). Both intelligence and confidence measures were rated on a 7-point Likert scale ranging from “*Not at all*” to “*Extremely*.” Between subjects, we counterbalanced the administration order of these three measures – advancement decisions, perceived confidence, and perceived intelligence. (There were no order effects; therefore, the results collapse across this factor.)

This and all experiments concluded with question(s) in which participants were tasked with identifying the condition-specific information they had seen. We included these items because they would help diagnose the reason for any null effects. The pass rates were high; nonetheless, all reported results include all participants regardless of whether they passed these checks. In addition to manipulation and comprehension checks (where the overall pass rate was 87.6% across all experiments and equivalent across conditions), participants also completed basic demographic measures.

In this experiment, the manipulation check tasked participants with completing the sentence “In this scenario, you saw the entrepreneur, in response to the moderator's comment...” with the condition-specific information they had been presented; there were three response options: “change his initial business plan,” “stick to his initial business plan,” or “I don't recall;” 91.1% of participants answered correctly. The comprehension check asked participants: “Who was the moderator in this scenario?” Participants were tasked with identifying the correct answer – “An experienced entrepreneur” – amid the five other response options: “The pitch organizer,” “A random member of the audience,” “I don't recall,” “A prospective investor,” and “A judge.” 81.8% of participants correctly answered the question.

### 5.2. Results

Consistent with Study 1, participants were significantly more likely



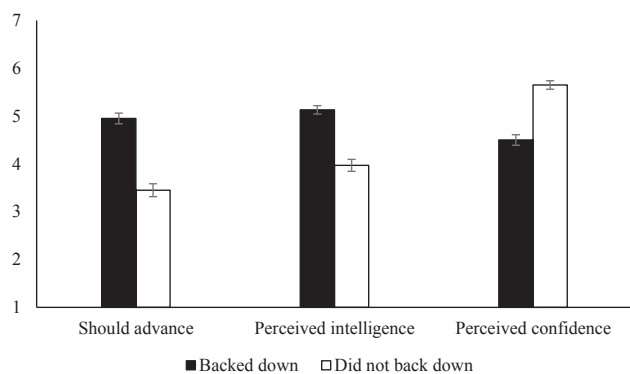


Fig. 1. Dependent measures (advancement, intelligence, confidence) by condition (backed down versus did not back down). Error bars represent standard errors.

to agree that an entrepreneur should advance in the competition when that entrepreneur backed down in the face of contradictory information ( $M_{backed\_down} = 4.95$ ,  $SD = 1.39$ ), relative to not backing down ( $M_{did\_not\_back\_down} = 3.45$ ,  $SD = 1.66$ ;  $t(292.97) = -8.57$ ,  $p < .001$ ) (see Fig. 1). Relative to the entrepreneur who backed down as more intelligent ( $M_{backed\_down} = 5.13$  out of 7,  $SD = 1.09$ ;  $M_{did\_not\_back\_down} = 3.97$ ,  $SD = 1.54$ ;  $t(271.12) = -7.59$ ,  $p < .001$ ) but less confident ( $M_{backed\_down} = 4.50$  out of 7,  $SD = 1.36$ ;  $M_{did\_not\_back\_down} = 5.65$ ,  $SD = 1.10$ ;  $t(291.01) = 8.08$ ,  $p < .001$ ) (see Fig. 1).

### 5.2.1. Mediation

A path analysis revealed that both perceived intelligence and confidence mediated opinions on entrepreneurs advancing in the competition. Entrepreneurs who backed down were perceived as more intelligent and less confident, which ultimately led participants in the role of the investor to believe the entrepreneur should advance. When we included perceived intelligence and confidence in the model predicting the participant's belief that the entrepreneur should advance, the effect of backing down was reduced (from  $\beta = 1.50$ ,  $p < .001$ , to  $\beta = 0.83$ ,  $p < .001$ ). Although both perceived intelligence ( $\beta = 0.75$ ,  $p < .001$ ) and confidence ( $\beta = 0.18$ ,  $p = .010$ ) were significant predictors of recommended advancement, consistent with the account that intelligence is a more reliable signal of merit (Tenney et al., 2018), intelligence emerged as a stronger predictor. A 10,000-sample bootstrap analysis revealed that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero for perceived intelligence [0.62, 1.13] and confidence [-0.43, -0.04], suggesting a significant indirect effect size of 0.87 for intelligence and -0.20 for confidence (Baron & Kenny, 1986; Preacher & Kelley, 2011).

In sum, Study 2 replicates the finding that, all else being equal, investors were more impressed by entrepreneurs who backed down relative to those who did not. When evaluating entrepreneurs who backed down, participants, acting as investors, were particularly likely to recommend advancement in a pitch competition. Study 2 goes further, providing insight into the hypothesized facets of person perception that underlie this recommendation. Although backing down causes a person to be viewed as lacking in confidence, it also causes her to be perceived as intelligent, and it is this perceived intelligence that seems to guide observers' ultimate judgments of whether that entrepreneur should advance. However, as we next explore, this does not necessarily mean that backing down always makes for an overall positive impression.

## 6. Study 3: Moderation by domain

In Study 3, we broaden our investigation beyond the

entrepreneurship context to show that the self-presentational consequences of backing down extend to organizational outcomes more broadly. When it comes to making a good impression, does it behoove individuals and employees to back down or not back down in the workplace? Our account implies that in domains in which intelligence is valued over confidence, it is beneficial for actors to back down, but that refusing to back down may not be penalized, and might even be advantageous, where confidence is valued over intelligence. Thus, Study 3 tests the idea that whether an individual's decision to change their mind makes a net positive impression (which we operationalize by observer's choice to hire the given individual) depends on the domain in which this decision occurs – i.e., whether the domain is one in which intelligence versus confidence is particularly valued.

Accordingly, in Study 3, we test whether people are less inclined to penalize those who refuse to back down in domains in which confidence is particularly valued. While confidence is arguably a valuable attribute in the entrepreneurship realm explored in Studies 1 and 2, intelligence is plausibly far more salient given the undertaking and the onus on entrepreneurs to create new markets, introduce disruptive new innovations, and scale their companies (Hmieleski & Baron, 2009; Huang, 2018). Confidence is lauded, but intelligence is (and should be) far more indispensable (Tenney et al., 2018).

Study 3, on the other hand, allowed us to examine an inversion of the relative importance of these attributes. Specifically, Study 3 was a scenario study in the hiring realm, in which participants imagined that they were evaluating two candidates for a particular job. Participants were told that in an unrelated task one of the candidates had backed down in the face of contradictory evidence, while the other candidate had refused to back down. Between subjects, we manipulated job domain: participants either chose which person to hire as an engineer (pretested to be a domain in which intelligence is particularly valued) versus a motivational speaker (pretested to be a domain in which confidence is particularly valued).

