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Is moral redemption possible? The effectiveness of public apologies for sexual misconduct*



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ABSTRACT

Amidst an international movement against sexual violence in 2017, hundreds of high-profile men were accused of sexual misconduct, and people's news feeds were flooded with apologies issued by many of these men. In five studies (N = 1931), we examined people's reactions to these apologies, with a focus on how their perceived content (participants' evaluations of how comprehensive and non-defensive they were), the gender of the audience, and the severity of the allegations against the accused influenced their effectiveness relative to denials and "no comment" statements. Using both real statements issued during the #MeToo movement (Study 1) and experimentally controlled statements issued by fictitious (Studies 2-4) and real (Study 5) public figures, we found that what the accused men said in their statements indeed mattered. Apologies were more effective when they were more comprehensive and less defensive, and when they were offered in response to lower (versus higher) severity allegations. Consistent effects of gender also emerged, with women reacting less favorably to denials and "no comment" statements than men. On the whole, the findings provide intriguing evidence for parallels between public and interpersonal apologies, revealing that high-quality apologies hold some value in a context where doubts about the remorsefulness and morality of the apologizer abound. However, the benefits of even the highest quality apologies were modest, resembling those found in the literature on intergroup apologies. These findings thus suggest that the public may view apologies for sexual misconduct as an appropriate starting point—but certainly not endgame—for the accused men.

1. Introduction

On October 5th, 2017, the New York Times published a story detailing decades of allegations of sexual harassment against film producer and executive, Harvey Weinstein (Kantor & Twohey, 2017). These allegations triggered a "national reckoning" on sexual misconduct, with hundreds of high-profile men¹ accused of sexual harassment and abuse in the months that followed (Griffin, Recht, & Green, 2018). Although over half of these men have chosen to completely deny the allegations against them, roughly a quarter of them have publicly apologized for their behavior. How do people perceive these apologies and denials? Can the accused men be morally redeemed in the eye of the public, and does what they say in a public statement matter? In the current studies, we examined people's reactions to the recent wave of public apologies and denials offered for sexual misconduct, with a focus on how certain features of their public statements, the allegations against the accused, and the audience affect the value of these

statements.

1.1. Apologies in diverse contexts

In interpersonal conflict situations, apologies are one of the most powerful strategies that transgressors can use to promote reconciliation with a victim. Apologies can help victims feel validated, increase victims' empathy for their transgressors, improve victims' evaluations of their transgressors, and decrease victims' aggression toward their transgressors (Barkat, 2002; Eaton, 2006; Ohbuchi, Kameda, & Agarie, 1989). Perhaps most importantly, apologies are one of the strongest predictors of interpersonal forgiveness, an outcome that has long been considered the 'holy grail' in conflict research (Fehr, Gelfand, & Nag, 2010; McCullough et al., 1998).

Although the effectiveness of interpersonal apologies is well established, evidence for the effectiveness of apologies in other contexts is mixed. Intergroup and corporate apologies tend to elicit positive

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¹ Several women have also been accused of sexual misconduct during this wave of allegations.

outcomes only when they successfully overcome—through a variety of individual, contextual, or message-based features—the seemingly default perception that the apology is insincere (e.g., Brinke & Adams, 2015; Hornsey & Wohl, 2013; Philpot & Hornsey, 2008; Wohl, Matheson, Branscombe, & Anisman, 2013). These public apologies likely elicit more skeptical reactions from their audience because they follow a different set of conventions than interpersonal apologies (Hornsey et al., 2019; MacLachlan, 2015). First, because these apologies often occur in front of cameras and have been scripted by a team of advisors, they can give off a feeling of being staged rather than spontaneous and heartfelt (Hornsey et al., 2019; MacLachlan, 2015). Second, because these apologies often follow from political or normative pressures to apologize, or occur in the context of ongoing conflict and hostility, they might be perceived as strategic or manipulative (Blatz, Schumann, & Ross, 2009; Okimoto, Wenzel, & Hornsey, 2015; Shnabel, Halabi, & SimanTov-Nachlieli, 2015). Third, because these apologies are intended for the broader public, there is often less relational trust between the apologizer and apology recipients-trust that facilitates acceptance of the apology (MacLachlan, 2015; Nadler & Liviatan, 2006; Wohl, Hornsey, & Bennett, 2012). Thus, although public apologies are expected and viewed as important (Okimoto et al., 2015), they are often viewed through a cynical lens that tends to undermine their value.

Public apologies for sexual misconduct represent a specific type of public apology-the one-to-many apology for a personal offense (Hornsey et al., 2019) where someone in the public eye apologizes publicly for their own wrongdoing—that has received almost no attention in the literature until very recently. This type of apology falls somewhere between interpersonal (i.e., one-to-one) apologies and other forms of public apologies (i.e., many-to-many, such as intergroup and corporate apologies) on various dimensions. For example, they differ from interpersonal apologies in that they are typically targeted at the broader public in addition to (or sometimes instead of) the direct victim (s) of their offense. Yet, unlike other public apologies that are typically delivered by a representative of a group for a harm committed against another group of people, these one-to-many apologies are typically delivered by the sole perpetrator of the offensive behavior. These apologies are thus intended to help the public figure achieve moral redemption in the eyes of the public, so they might salvage their reputation and maintain their public support (Hornsey et al., 2019).

Because the one-to-many apology shares features with both interpersonal and public apologies, it might also function in ways that resemble both of these contexts. Although there is almost no work on these types of apologies, a recent set of studies demonstrated that one-to-many apologies delivered by public figures (a professional athlete and a politician) for their own misdemeanors promoted a variety of positive reactions when compared to a non-apology condition, such as more positive evaluations of, empathy toward, and forgiveness of, the apologizing transgressor (Hornsey et al., 2019, Studies 4–5). These findings suggest that, despite being offered publicly, people might react to one-to-many apologies in ways that are similar to how they react to interpersonal apologies.

However, public apologies for sexual misconduct might present unique features that work against their perceived genuineness. For example, the obscene nature and severity of the alleged offenses likely undermine trust toward the apologizer, trust that plays an important role in the apology-reconciliation process (Nadler & Liviatan, 2006; Wohl et al., 2012). In addition, the sheer number of apologies offered since the Weinstein fallout undermines their perceived sincerity, as their prevalence dilutes their significance and likely calls to mind attributions of normative pressure (rather than genuine remorse) as the motivating force behind them (Okimoto et al., 2015; Shnabel et al., 2015). It is therefore necessary to directly examine apologies in this context to determine their effectiveness.

To our knowledge, only one set of studies to date has specifically examined public apologies for sexual misconduct (Nigro, Ross, Binns, &

Kurtz, 2019). In a first study, the authors coded a subset of #MeToo apologies for the extent to which they included elements that focused on the accused individual's feelings and behavior (i.e., self-focus) and elements that focused on the accuser's needs and feelings (i.e., selfother-focus), and found that these apologies tended to be more selffocused than self-other-focused. In a second study, they manipulated the content of an apology that had ostensibly been offered by a fictitious public figure accused of sexual misconduct, and found that people generally preferred the self-other-focused apology over the self-focused apology. This research suggests that the content of #MeToo apologies affects people's evaluations of those apologies. However, many questions remain unanswered about this timely and important apology context, and we attempt to address some of these questions with the current research. Specifically, we designed five studies to examine whether public apologies for sexual misconduct are effective at promoting more favorable attitudes toward the accused individual, and whether their effectiveness depends on (a) the content of the apology, (b) the gender of the audience, and (c) the severity of the allegations against the accused. Further, because denials and "no comment" statements are other common responses offered during the #MeToo movement, we examine how apologies compare to these types of statements in their ability to restore the accused individual's public image and support.

1.2. Apology content

Past work on interpersonal apologies has demonstrated that not all apologies are created equal, and that transgressors might try to communicate sincerity by carefully constructing their apology to be comprehensive (i.e., by including many of eight apology elements that satisfy the psychological needs of the victim: remorse, acceptance of responsibility, offer of repair, admission of wrongdoing, acknowledgement of harm, promise to behave better, explanation, request for forgiveness) and non-defensive (i.e., by *not* including many of five self-protective strategies: excuses, justifications, victim blaming, minimizations, denials; see Table S1 in Supplementary Materials for a description and example of each element and strategy; Schumann, 2014). By offering apologies that are comprehensive and non-defensive, transgressors communicate a genuine attempt to take stock of their offense, take accountability for it, and do what is necessary to restore their relationship with the victim (Schumann, 2014).

In the interpersonal domain, greater comprehensiveness and less defensiveness tends to enhance the value of the apology, increasing perceptions of sincerity and promoting forgiveness from victims (Gonzales, 1992; Hodgins & Liebeskind, 2003; Kirchhoff, Wagner, & Strack, 2012; Scher & Darley, 1997; Schumann, 2012). Although some work has demonstrated parallel (albeit more limited) benefits of apology content in the domains of intergroup public apologies (e.g., Kirchoff & Cehajic-Clancy, 2014; Steele & Blatz, 2014) and corporate apologies (e.g., Coombs & Schmidt, 2000; Griffin, Babin, & Attaway, 1991), and one study demonstrated benefits of a self-other-focused over a self-focused #MeToo apology (Nigro et al., 2019), to our knowledge, no work has yet examined how apology comprehensiveness and defensiveness influence the effectiveness of apologies offered by public figures for their personal offenses. It is therefore unknown whether any public apology for sexual misconduct—no matter how comprehensive and non-defensive—can improve evaluations of the apologizer. On the one hand, people might be insensitive to the content of apologies in this context, where doubts about the remorsefulness and morality of the apologizer are high. On the other hand, people might use the content of the apology as diagnostic cues regarding the apologizer's character, degree of remorse, and likelihood of committing similar offenses in the future. Given that the recent work on #MeToo apologies suggested that people are responsive to the content of these apologies (Nigro et al., 2019), we hypothesized that participants' perceptions of apology comprehensiveness and defensiveness would be associated with more