### 6.1. Method

Participants ( $N = 186$  mTurk workers;  $M_{age} = 35.5$  years,  $SD = 10.8$  years, 57% male) indicated which of two target actors, one who backed down and one who did not, would be better suited for a given job. Between subjects, we manipulated job domain: participants either selected which candidate to hire as an engineer (intelligence domain condition) or as a motivational speaker (confidence domain condition).

#### 6.1.1. Pretests

We ran a pretest to identify a domain in which confidence is particularly valued and a domain in which intelligence is particularly valued. Pretest participants ( $N = 203$  mTurk workers;  $M_{age} = 34.8$  years,  $SD = 10.2$  years, 63% male) rated the importance of confidence and intelligence for each of 30 roles (e.g., actor, motivational speaker, pilot, brain surgeon). For use in our main study, we selected two roles: one rated highly on intelligence but low on confidence (engineer:  $M_{intelligence} = 4.6$  out of 5,  $SD = 0.69$  &  $M_{confidence} = 3.6$  out of 5,  $SD = 1.05$ ) and one rated highly on confidence but low on intelligence (motivational speaker:  $M_{confidence} = 4.4$ ,  $SD = 1.02$  &  $M_{intelligence} = 3.2$ ,  $SD = 1.05$ ).

A separate pilot study ( $N = 87$  mTurk workers;  $M_{age} = 34.4$  years,  $SD = 10.4$  years, 63% male) confirmed that participants perceived intelligence to be significantly more important for an engineer ( $M_{engineer} = 4.5$  out of 5,  $SD = 0.66$ ) than a motivational speaker ( $M_{speaker} = 3.3$ ,  $SD = 1.09$ ;  $F(1, 86) = 86.45$ ,  $p < .001$ ). Conversely, participants perceived confidence to be significantly more important for a motivational speaker ( $M_{speaker} = 4.8$  out of 5,  $SD = 0.56$ ) than an engineer ( $M_{engineer} = 3.6$ ,  $SD = 1.00$ ;  $F(1, 86) = 97.96$ ,  $p < .001$ ). Both roles were perceived as having similar levels of status in society ( $M_{engineer} = 4.84$  of 7,  $SD = 1.16$ ;  $M_{speaker} = 4.97$ ,  $SD = 1.15$ ;  $F(1,$

86) = 0.79,  $p = .377$ ) (see Appendix C for full description of methods and results).

In the main study, participants were tasked with choosing which of two job candidates would be better suited for a particular job. In the intelligence domain condition, participants selected which candidate would be better suited as an engineer. In the confidence domain condition, participants selected which candidate would be better suited as a motivational speaker. Specifically, in the intelligence [confidence] condition participants were told:

“Your task is to evaluate two fellow participants and choose which participant would be good as an engineer [a motivational speaker]. On the next page, you will see information about both participants on an unrelated task. Using this information, decide which of the two participants would be a better engineer [motivational speaker].”

Next, participants were told they would see information about how each candidate had behaved in a debate and then, based on that information, would select which target they believed would be better suited as an engineer or motivational speaker, depending on their assigned condition. Participants read that the candidates had participated in a debate and that one of them had backed down whereas the other had not. Specifically, participants were told:

“Participant X and Participant Y are involved in a debate. Both of them take certain positions on an issue. The moderator provides factual evidence directly contradicting both Participant X’s and Participant Y’s initial positions. Participant X decides to change his initial position on the issue, in line with the contradictory evidence. Participant Y decides to stick to his initial position on the issue, despite the contradictory evidence.”

Next, participants indicated which of the two candidates they thought would be better suited for the given job.

A manipulation check tasked participants with completing the sentence “Your task was to evaluate which participant would be a better ...” with the condition-specific information they had been presented; there were three response options: “engineer,” “motivational speaker,” and “I don’t remember;” 94.6% of participants answered correctly.

## 6.2. Results

Participants’ propensity to select the target who had backed down depended on domain, ( $\chi^2(1) = 11.30, p = .001$ ), with 72.9% of participants selecting the target who backed down in the intelligence domain (engineer) relative to only 48.9% in the confidence domain (motivational speaker).

In sum, Study 3 suggests that observers are particularly impressed by those who back down in domains, such as engineering, in which intelligence is particularly valued. By contrast, this preference was tempered in domains, such as public speaking, in which confidence is deemed particularly important. In addition, in Appendix D, we report an additional study that conceptually replicates these results.

## 7. Study 4: Actors’ predictions of the self-presentational effects of refusing to back down

Thus far, we have shown that those who back down come across as less confident but more intelligent than those who stick to their initial stance (and that the strength of these effects depends on domain, as shown in Study 3). Moreover, we have documented that these self-presentational effects can translate into consequential outcomes for actors (Studies 1, 2, and 3). In the next study, we test whether actors, faced with whether to change their mind, can predict how their decision affects how they are perceived. The study was a two-condition between-subjects design in which we asked participants to predict how

others would view them as a function of whether they backed down or did not back down.

### 7.1. Method

Participants ( $N = 198$  mTurk workers;  $M_{age} = 35.6$  years,  $SD = 11.5$  years; 68% male) were asked to take a stance on an issue and then given factual evidence contradicting that stance. Next, they were randomly assigned to imagine that they either backed down or did not back down from that stance and to indicate how they thought others would perceive them as a result.

Specifically, participants were told about a real-world indigenous Chilean relocation scenario. The scenario, from the 1980s, involved Endesa, a Chilean electricity company, which had sought to build a power plant on the indigenous people’s land (McGinn, Laschober, & Pradel, 2006). To do so, the company needed to convince the indigenous people to move and tried to use money to do so. The indigenous people refused to accept Endesa’s increasingly generous monetary offers.

Participants were asked to take a stance on why they thought this might be the case. Specifically, participants were asked, “Please indicate which of the following statements you agree with” by selecting one of the following two response options: “I think that money is MORE important to the indigenous people than preserving their culture” or “I think money is LESS important to the indigenous people than preserving their culture.”

Next, participants were given information that contradicted that stance: a quote from one of the indigenous people. There were two versions of the quote because participants could take one of two initial stances. Participants who had taken the initial stance that money is more important than culture received the following contradictory information:

“This land has been in my family for so many generations, I don’t even know exactly how long. This is where my great-grandfather was born, this very house, this very land... This is where my grandfather was born and raised, this is where my father was born and where we buried him when he passed. This is where I was born and where my son was born. Already the culture of our people is disappearing over time, and so if we give up our home and our land for money, what will we have left? There will be nothing.”

Participants who had taken the opposite initial stance, that money was less important than culture, received the following contradictory information:

“There is nothing we have but this land. And I would feel so terrible selling it and moving away, unless I know the money we receive will be sufficient to provide for my children and my children’s children. They can get an education, move into the city and then get a good job. And have a better life than me. In one of the neighboring lands, a shopping center was built and they offered money to the native families living on the land. When the families didn’t accept right away, the developer’s offered more and more money. I’m hoping that’s what will happen in our case.”