positive attitudes toward the statement and the man who issued it. We test this hypothesis in Studies 1 and 2 by examining whether the effectiveness of a public apology for sexual misconduct depends on its perceived degree of comprehensiveness and defensiveness.

In addition to examining the degree of comprehensiveness and defensiveness, we explore whether there are certain apology elements and defensive strategies that are particularly beneficial or harmful to the public's judgments of the accused individuals. Although scholars offer different frameworks of the specific elements that might constitute an apology, nearly all frameworks include an expression of remorse, acceptance of responsibility, and offer of repair as important elements (e.g., Anderson, Linden, & Habra, 2006; Holmes, 1990; Kirchhoff et al., 2012; Lazare, 2004; Scher & Darley, 1997; Schmitt, Gollwitzer, Förster, & Montada, 2004; Schumann & Ross, 2010). These three elements might thus be considered the core of an apology (Schumann, 2014), and might carry more weight in driving positive reactions to an apology statement. We test this possibility in Studies 1 and 3 by exploring reactions to each of the apology elements and defensive strategies separately. To our knowledge, no other study has tested reactions to such a broad array of apology elements and defensive strategies at once.

1.3. Gender of the audience

Past work suggests that the gender of the transgressor is an important variable to consider when studying how apologies are offered and received. For example, women are more likely than men to apologize because they judge their offenses to be more severe (Schumann & Ross, 2010). People also expect women to apologize more often than men, and consequently respond more favorably to apologies delivered by men than those delivered by women (Walfisch, Van Dijk, & Kark, 2013). However, there is less evidence to suggest that the gender of the victim (or member of a broader audience receiving a public apology) influences their evaluations of an apology. For example, men and women rate apologies as similarly valuable (Schumann, 2011, Study 4), and are similarly forgiving after receiving strong apologies (Sidelinger, Frisby, & McMullen, 2009). Despite these findings, gender might be especially important to consider in the current studies because it is a pertinent variable in the context of sexual misconduct and the #MeToo movement. Indeed, in the one published study that examined reactions to #MeToo apologies, a gender effect was found such that college-aged men preferred an apology that was both self-focused and self-otherfocused, whereas women preferred a self-other-focused apology (but no gender difference was found among an older sample of participants; Nigro et al., 2019). The authors suggest that this gender effect could be driven by men of this age empathizing with both the accusers (women) and the accused (man), a pattern that could occur in the current studies. We therefore tested for any moderating effects of participant gender in all five studies.

1.4. Severity of allegations

In addition to the content of the apology and the gender of the audience, another important feature to consider is the severity of the allegations against the accused. The allegations reported during the #MeToo movement ranged considerably, from allegations on the (relatively) lower end of severity (e.g., making sexually charged remarks; making unwanted advances) to those on the higher end of severity (e.g., varying degrees of sexual assault, including rape; allegations of misconduct against minors). Past work on the effectiveness of apologies suggests that the severity of the offense plays an influential role in the apology-forgiveness link, with apologies for lower severity offenses being more effective in both interpersonal and intergroup contexts (Bennett & Earwaker, 1994; Kirchhoff et al., 2012; Kirchhoff & Čehajić-Clancy, 2014). We therefore anticipated that apologies for sexual misconduct would be more effective when offered in response to lower severity allegations. We directly tested the effect of severity in Studies 3

and 4.

1.5. Potential risks and benefits of apologies, denials, and "no comment" statements

In addition to being at risk for being judged as insincere, public apologies for sexual misconduct come with a host of other tangible risks by requiring the accused to take responsibility for egregious behavior (Kampf, 2009). Those facing allegations might feel that admitting sexual misconduct will be humiliating and will ensure a variety of harsh social, financial, and legal consequences. The stakes are extremely high: accepting responsibility for sexual misconduct via an apology will likely lead to them being terminated or pressured to resign from their position, as we witnessed with so many of those who were recently accused. Apologizing might also obligate the accused to engage in further reparative efforts, such as compensating the victim(s), supporting victim causes, or participating in rehabilitative practices.

Thus, rather than apologize, public figures who have been accused may choose to completely deny the allegations against them, a qualitatively different response (Scott & Lyman, 1968) that has been enacted by over half of those implicated during the context of the #MeToo movement. By claiming that an allegation is false, an individual seeks to maintain the trust of the public and possibly escape punishment or any need to make amends. Some past work suggests that denials can confer these types of benefits, particularly when evidence supports the innocence of the accused and when they are denying violations concerning integrity rather than competence (Kim, Ferrin, Cooper, & Dirks, 2004). Denials might function this way in the context of the #MeToo movement, where the audience is the broader public (rather than direct victims) and thus has difficulty ascertaining the veracity of the allegations unless the accused individual accepts responsibility for them via an apology.

However, denials carry their own risks: if people doubt their sincerity or additional evidence of guilt emerges, the accused might fall further from grace and miss any benefits that an apology might offer (Scott & Lyman, 1968). Rather than being seen as someone who acknowledges the wrongfulness of their actions and seeks to grow as a person (Schumann & Dweck, 2014), someone who denies their misconduct might be seen as especially immoral if their denial is not believed. These risks are likely quite strong in the context of #MeToo, where many of the accused face similar allegations from multiple accusers, and the sheer size of the movement sends a message to the public that sexual misconduct is a real, pervasive problem that warrants attention. We therefore examined how denials fare against apologies in the current studies. To our knowledge, this was the first set of studies to compare one-to-many apologies for personal offenses to denials for these offenses, with all other previous work comparing the one-to-many apology to a non-apology condition (Hornsey et al., 2019) or to another one-to-many apology with different content (Nigro et al., 2019).

As with apologies, we anticipated that gender could affect reactions to denials in the current context. In one study that examined evaluations of various accounts (e.g., justifications, excuses, denials) offered by a hypothetical co-worker accused of sexual harassment, women reacted less positively to these accounts (including both a *simple denial* where he denied engaging in any inappropriate behavior and a *questioning of motives denial* where he claimed the accuser was creating false allegations due to her own political or personal agenda; Dunn & Cody, 2000). We therefore tested whether participant gender affected reactions to denials in all studies.

An alternative to offering a denial or apology is to withhold a comment, either by offering a "no comment" statement or by refusing to issue a comment, responses also commonly seen during the #MeToo movement. Past work on corporate responses following a crisis suggests that both "no comment" statements and refusing to issue a comment result in less favorable evaluations than does issuing an apology (Lee, 2004; Uhrich & Flöter, 2014). Further, across various contexts, people

tend to assume the worst when individuals do not disclose information about themselves (John, Barasz, & Norton, 2016). We thus expected a "no comment" statement to be less effective than an apology, and tested this prediction in Study 5.

1.6. Research overview

In the present research, we conducted five studies to examine how various statements offered in response to allegations for sexual misconduct influence evaluations of the accused men. In Study 1, participants reacted to five public statements offered by high-profile public figures accused of sexual misconduct. We assessed participants' perceptions of the content of these statements and examined whether these perceptions predicted their evaluations of the accused individual's statement and character. In Study 2, we sought to conduct a more controlled comparison of various statements by presenting participants with a description of a fictitious public figure who had been accused of sexual misconduct by multiple women. Participants then read and reacted to a statement that included either a comprehensive/non-defensive apology, a defensive apology, or a denial. In Study 3, we presented participants with a description of a different fictitious public figure who had been accused of either lower vs. higher severity forms of sexual misconduct. We then presented participants with definitions and examples of each apology element and defensive strategy, and had them rate each of these potential responses. This study allowed us to examine whether there are specific elements and strategies that promote or hinder positive evaluations from the public, and whether these judgments depend on the severity of the allegations against the accused individual. In Study 4, we also varied the severity of the allegations against a fictitious public figure and compared participants' reactions to a comprehensive/non-defensive apology and a denial. Finally, in Study 5, we returned to presenting participants with a real public figure accused of sexual misconduct and compared a comprehensive/non-defensive apology to both a denial and a "no comment" statement. In these last two studies, we also included outcome measures intended to capture more consequential behavior toward the accused individual (e.g., willingness to purchase products or services from them or their company), and in all studies, we tested for any moderating effects of participant gender. For all studies, we report all measures, manipulations, and exclusions, and no data collection took place after any stage of data analysis. All data and materials are available in the data repository on the Open Science Framework at https://osf.io/9jrqd/.