Then, to look at whether participants accurately predict how backing down affects how they come across to others, we randomized participants to imagine that after having received this contradictory information they either decided to back down (i.e., to revise their stance) or to not back down. Specifically, participants who imagined they would back down [not back down] were told:

“Imagine that given this [despite this] new contradictory information, you decided to change your mind on your initial position [stick with your initial position]. Next, imagine we showed your responses to another mTurker, who is tasked with rating your decision-making. This mTurker will see that you changed your mind [stuck to

your initial position] in light of contradictory evidence.”

Next, participants predicted how this other mTurker would evaluate their confidence ( $\alpha = 0.96$ ) and intelligence ( $\alpha = 0.95$ ), using the same scales from Study 2 but from the perspective of how another mTurker would perceive them. Order of administration was counter-balanced between subjects (there were no order effects; therefore, the results collapse across this factor). We administered one manipulation check question (where the accuracy rate was 82.5%) that asked, “Which of the following is true?” where participants had to choose between the options, “You changed your mind about what is most important to the indigenous people” or “You did NOT change your mind about what is most important to the indigenous people.”

### 7.1.1. Pilot Study

To ensure that in this context, similar to Study 2, observers view those who back down as having intelligence but lacking in confidence, we ran an “observer version” of this study (see Appendix E for full description of methods and results). Specifically, participants were assigned the role of observer, read about a target actor who either had backed down or *not* backed down in the face of contradictory information in the same Endesa scenario as the main study, and rated the extent to which they deemed that actor to display intelligence and confidence. Similar to Study 2, relative to the target who did not back down, participants judged the target who backed down as being more intelligent ( $M_{backed\_down} = 5.10$  out of 7,  $SD = 1.29$ ;  $M_{did\_not\_back\_down} = 3.74$ ,  $SD = 1.75$ ;  $t(173.18) = -6.13$ ,  $p < .001$ ) but having less confidence ( $M_{backed\_down} = 4.61$ ,  $SD = 1.64$ ;  $M_{did\_not\_back\_down} = 5.54$ ,  $SD = 1.10$ ;  $t(166.42) = 4.63$ ,  $p < .001$ ).

## 7.2. Results

Participants’ predictions were generally accurate (see Fig. 2). Specifically, for confidence, participants predicted they would be seen as significantly less confident if they backed down relative to if they did not back down ( $M_{back\_down} = 3.75$ ,  $SD = 1.64$ ;  $M_{do\_not\_back\_down} = 4.85$ ,  $SD = 1.41$ ;  $t(192) = 5.01$ ,  $p < .001$ ). Likewise, for intelligence, participants predicted they would be seen as being significantly more intelligent if they backed down relative to if they did not back down ( $M_{back\_down} = 4.63$ ,  $SD = 1.18$ ;  $M_{do\_not\_back\_down} = 3.98$ ,  $SD = 1.47$ ;  $t(187.65) = -3.37$ ,  $p = .001$ ).

## 8. Study 5: Actors prioritize face-saving

Despite evidence of the capacity to intuit how backing down affects evaluators’ impressions (Study 4), it is possible that actors’ decisions to back down may be more strongly dictated by whether they can do so in a way that salvages their pride. Publicly changing one’s mind is a kind of admission of being wrong, which hurts one’s pride. Indeed, previous

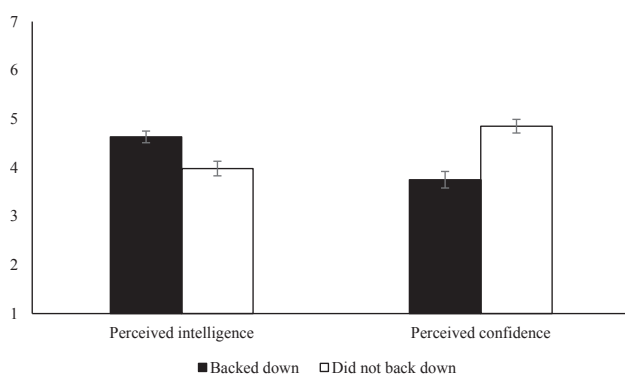


Fig. 2. Dependent measures (confidence, intelligence) by condition (backed down versus did not back down). Error bars represent standard errors.

research has shown that people engage in face-saving, whereby they sacrifice tangible rewards to avoid public embarrassment (Brown & Garland, 1971; Brown, 1970). Consistent with this research, we predict that actors’ propensity to back down might be more sensitive to whether they can do so with minimal embarrassment than to whether they are incented to impress on intelligence-based judgment versus confidence.

Specifically, in Study 5, participants were faced with a decision of whether to back down, with the knowledge that their responses would be evaluated by other participants and that those evaluations would determine their bonus payment. We varied whether the bonus payment was based on observers’ ratings of participants’ intelligence-based judgment versus confidence. We contrast this factor with a second one, which we predicted would take precedence: the ability to change one’s mind in relative privacy. In sum, Study 5 used a  $2 \times 2$  between-subjects design in which we manipulated relative privacy (i.e., whether participants’ decision of whether to change their stance would be viewed by many others, or by only one other, affording relatively privacy), and self-presentation incentive (i.e., whether participants were financially incented to impress on intelligence versus confidence).

## 8.1. Methods

Participants ( $N = 816$  mTurk workers;  $M_{age} = 35.4$  years,  $SD = 11.3$  years; 52% male) read about the same Endesa scenario from Study 4 from the perspective of the actor, so they took an initial stance and were given information that contradicted that stance. Prior to asking whether they wanted to change their stance in light of this new information, participants were informed of a) how many other participants would ostensibly view their decision (manipulation of relative privacy), as well as a bonus incentive they would receive that was ostensibly based on how these other participants perceived them (manipulation of self-presentation incentive).

### 8.1.1. Manipulation of relative privacy

Participants were told that either one versus 20 mTurk workers would evaluate their decision-making. Specifically, in the one mTurk worker [20 mTurk workers] condition, they were told:

“Your initial stance as well as your decision to change your mind or stick to your initial stance will be evaluated by a fellow mTurk worker [a group of 20 fellow mTurk workers] who will evaluate you on your decision-making. This evaluation is important because it will determine your bonus payment.”

To reinforce this information, it was accompanied by a silhouette of either one or twenty gender-neutral avatar(s) (see Appendix F).