One of the central arguments for conducting the current studies is that public apologies for sexual misconduct are generally perceived as insincere, and thus might be less effective than apologies that occur in the interpersonal domain. To provide more direct evidence for this assumption and obtain more insight into the specific apology context that we're examining, we first present a pilot study in which we compared the perceived sincerity of public apologies for sexual misconduct to that of interpersonal apologies and three other types of public apologies. The purpose of this pilot study is to provide a stronger empirical basis for examining our research questions in the context of public apologies for sexual misconduct; Demonstrating that this context prompts different perceptions of sincerity than the interpersonal domain (and possibly other public apology domains) indicates the need for research examining the specific effects of public apologies for sexual misconduct.

2. Pilot study

To directly test whether public apologies for sexual misconduct are generally perceived as less sincere than interpersonal apologies, we conducted a pilot study in which a nationally representative sample of participants rated five apology contexts—interpersonal apologies, public apologies for sexual misconduct, public apologies for personal offenses, corporate apologies, and government apologies—on their

prototypical sincerity. We predicted that interpersonal apologies would be judged as more prototypically sincere than all other categories, and also explored how apologies for sexual misconduct compared to the other three categories of apologies that occur on a public stage.

2.1. Method

2.1.1. Participants

We recruited a nationally representative sample of 300 participants from *Prolific*, an online research platform. To achieve a representative US sample, *Prolific* stratifies the intended sample size across the demographic categories of gender, age, and ethnicity based on data from the US Census Bureau. Participants were 150 female, 144 male, 1 transfemale, 2 2 non-binary, and 3 "other," with a mean age of 44.20, SD=15.57. A sensitivity analysis conducted in G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) showed that based on the sample size, an alpha probability of 0.05, and power of 80%, this study was powered to detect small effects (Cohen's f=0.07).

2.1.2. Materials and procedure

Participants completed all materials online. They first read an introduction that described apologies as common responses to transgressions that occur across various contexts. These apologies were described as being "offered for a wide range of offenses that vary in how intentional they were, how severe they are, how long ago they occurred, how many people were harmed, the relationships between the offender(s) and victim(s), and various other dimensions. These apologies also differ in their content and how they are delivered." Participants were informed that despite these many differences, we were interested in their thoughts about prototypical apologies that occur in each context, and were instructed to "try to imagine the average or most common type of apology" that they see in each context.

In randomized order, participants then read a description of each apology context (interpersonal apologies; public apologies by public figures for sexual misconduct; public apologies by public figures for personal offenses; public apologies by corporations for corporate offenses; public apologies by governments for government offenses; see Table S2 in Supplementary Materials for full descriptions) and responded to 7 items assessing perceived sincerity (e.g., "In general,...I believe these apologies are sincere"; "In general, I believe these apologies are manipulative" [reverse-scored]). These items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree), and were averaged for each apology context to create reliable composites (α range = 0.88–0.92) of perceived apology sincerity. Participants then completed demographics and ended the survey.

2.2. Results

A repeated measures analysis of variance (ANOVA) yielded a significant effect of apology context, F(4, 1196) = 556.77, p < .001. Post-hoc comparisons revealed that interpersonal apologies were rated as far more sincere than apologies occurring in all four public contexts (see Table 1 for means and standard deviations). Additionally, public apologies by public figures for sexual misconduct were rated as the least sincere of all apology contexts.

² Participants who identified as trans-female were included with females; those who identified as trans-male were included with males; all other non-binary categories were excluded from analyses involving gender, in this and all other studies in this package. Although the categories "female" and "male" reflect biological sex, we use the terms "gender," "women," and "men" throughout the paper because the categories provided to participants included other gender identity categories not reflecting biological sex. Use of "gender" instead of "sex" is also consistent with APA recommendations for the type of research questions being tested in the current studies (see https://apastyle.apa.org/style-grammar-guidelines/bias-free-language/gender).

Table 1 Pairwise comparisons between apology contexts, Pilot Study.

	Interpersonal	Sexual Misconduct	Public Personal	Corporate	Government
	M (SD)				
Perceived sincerity	5.21 _a (0.98)	2.31 _b (1.03)	2.70 _c (1.05)	2.45 _d (1.14)	2.63 _c (1.21)

Note. Values that share a subscript within a row do not significantly differ from each other; all other values differ significantly at p < .05.

2.3. Discussion

This pilot study provides more direct evidence that public apologies are generally perceived as less sincere than interpersonal apologies and therefore represent a unique apology context. Indeed, interpersonal and public apologies appear to elicit very different judgments of sincerity, with interpersonal apologies being rated as fairly high in sincerity (i.e., at a level well above the scale midpoint, one-sample t $(299)_{interpersonal} = 21.39, p < .001)$, and public apologies being rated as fairly low in sincerity (i.e., at a level well below the scale midpoint, one-sample $t(299)_{\text{sexual.misconduct}} = -28.20, p < .001; t$ $(299)_{\text{public.personal}} = -21.49, p < .001; t(299)_{\text{corporate}} = -23.63,$ p < .001; $t(299)_{government} = -19.57$, p < .001). Further, this study provides evidence that although public apologies for sexual misconduct share certain characteristics with interpersonal apologies (e.g., both are offered from the offending individual for an offense committed interpersonally) that are unlike corporate and government apologies, these public apologies for sexual misconduct received the lowest sincerity ratings of all apology contexts.