Next, participants were told that the evaluator(s) would rate both their confidence and intelligence-based judgment on a scale from 1 to 10 with endpoints labelled “not at all” and “extremely.” In this study, we used simplified one-item scales, so that participants were told to imagine how participants would globally assess them on being “confident” and “having good judgment.”<sup>2</sup> Participants were shown a screenshot of

<sup>2</sup> In this study, we measured good judgment because (a) we thought participants would deem it particularly relevant for what participants believed other mTurk workers would be rating them on: their decision-making abilities; and (b) intelligent people are typically viewed as having good judgment, suggesting that perceived good judgment is a reasonable proxy for perceived intelligence (Baron, 1991; Ennis, 1993; Hogan, Hogan, & Barrett, 2008; Stanovich & West, 1998; Sternberg, 1990; Tetlock, 2017). To be sure, there are situations in which these constructs may differ (e.g. when an intelligent person displays bad judgment due to misinformation or situational pressures); however, in this exploration, we consider them to be conceptually similar. And in fact, data from a study we include in Appendix A (see Introduction Pilot Study) where we used both measures suggest the scales to be measuring similar concepts ( $r = 0.786$ ,  $n = 658$ ,  $p < .001$ ). At the cultural level, there is evidence linking intelligence

these two measures (i.e., confidence and intelligence-based judgment) on which they would be rated by the audience member(s), in screenshot format (i.e., exactly as they would appear to the evaluators).

### 8.1.2. Manipulation of self-presentation incentive

Next, participants were told that their bonus payment would be determined by how they scored on one of these two measures. Between subjects, we randomized whether the payment was based on the intelligence-based judgment score versus the confidence score; participants were told upfront which dimension they were being incented on (this information necessarily differed slightly by the privacy manipulation). Specifically, participants in the relative privacy, judgment-incented [confidence-incented] condition were told: “You will receive \$0.02 for each point you earn on the judgment scale. For example, if your score is 8 out of 10 on judgment [confidence], you will receive \$0.16 (i.e.  $\$0.02 \times 8 = \$0.16$ ) (see Appendix G).” In the relative publicity condition, the only difference was that the word “average” was inserted before the word “score” in the previous sentence. Although the size of the incentive is modest in absolute terms, it is non-trivial for mTurk.

Finally, participants were asked: “Please indicate now whether you would like to change your initial stance” by selecting one of two options, tailored to their initial stance. For example, participants who had initially indicated money was less important to the indigenous people than preserving their culture were asked: “After having read the contradictory interview, please indicate which of the following statements you agree with” and then could choose “I still think the indigenous people view money as LESS important than preserving their culture” (representing the decision to not back down) or “I think the indigenous people view money as MORE important than preserving their culture” (representing the decision to back down).

We administered two manipulation checks. The first question (with an accuracy rate of 77.3%) asked, “Which of the following is true? (Only 1 answer is true)” where the two options were, “My bonus was based on evaluations of my confidence,” or “My bonus was based on evaluations of my good judgment.” The second question (with an accuracy rate of 98.2%) asked, “Which of the following is true?” where the two options were “I was told 1 mTurker would evaluate me,” or “I was told 20 mTurkers would evaluate me.”

## 8.2. Results

The initial stance participants took (i.e., that the indigenous people’s refusals so far were out of a desire to preserve their culture versus a desire for more money) was unrelated to whether they backed down, so our analyses collapse across this factor. A binary logistic regression revealed only a main effect of the relative privacy manipulation ( $\beta = 0.463$ ,  $SE = 0.202$ ;  $p = .022$ ). Specifically, participants were 11.3% more likely to back down when they could do so in relative privacy (i.e., when only one person would be observing and evaluating them) as compared to relative publicity (relative privacy: 56.3% of participants backed down; relative publicity: 50.6% of participants backed down). There was no main effect of incentive ( $\beta = -0.010$ ,  $SE = 0.198$ ;  $p = .959$ ), nor was there a statistically significant interaction ( $\beta = -0.463$ ,  $SE = 0.282$ ;  $p = .101$ ).

Study 5 demonstrated that people’s propensity to back down is insensitive to whether they are incented to impress on intelligence-based judgment versus confidence; instead, it is sensitive to a factor that lessens the “ego blow” of mind-changing: the ability to do so in relative privacy. Although the interaction did not reach statistical significance ( $p = .101$ ), its direction (Fig. 3), combined with the fact that there was no main effect of incentive, may suggest that, consistent with our

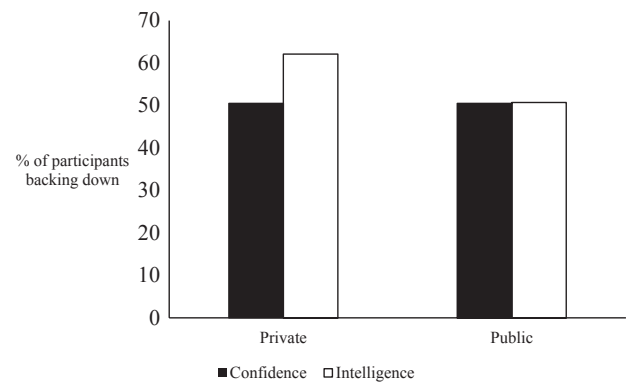


Fig. 3. Dependent measure (backing down) by condition (private v. public & confidence v. intelligence-incented).

account, for people to correct an inaccurate stance to which they have previously publicly committed, it is not enough to simply present them with contradictory information; one need also honor their desire to save face. Study 5 suggests that one way of doing so is by affording them privacy.

## 9. General discussion

We tested the self-presentational consequences of people’s aversion to changing their mind in spite of evidence that they are wrong. In doing so, we uncovered a complex interplay between individuals’ self-presentational displays on the one hand, and the perceptions and attributions made by outside observers on the other.

First, we found that refusing to back down can make a bad impression—an impression that can ultimately translate into negative consequences for the refuser himself. Specifically, Study 1 showed that investors are more impressed by entrepreneurs who back down; they are more likely to recommend that such entrepreneurs advance in a pitch competition relative to those who do not back down. Then, in two sets of experiments, we unpacked the psychology underlying an individual’s refusal to back down on the one hand, and observers’ judgments and subsequent decisions about those actors on the other.

Studies 2 and 3 examined the facets of person perception that impact observers’ judgments about those who refuse to back down, indicating that such actors are viewed as intelligent but lacking confidence. In turn, these impressions shape observers’ consequential decisions about those actors: Study 2 indicates that the tendency for investors to favor entrepreneurs who back down is mediated by their positive impressions of that entrepreneur’s intelligence (despite the fact that investors also view such entrepreneurs as relatively unconfident).

More broadly, our account implies that whether an actor’s decision to change her mind makes a net positive impression depends on whether she is in a domain that primarily values intelligence or confidence. Indeed, as we show in Study 3, whereas refusing to back down decreases a person’s chances of being hired as an engineer (a profession in which intelligence is valued over confidence), it does not hurt, and may even increase, a person’s chances of being hired as a motivational speaker (a profession in which confidence is valued over intelligence). We have conceptually replicated this effect in another study (see Appendix D) in which we used different professions; in this study the intelligence domain profession was a judge and the confidence domain profession was a politician. Backing down increased judges’ chances of getting hired more so than politicians’, which may help to explain why politicians are disparagingly called “flip-flopers” and “wafflers” when they change stances, while judges and jurors are applauded for doing so.