A number of intriguing questions emerge from these findings. For example, if corporate apologies are perceived as more genuine than apologies offered by public figures for sexual misconduct, would an apology offered by a public figure's corporation (e.g., The Weinstein Company) receive more positive reactions than an apology offered by the public figure himself (e.g., Harvey Weinstein)? Or, if interpersonal apologies are generally perceived as sincere expressions of remorse, might an apology offered from the accused individual directly to victim (rather than the broader public) be most powerful? Would it have to be delivered in private (and then perhaps shared publicly at a later time), or could it be delivered publicly? Although these questions certainly warrant attention, in the current studies we focused on the broader question of how apologies in this unique context compare to other common responses (denials and "no comment" statements), and whether reactions to these statements depend on key features of the apology content, the allegations against the accused, and the audience. We now turn to five studies that we conducted to achieve these aims.

3. Study 1

In Study 1, participants reacted to four high-profile apologies (by Harvey Weinstein, Kevin Spacey, Russell Simmons, and Al Franken) offered in response to allegations of sexual misconduct. The four apology statements differed substantially in their objectively-rated comprehensiveness and defensiveness (see Table S3 in Supplementary Materials for full text of each statement and Table S4 for objective coding of the content of each statement). However, we were primarily interested in examining whether people's perceptions of comprehensiveness and defensiveness-rather than objective ratings of these indices-were associated with their reactions to the statement. We therefore assessed these perceptions and examined whether they predicted participants' evaluations of the accused man's statement and character, as well as participants' levels of forgiveness and the consequences they desired for the accused man. Does a more comprehensive, less defensive apology reduce the cynicism toward public apologies for sexual misconduct that we observed in the pilot study? Or might these perceptions of insincerity diminish the value of any statement offered by the accused?

In addition to the four apology statements, we included one similarly high-profile denial (by Roy Moore) to use as a comparison. Participants read and reacted to Moore's statement on the same outcome measures, and we compare reactions to this denial and each of the apology statements on page 29.

We collected data from a nationally representative online sample in December of 2017, when allegations of sexual misconduct and apologies for these offenses were still showing up in people's news feeds on a daily basis. The issue was therefore quite salient to participants at the time they completed the study.

3.1. Method

3.1.1. Participants

We used Qualtrics to recruit a nationally representative sample of 720 participants (366 females, 354 males; $M_{age} = 46.01$, SD = 16.69). Qualtrics samples a subset of participants from its pool of over 90 million members globally.³ National samples recruited via Qualtrics closely approximate U.S. Census estimates of various demographic characteristics and are therefore considered an appropriate and efficient method of acquiring nationally representative data (Heen, Lieberman, & Miethe, 2014). To demonstrate the representativeness of the current sample, Table S5 in supplementary materials compares the distributions of gender, age, ethnicity, and income of the current sample to population distributions obtained from the 2015 U.S. Census. Although a G*Power (Faul et al., 2007) analysis to detect a medium effect with 90% power required fewer than 100 participants, we recruited a larger sample to increase its representativeness. A sensitivity analysis conducted in G*Power showed that based on the sample size, an alpha probability of 0.05, and power of 80%, this study was powered to detect small effects (Cohen's f = 0.01). One reliability question ("For this question, click strongly agree") was built into the survey to ensure that participants were providing valid responses. The data from those who did not respond reliably (i.e., who clicked any option other than strongly agree) were not recorded, however, Qualtrics estimates that fewer than 10% of participants answer unreliably. Participants received monetary compensation upon completing the study.

3.1.2. Materials and procedure

Participants completed all materials online. They were informed that they would be reading a number of real, verbatim statements that had recently been offered by public figures in response to allegations of sexual misconduct. In randomized order, participants read and responded to four apology statements that had been publicly offered by Harvey Weinstein, Kevin Spacey, Russell Simmons, and Al Franken, as well as a denial statement that had been offered by Roy Moore. We selected these statements because they had recently been offered by

³ Study 1 uses a nationally representative dataset that was also used in a paper examining the association between implicit theories of personality and reactions to public apologies for sexual misconduct (Schumann, 2019). With the exception of the frequencies of open-ended responses reported on pages 29–30, the analyses reported here were not presented in Schumann (2019).

high-profile public figures from a variety of sectors and were diverse in the severity of the allegations against the accused men and the content of the statements they had offered. Above each statement, participants saw the name of the accused, as well as his position and a summary of the allegations made against him at the time the statement was offered (see Table S2 in supplementary materials). Although some of these public figures had been accused of other acts since the time of their statements, participants were asked to consider each statement in the context of the allegations that were present at the time the statement was offered.