Studies 4 and 5 focused on actors, exploring what drives – and does not drive – actors’ decisions to back down. First, we showed that

(footnote continued)

to good judgment (Ang et al., 2007).



refusals to back down do not appear to be driven by a failure to understand its self-presentational consequences: Study 4 indicated that actors are capable of anticipating the effects of backing down on observers' perceptions of their intelligence and confidence. Rather, and consistent with our face-saving account, Study 5 indicated that actors' propensity to back down is insensitive to whether their pay is determined by others' ratings of their intelligence versus confidence; instead, it was sensitive to a factor that lessened the "ego blow" of backing down: the ability to do so in relative privacy. This finding suggests that honoring people's desire to save face (by allowing them to back down in private) may help them to not only make better decisions (i.e., to take more accurate stances), but also to make better impressions.

Taken together, this research sheds light on the consequences of people's aversion to backing down. To make a good impression on others, should a person back down? When one is trying to appear confident, changing one's mind is unwise. But our results suggest that when one is trying to appear intelligent, doing so is wise. Thus, we advise people to be cognizant of the value that others place on the relative importance of intelligence versus confidence in a given situation. Our research suggests that actors may not naturally do so because they prioritize their desire to save face rather than tailoring their behavior to the factor – intelligence versus confidence – that is important in a given situation (Study 5).

Future research could therefore devise interventions to help people decide whether to back down based on their goals – whether to be perceived as intelligent or to appear confident, so as to positively affect others' consequential choices about them. Relatedly, future research could explore how to change one's mind without being perceived as lacking in confidence. Might this penalty be buffered by the way a person communicates their change of mind? Perhaps, for example, framing mind-changing as being responsive to evidence or as representing an "evolution" in stance implying forward momentum could help (at least when the issue at hand is fact-based, as opposed to morality-based, [Kreps, Laurin, & Merritt, 2017](#)). In this same vein, given recent work on the "revision bias" – a preference for things that have been revised, even absent objective improvement ([Garcia-Rada, John, O'Brien, & Norton, working paper](#)) – it could be advisable to frame a changed stance as a "revised stance." Would-be mind-changers might avoid the confidence penalty by conveying their revised stance using assertive language or a confident tone of voice.

Future research might also test how the effects we document might be dependent upon communication mode (here, we used written transcripts) or prior communication, as in the case of observers who have an existing relationship with their targets. If, for example, a manager who

typically exudes confidence backs down, might her employees nonetheless perceive her as confident? Another contextual factor worthy of further empirical study is how the status and power differential between target and observer could alter the perceptions and consequences of backing down documented in our paper.

Scholars might also consider what happens when observers find out that a person has publicly changed her mind while privately maintaining a held belief. Will such people be seen as shrewd and diplomatic, or two-faced and inauthentic? This has important ramifications not only for the types of organizations and contexts that we investigated here, but also for political agendas, social movements, and other programs and initiatives that we engage with in our broader interactions.

Our perspective is based on the idea, rooted in theories of social interaction, that people experience discomfort when they encounter information that contradicts a stance that they have publicly committed to. Our results are consistent with the idea that people seek to alleviate this discomfort by re-asserting their initial stance, in essence, seeking (albeit probably in vain) to make the external world align with their internal beliefs—or at least what they have represented as their internal beliefs (in the form of the public stance taken). Consistent with this result, our studies were conducted in the US, where a "dignity culture" prevails—a culture that particularly values autonomous thought and individuality, in contrast to "face cultures," which emphasize consensus and group harmony ([Ho, 1976](#); [Kim & Cohen, 2010](#); [Kim, Cohen, & Au, 2010](#); [Leung & Cohen, 2011](#)). In such cultures, people may seek to alleviate the discomfort of stance-inconsistent information by publicly revising, as opposed to re-asserting, their initial stance. Future research could explore this possibility, as well as its implications for impression management.

In closing, we note that changing a stance or altering a course of action in response to valid evidence is an important aspect of making good decisions. Indeed, some of the most effective leaders of our time, including Abraham Lincoln and Franklin Roosevelt, have changed their minds on big issues, and it is arguably this openness of thought that allows for reflection and learning ([Grant, 2015](#)). Thus, our research reveals a kind of paradox: although changing a stance in response to valid evidence is probably integral to progress, the executors of such change pay a price when it comes to how confident they appear in the eyes of others.

#### Author note

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## Appendix A. Introduction Pilot Study: Perceptions of backing down moderated by the factual nature of the contradictory information

### A.1. Method

Participants ( $N = 645$  mTurkers;  $M_{age} = 33.9$  years,  $SD = 11.1$  years; 58% male) from Amazon's Mechanical Turk completed this online study for \$0.50. Participants evaluated a target who (1) was asked for their stance on capital punishment; (2) expressed their stance; (3) was presented with information contradicting that stance; and (4) either did or did not back down from that initial stance.

In addition to manipulating whether the target had backed down, we also manipulated the framing of the issue: either fact-based, in which in step 1 above, participants viewed the question posed to the targets as having been fact-based ("Based on the available evidence to date, do you think capital punishment deters crime?"), or opinion-based ("Based on your personal opinion, do you think capital punishment deters crime?"). This manipulation was also reflected in the nature of the contradictory information presented. In the fact-based condition, the targets ostensibly had been told of a research study that contradicted their initial stance; in the issue-based condition, the targets ostensibly had been told that a fellow participant had taken the opposite stance in a poll asking their opinion on capital punishment.

As a control independent variable, we also counterbalanced the specific stance that the target had initially taken; thus, the contradictory information took one of four forms. In the fact-based conditions, the contradictory information was based on [Lord et al. \(1979\)](#). Specifically:

...for participants evaluating a target who had taken the stance that capital punishment deters crime:

*"Palmer and Crandall (1977) compared murder rates in 10 pairs of neighboring states with different capital punishment laws. In 8 of the 10 pairs, murder rates were higher in the state with capital punishment. This research suggests that capital punishment does NOT deter crime."*

...for participants evaluating a target who had taken the stance that capital punishment does NOT deter crime:

“Kroner and Phillips (1977) compared murder rates for the year before and after adoption of capital punishment in 14 states. In 11 of the 14 states, murder rates were lower after adoption of the death penalty. This research suggests that capital punishment DETERS crime.”

In the issue-based conditions, the contradictory information was:

...for participants evaluating a target who had taken the stance that capital punishment deters crime:

“In this poll, another mTurk worker (ID A217W59SA6LFSR) gave the following answer to the question:

*Based on your personal opinion, do you think capital punishment deters crime? \_Yes or XNo,*” (i.e., the “No” response option was endorsed)

...for participants evaluating a target who had taken the stance that capital punishment does NOT deter crime:

“In this poll, another mTurk worker (ID A217W59SA6LFSR) gave the following answer to the question:

*Based on your personal opinion, do you think capital punishment deters crime? XYes or \_No,*” (i.e., the “Yes” response option was endorsed)

This study was therefore a 2 (initial stance: for vs. against the death penalty) × 2 (framing: fact vs. opinion) × 2 (revised stance: back down vs. did not back down) between-subjects design. However, because the results do not interact with the control variable (initial stance taken), we collapse across it in the analyses.

The intelligence-based judgment measure (adapted from Baron’s Actively Open-Minded thinking scale) rated the extent to which the target “has good judgment,” “considers multiple solutions to a problem,” “considers all relevant information when making decisions,” and “is able to weigh options accurately” and was used to measure perceptions of good judgment ( $\alpha = 0.94$ ) (Baron, 1993). The same four-item scale from Studies 2 and 4 was used to measure confidence ( $\alpha = 0.98$ ). We also measured intelligence and likability (Cialdini et al., 1974). (The same four-item intelligence measure was used in Studies 2 and 4.) Finally, participants were also asked to indicate their own attitudes toward capital punishment on a -4 to 4 scale ranging from “Strongly opposed” to “Strongly in favor.”

### A.2. Results

As predicted, the effect of backing down on perceived judgment quality depended on issue type ( $F(1, 654) = 67.18, p < .001$ ). Specifically, when the issue was fact-based, participants viewed targets who backed down as having better judgment than those who did not back down ( $M_{backed\_down} = 4.72, SD = 1.26; M_{did\_not\_back\_down} = 3.81, SD = 1.72; t(331) = -5.46, p < .001, d = 0.60$ ). However, the opposite pattern was observed when the issue was opinion-based, ( $M_{backed\_down} = 3.74, SD = 1.34; M_{did\_not\_back\_down} = 4.6, SD = 1.09; t(323) = 6.30, p < .001, d = 0.70$ ), which is consistent with Cialdini et al. (1974). The results hold when controlling for participants’ own attitudes toward capital punishment.

As converging evidence of the effect of backing down on judgment, the alternate measure of judgment (Cialdini et al., 1974) was strongly correlated with the primary judgment measure ( $r = 0.79, p < .001$ ) and produced the same pattern of results. The effect of backing down on perceived intelligence depended on domain ( $F(1, 657) = 36.28, p < .001$ ). Specifically, when the issue was fact-based, participants viewed targets who backed down as being more intelligent than those who did not back down ( $M_{backed\_down} = 4.29, SD = 1.19; M_{did\_not\_back\_down} = 3.93, SD = 1.58; t(332) = -2.34, p = .02$ ). By contrast, however, the opposite pattern was observed when the issue was opinion-based ( $M_{backed\_down} = 3.65, SD = 1.32; M_{did\_not\_back\_down} = 4.53, SD = 1.12; t(325) = 6.47, p < .001$ ).

Also as predicted, regardless of domain, participants viewed targets who backed down as less confident than those who did not back down ( $M_{backed\_down} = 3.17, SD = 1.5; M_{did\_not\_back\_down} = 5.65, SD = 1.03; F(1,655) = 633.56, p < .001, d = 1.93$ ).

The effect of backing down on likability depended on domain as well ( $F(1, 660) = 19.02, p < .001$ ). Specifically, when the issue was fact-based, participants viewed targets who backed down as more likable than those who did not back down ( $M_{backed\_down} = 4.32, SD = 0.89; M_{did\_not\_back\_down} = 4.01, SD = 1.18, t(333) = -2.74, p = .007$ ). By contrast however, the opposite pattern was observed when the issue was opinion-based, ( $M_{backed\_down} = 4.03, SD = 0.98; M_{did\_not\_back\_down} = 4.40, SD = 0.92; t(327) = 3.47, p = .001$ ).

### Appendix B. Study 1: Sample coded pitch

Context	Initial position	Prompt	Demonstration of shift (i.e. “backing down”)
“Backing down” identified (coding comments) Entrepreneur was pitching a product company, where they create insoles for shoes as their exclusive product. Then, when it was noted that what they were really suggesting was that they should make the shoes themselves, as well as the insoles, they backed down.	Initial position Entrepreneur: “We will use [this information] to match her feet type to a best-fit insole from our insole collection.”	Prompt Investor: “[Your] design is not for the insole... it’s for making shoes too, right?... You’re not just adding insoles to other people’s shoes... you’re making shoes.”	Demonstration of shift (i.e. “backing down”) Entrepreneur: “Yes, depending on what... might be the best value proposition, we have the capacity to make both... Right, the insole model might not be the way to go.”
Entrepreneur was suggesting a business model that was through Amazon.com. When later told that a personal site was just as effective, they backed down and agreed that a personal site was also an option.	Entrepreneur: “I saw an opportunity on Amazon.com for premium high end goods... I launched on Amazon in July... Decided not to launch through my own site”	Investor: “... So the focus is on the brand and you’ve been able to establish that. Why not sell on your own site [which has worked for others]?”	Entrepreneur: “I will do [that] as well...”
Retail (e-commerce) company with a range of products tailored to skincare for men.	Entrepreneur: “Men are seeking products that are simple to use, address their skincare issues and fit within their daily regimen...”	Investor: “You have identified a broad age range for your products... men 12–54 yrs + ... Based on product needs, you’d be better off sticking to a tighter range for your roll-out.”	Entrepreneur: “It’s a great point that you raise... in fact, it makes me think about conversations we’ve had about teenagers and their unique needs. We should probably exclude them from our age range.”

Example of refusal to “back down”	Initial position	Prompt	Demonstration of refusal to “back down”
Media company that positioned itself with four revenue streams: licensed content, direct to	Entrepreneur: “We expect that it is through our diversified revenue streams that will achieve the type of growth we need to increasingly create our own content and become a full-service creative...”	Investor: “Licensed content and direct to consumer have been miniscule. You’d be better served just focusing on sponsorship and media sales.”	Entrepreneur: “We believe that our four-pronged approach is what is really going to drive our growth. Licensed content and direct to consumer are

consumer, brand sponsorship, and media sales.	Entrepreneur created a platform for shopping, comparing, and booking home healthcare.	Entrepreneur: “Our target market are seniors in regions with higher median income, a larger senior population, reduced access to stores, and greater rates of obesity.”	Investor: “It seems like you are confusing the customer and the end consumer? Why wouldn’t you focus more on family members?”	especially important for us, even with the historical challenges...” Entrepreneur: “Clients and their family members can view agencies, read reviews, compare pricing and book care. That is the core of our positioning. But the patient population is where we are distinguishing ourselves. We don’t want the focus to be on family members.”
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## Appendix C. Study 3: Pilot study

### C.1. Method

We ran a pilot study to test whether the two roles used in the main study (engineer and motivational speaker) were perceived as requiring different levels of intelligence and confidence in order to succeed, as well as having similar levels of status in society. Participants ( $N = 87$  mTurk workers;  $M_{age} = 34.4$  years,  $SD = 10.4$  years, 63% male) were instructed to read about different jobs and provide their opinions about it. Participants considered the role of an engineer or motivational speaker, in a counter-balanced order. For each job, participants were asked, “How important do you think it is for someone to be confident in order to succeed at the job of an engineer/motivational speaker?” and “How important do you think it is for someone to be intelligent in order to succeed at the job of an engineer/motivational speaker?” Participants answered these two questions on a 1–5 Likert point scale ranging from “Not at all important” to “Extremely important.” Participants were also asked, “How much of the following do you think a engineer/motivational speaker has in society?” Participants read a list of four items presented in randomized order: status, influence, respect, and power, and answered on a 1–7 Likert point scale ranging from “None” to “A lot.” Finally, participants completed basic demographic measures.