3.1.2.1. Perceived apology content. After reading each statement, participants indicated the extent to which they thought it included each of the eight apology elements (e.g., "In the above statement, to what extent does Harvey Weinstein accept responsibility for his actions?"), and five defensive strategies (e.g., "In the above statement, to what extent does Harvey Weinstein deny the alleged behavior?"). These items were answered on a 7-point scale ($1 = not \, at \, all, \, 7 = to \, a \, great \, degree$). Responses to the apology elements were summed to create an index of apology comprehensiveness, with higher scores indicating more comprehensive apologies (possible range: 8–56). Responses to the defensive strategies were summed to create an index of defensiveness, with higher scores indicating more defensive responses (possible range: 5–35).

3.1.2.2. Statement evaluations. Participants responded to 7 items assessing their reactions to the statement (e.g., "This statement seems sincere"; "This statement is worthless" [reverse-scored]). These items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree), and were averaged for each statement to create reliable composites (α range = 0.88–0.90) of statement evaluations, with higher scores representing more positive evaluations.

3.1.2.3. Character evaluations. Participants responded to 6 items assessing their evaluations of the accused individual's character (e.g., "Harvey Weinstein seems like he could change for the better"; "Harvey Weinstein seems like an immoral person" [reverse-scored]). These items were answered on a 7-point scale (1 = strongly disagree, $7 = strongly \ agree$), and were averaged for each statement to create reliable composites (α range = 0.77–0.85) of character evaluations, with higher scores representing more positive evaluations.

3.1.2.4. Forgiveness. Participants responded to 5 items assessing their levels of personal forgiveness of each of the accused (e.g., "I feel forgiving toward Harvey Weinstein"; "I feel anger toward Harvey Weinstein" [reverse-scored]. These items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree), and were averaged for each statement to create reliable composites (α range = 0.79–0.85) of forgiveness of the accused individuals.

3.1.2.5. Desired consequences. Participants responded to 5 items assessing the extent to which they thought the accused should receive various consequences (e.g., "To what extent should Harvey Weinstein be morally redeemed in the eye of the public"; "To what extent should Harvey Weinstein be legally punished for his actions" [reverse-scored]. These items were answered on a 7-point scale ($1=not\ at\ all$, $7=to\ a$ great degree), and were averaged for each statement to create reliable composites (α range = 0.77–0.85) of desired consequences, with higher scores representing more lenient desired consequences for the accused men.

3.1.2.6. Positive reactions composite. The four outcomes described above shared high correlations (rs ranging from 0.66 to 0.82). Thus, in addition to assessing each outcome separately, we created a composite measure of all four outcomes and tested whether apology comprehensiveness and defensiveness predicted this composite

measure.

3.1.2.7. General attitudes toward public apologies for misconduct. After reading and reacting to each of the five statements, participants responded to 5 items assessing their attitudes toward the recent apologies that had been offered by public figures for sexual misconduct (e.g., "In general, these apologies seem sincere"; "In general, there is nothing that these people can say to redeem themselves" [reverse-scored]). These items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree), and were averaged to create composite of general attitudes (α = 0.76), with higher scores representing more positive attitudes toward the recent flood of apologies.

In addition, participants responded to 3 items that assessed whether they believed these apologies were beneficial to the apologizer, to the accusers/victims, and to raising awareness about the consequences of sexual misconduct. Although public apologies for sexual misconduct are typically directed at the broader public, they also tend to mention the victim(s) in their statement (as all four apologies in Study 1 did), suggesting they might also be attempting to address the victim(s). Additionally, public apologies are often desired by victimized groups because the formal acknowledgement of the injustice by the perpetrating group can help validate that the injustice occurred (Blatz et al., 2009; Brooks, 1999). We therefore sought to assess whether participants perceived public apologies as beneficial not only to the apologizers, but also to the victim(s) and the broader cause of raising awareness about sexual misconduct. These items were answered on a 7point scale (1 = strongly disagree, 7 = strongly agree) and were each analyzed separately.

3.1.2.8. Other means of redemption. To explore participants' views of whether and how redemption was possible for the accused men, participants answered an open-ended question that asked them to "indicate whether there was anything these people can say or do to redeem themselves." Two independent coders first categorized these responses into the three categories of "yes, redemption might be possible," "no, redemption is not possible," and "other" (which included responses such as being unsure, irrelevant, incoherent, or blank). Coders then coded the "yes" responses into 10 categories of how the accused might redeem themselves: self-change, improving the apology, making amends directly to victims, advancing the cause, receiving legal punishment, removing themselves from their position, payment, service, the passage of time, and religious redemption. Some responses included more than one category. Reliability between the coders was high (average kappa = 0.82); discrepancies were resolved by a third coder.