### C.2. Results

Participants perceived intelligence to be significantly more important for the role of an engineer ( $M = 4.5$  out of 5,  $SD = 0.66$ ) than a motivational speaker ( $M = 3.3$  out of 5,  $SD = 1.09$ ;  $F(1, 86) = 86.45$ ,  $p < .001$ ). Conversely, participants perceived confidence to be significantly more important for the role of a motivational speaker ( $M = 4.8$  out of 5,  $SD = 0.56$ ) than an engineer ( $M = 3.6$  out of 5,  $SD = 1.00$ ;  $F(1, 86) = 97.96$ ,  $p < .001$ ).

In other words, for the role of an engineer, intelligence ( $M = 4.5$  out of 5,  $SD = 0.66$ ) was perceived as significantly more important than confidence, ( $M = 3.6$  out of 5,  $SD = 1.00$ ;  $F(1, 86) = 39.59$ ,  $p < .001$ ). And for the role of a motivational speaker, confidence ( $M = 4.8$  out of 5,  $SD = 0.56$ ) was perceived as significantly more important than intelligence ( $M = 3.3$  out of 5,  $SD = 1.09$ ;  $F(1, 86) = 110.73$ ,  $p < .001$ ).

These two roles were perceived as having similar levels of status in society ( $M_{engineer} = 4.84$  of 7,  $SD = 1.16$ ;  $M_{speaker} = 4.97$ ,  $SD = 1.15$ ;  $F(1, 86) = 0.79$ ,  $p = .377$ )

## Appendix D. Study 3: Conceptual replication

In this study, participants judged a target candidate’s suitability for a job. Prior to making this judgment, they were told whether the candidate had backed down from a stance they had taken after being presented with contradictory evidence (described below in the Methods). The study was a  $2 \times 2$  between-subjects design in which we manipulated: whether the candidate had backed down (backed down versus did not back down) and the job domain (intelligence valued versus confidence valued).

### D.1. Method

We ran an additional study conceptually replicating the results of Study 3 where observers’ behaviors towards targets who backed down depended on domain. Participants ( $N = 807$  mTurkers;  $M_{age} = 34.7$  years,  $SD = 11.1$  years, 56% male) were instructed to evaluate a target candidate (who either did or did not back down in the face of valid contradictory evidence) for a particular job. The job was manipulated between subjects so that participants judged the target candidate’s suitability for a job in which either intelligence or confidence was deemed (by a pre-test) to be particularly important. Whereas in Study 3 the “intelligence domain job” was an engineer, here, it is a judge; and whereas in Study 3 the “confidence domain job” was a motivational speaker, here, it is a politician. The same pre-test ( $N = 203$  mTurk workers;  $M_{age} = 34.8$  years,  $SD = 10.2$  years, 63% male) as described in Study 3 revealed that intelligence was deemed very important for judges ( $M = 4.4$  out of 5,  $SD = 0.87$ ) and that confidence was deemed very important for politicians ( $M = 4.2$  out of 5,  $SD = 1.01$ ). A separate pilot study ( $N = 94$  mTurk workers;  $M_{age} = 33.9$  years,  $SD = 9.7$  years, 56% male) confirmed these two roles were perceived as having similar levels of status in society ( $M_{judge} = 5.80$  of 7,  $SD = 1.26$ ;  $M_{politician} = 5.58$ ,  $SD = 0.99$ ;  $t(92) = 0.95$ ,  $p = .344$ ).

Participants were told about a target candidate’s opinion on a real-world scenario, presented as part of the interview process. The scenario, from the 1980s, involved Endesa, a Chilean electricity company, which had sought to build a power plant on indigenous people’s land. To do so, the company needed to convince the indigenous people to move and tried to pay them to do so. Participants evaluated target candidates who had ostensibly taken a stance on why some of the indigenous people refused to accept Endesa’s increasingly generous monetary offers.

Specifically, participants were told that a target candidate had initially taken the stance that the indigenous Chileans refused to accept Endesa’s offers because they were “holding out” for more money. Participants were further informed that the target candidate was subsequently shown a video in which an indigenous person expressed that the refusal was not because of money but due to the sacredness of the land. Participants were also shown this same video, which was separately pretested to ensure the contradictory evidence was indeed perceived as valid (see below). Next, participants were told that the target candidate had then been given the opportunity to revise his stance; half of participants were randomly assigned to learn that the target candidate’s stance was unchanged; the other half learned that the target candidate had backed down – i.e., that he had revised his stance and now believed the refusal was due to the sacredness of the land.

### D.1.1. Pretest

To ascertain that the contradictory evidence was in fact perceived as valid, a separate sample of participants ( $N = 99$  mTurkers;  $M_{age} = 33.5$  years,  $SD = 10.1$  years; 62% male) was shown the contradictory evidence (i.e., the video of the indigenous woman explaining that her refusal was due to the importance of culture) and asked whether they agreed with the statement: “This video is good evidence showing that the indigenous families are refusing Endesa’s offer because they want to stay on their land” (response options: “Yes” and “No”). Ninety-three percent of participants indicated “Yes.”

The same four-item scales used in Studies 2 and 4 were used to measure perceptions of intelligence ( $\alpha = 0.96$ ) and confidence ( $\alpha = 0.95$ ), which were presented in a counterbalanced order. Participants also rated the extent to which they agreed with the statement, “I think the candidate felt embarrassed in this situation.” Additionally, participants indicated the extent to which they agreed with the following statement: “I think this candidate is well-suited to be a judge/political representative (depending on the assigned condition).” Participants answered these two questions on a 1–7 point Likert scale ranging from “Strongly disagree” to “Strongly agree.” In addition to two manipulation checks (with a 88% and 87% accuracy rate) and one comprehension check (with a 96% accuracy rate), participants also completed basic demographic measures.

### D.2. Results

Collapsing across domain, participants viewed candidates who backed down as significantly more suited for the job than those who did not back down ( $M_{backed\_down} = 4.28$  out of 7,  $SD = 1.72$ ;  $M_{did\_not\_back\_down} = 3.11$ ,  $SD = 2.04$ ;  $(F(1, 805) = 77.51, p < .001)$ , potentially speaking to the primary of perceived intelligence in making judgments about others. However, this main effect was qualified by a significant interaction – the effect of backing down on suitability for the job depended on the job domain ( $F(1, 803) = 6.21, p = .013$ ). Specifically, although participants deemed the politician who backed down as more suitable than the one who did not back down ( $M_{did\_not\_back\_down} = 3.33$ ,  $SD = 2.06$ ;  $M_{backed\_down} = 4.18$ ,  $SD = 1.68$ ;  $t(403.02) = 4.57, p < .001$ ), this pattern was particularly strong for judges – a domain in which intelligence is particularly valued ( $M_{did\_not\_back\_down} = 2.87$ ,  $SD = 1.98$ ;  $M_{backed\_down} = 4.38$ ,  $SD = 1.75$ ;  $t(377.50) = 8.03, p < .001$ ).

Consistent with these results, targets who backed down were seen as more intelligent than those who did not back down, both for judges ( $M_{backed\_down} = 4.46$ ,  $SD = 1.42$ ;  $M_{did\_not\_back\_down} = 3.36$ ,  $SD = 1.86$ ;  $(F(1, 803) = 43.69, p < .001)$  and for political representatives ( $M_{backed\_down} = 4.66$ ,  $SD = 1.41$ ;  $M_{did\_not\_back\_down} = 3.07$ ,  $SD = 1.90$ ;  $(F(1, 803) = 92.79, p < .001)$ ). Targets who did not back down were seen as more confident than those who backed down, both for judges ( $M_{backed\_down} = 4.07$ ,  $SD = 1.50$ ;  $M_{did\_not\_back\_down} = 5.51$ ,  $SD = 1.20$ ;  $(F(1, 803) = 104.85, p < .001)$  and political representatives ( $M_{backed\_down} = 4.33$ ,  $SD = 1.53$ ;  $M_{did\_not\_back\_down} = 5.41$ ,  $SD = 1.33$ ;  $(F(1, 803) = 60.52, p < .001)$ ). Participants believed targets who backed down experienced significantly greater embarrassment than those who did not back down, both for judges ( $M_{backed\_down} = 4.42$ ,  $SD = 1.57$ ;  $M_{did\_not\_back\_down} = 3.79$ ,  $SD = 1.76$ ;  $(F(1, 803) = 13.71, p < .001)$  and political representatives ( $M_{backed\_down} = 4.84$ ,  $SD = 1.52$ ;  $M_{did\_not\_back\_down} = 3.75$ ,  $SD = 1.86$ ;  $(F(1, 803) = 43.22, p < .001)$ ). In sum, similar to Study 3, the effect of a target person’s decision to back down – or to not back down – on observers’ consequential judgments – in this case perceived suitability for a job – depends on the perceived importance of intelligence versus confidence in the given domain.

## Appendix E. Study 4: Pilot study (observer version)

### E.1. Method

We ran a pilot study of an observer version of Study 4 to ascertain that observers view those who back down as demonstrating intelligence but lacking in confidence in this same context. This pilot study was a between-subjects design testing how observers evaluate targets who back down or refuse to back down. Participants ( $N = 191$  mTurkers;  $M_{age} = 34.2$  years,  $SD = 9.57$  years; 59% male) evaluated a target person who either did or did not back down in the face of contradictory evidence. Participants were told about a target person’s opinions on the same Endesa scenario.

Specifically, participants were told that a target person had initially taken the stance that the indigenous Chileans had refused to accept Endesa’s offers because they were either “holding out” for more money or because culture was more important than money. Participants were randomly assigned to read about a target who had taken one of these two initial stances. Participants were further informed that the target was subsequently shown information that contradicted their initial stance. The contradictory information was the same information used in Study 4. Again, similar to Study 4, there were two sets of contradictory information because there were two initial stances that a target could have taken. Next, participants were told that the target then had been given the opportunity to revise his stance; half of participants were randomized to learn that the target’s stance was unchanged; the other half learned that the target had backed down in the face of contradictory information.

The same four-item scales as Studies 2 and 4 were used to measure perceptions of confidence ( $\alpha = 0.91$ ) and intelligence ( $\alpha = 0.91$ ). Given there was no difference in perception between the two stances, we collapse between initial stances in the results.

### E.2. Results

Relative to the target who did not back down, participants judged the target who backed down as being more intelligent ( $M_{backed\_down} = 5.10$  out of 7,  $SD = 1.29$ ;  $M_{did\_not\_back\_down} = 3.74$ ,  $SD = 1.75$ ;  $t(173.18) = -6.13, p < 0.001$ ) but having less confidence ( $M_{backed\_down} = 4.61$ ,  $SD = 1.64$ ;  $M_{did\_not\_back\_down} = 5.54$ ,  $SD = 1.10$ ;  $t(166.42) = 4.63, p < 0.001$ ).

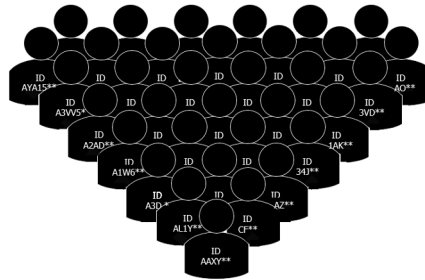
## Appendix F. Study 5: Private/public manipulation (as represented by avatars)

Relative privacy condition manipulation:





Relative publicity condition manipulation:



**Appendix G. Study 5: Intelligence-based judgment/confidence manipulations (as represented by incentives)**

Confidence incentive manipulation (for relative privacy condition)

Specifically, your bonus payment will be determined by how the mTurker rates your **confidence**. You will receive \$0.02 for each point you earn on the confidence scale. For example, if the mTurker scores you an 8 out of 10 on confidence, you will receive \$0.16 for your bonus (i.e., \$0.20 x 8 = \$0.16).

Please rate the extent to which you would view this mTurker worker (i.e. the mTurk worker you read about on previous pages) as...

	Not at all	1	2	3	4	5	6	7	8	9	Extremely
confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
having good judgment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Intelligence-based judgment incentive manipulation (for relative publicity condition)

Specifically, your bonus payment will be determined by how these 20 mTurkers rate your **good judgment**. You will receive \$0.02 for each point you earn on the good judgment scale. For example, if your average score is 8 out of 10 on good judgment, you will receive \$0.16 for your bonus (i.e., \$0.20 x 8 = \$0.16).

Please rate the extent to which you would view this mTurker worker (i.e. the mTurk worker you read about on previous pages) as...

	Not at all	1	2	3	4	5	6	7	8	9	Extremely
confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
having good judgment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Appendix H. Supplementary material**

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.obhdp.2019.07.001>.

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