3.1.2.9. Additional measures. Participants answered demographic questions (e.g., gender, age, ethnicity), as well as a 6-item implicit theories of personality scale (Levy, Stroessner, & Dweck, 1998; e.g., "No matter who somebody is and how they act, they can always change their ways"; $\alpha=0.87$) that was included as part of a separate investigation (Schumann, 2019). Participants were then debriefed via an online feedback letter and thanked for their participation.

3.2. Results

3.2.1. Associations with perceived apology content

This study used a within-subject design wherein participants reacted to four different public apologies offered in response to allegations of sexual misconduct. To estimate the extent to which clustering existed in participants' responses to these four statements, we tested four random intercept models to calculate intraclass correlations (ICCs) for each of the four dependent variables (statement evaluations; character evaluations; forgiveness; desired consequences). Higher ICCs indicate the presence of stronger correlations between an individual's ratings of the

four different public apologies (e.g., participants who evaluated Al Franken's apology relatively positively also tended to rate the other apologies relatively positively). Evidence was present for substantial clustering in each of these variables, with 24%, 26%, 37%, and 37% (respectively) of the variability in these variables being explained by rater (i.e., participant) effects. We therefore used multilevel modeling with the four apology statements (level 1) nested within participants (level 2) to test whether statements that participants rated as more comprehensive and less defensive would be evaluated more positively and would be more effective at promoting positive character evaluations, forgiveness, and more lenient desired consequences for the accused.

Following the recommendations of Bolger and Laurenceau (2013; see also Enders & Tofighi, 2007), we included both a between-person-centered predictor (e.g., the extent to which a participant generally perceives apology comprehensiveness and defensiveness across all statements, relative to other participants) and a within-person-centered predictor (i.e., the extent to which a person rates a given statement as comprehensive and defensive, relative to how they generally rate the statements) in our models. Including both the between-person and within-person predictors accounts for potential confounding between these levels of analysis. We then used Linear Mixed modeling in SPSS to test them as simultaneous predictors in separate models for each dependent measure. 5

As predicted, at both the between-person and within-person levels, statements that participants rated as more comprehensive were evaluated more positively (see Table 2 for test statistics). Statements that were rated as more comprehensive also elicited more positive character evaluations, more forgiveness, and more lenient desired consequences for the accused. By contrast, statements that were rated as more defensive were evaluated less positively and elicited less positive character evaluations, less forgiveness, and harsher desired consequences for the accused. Indeed, adding the four predictors (i.e., between-person and within-person predictors for both apology comprehensiveness and defensiveness) to the intercept-only model resulted in a 35–68% reduction in unexplained variance in the outcomes (Pseudo

 R^2 s: statement evaluations = 0.68; character evaluations = 0.46; forgiveness = 0.42; desired consequences = 0.35; composite of positive reactions = 0.56). As planned, we tested for any moderating effects of participant gender but found none (all interaction ps > .174).

3.2.2. Exploratory analyses of individual apology elements and defensive strategies

A secondary goal of this research was to explore whether certain elements were associated with particularly positive or negative reactions. We thus examined whether participants' perceptions.

of the presence of specific apology elements and defensive strategies predicted their reactions to the apology statements. Due to the large number of apology elements and defensive strategies, we simplified these exploratory analyses by examining the grand-mean-centered scores (rather than partitioning the within-person and between-person effects) for each predictor and running two models (one for apology elements; one for defensive strategies) on only the composite of positive reactions measure. Looking first at the apology elements model, explanation, remorse, responsibility, and repair emerged as significant positive predictors, whereas acknowledgement of harm emerged as a negative predictor (see Table 3). Forbearance, request for forgiveness, and admission of wrongdoing did not significantly predict positive reactions. Looking at the defensive strategies model, denial emerged as a significant positive predictor, whereas excuses and minimizations emerged as negative predictors (see Table 3). Justifications and blaming the victim did not significantly predict positive reactions. These exploratory analyses suggest that the elements typically considered the 'core' of an apology in the interpersonal literature (i.e., remorse, repair, and responsibility; Schumann, 2014) were also important to participants' reactions in the context of public apologies for sexual misconduct. An explanation was also a strong positive predictor, possibly because the item assessed the extent to which the accused explained "his actions without pushing blame away from himself," which includes some level of responsibility-taking. Conversely, acknowledgments of harm seemed to produce worse impressions, possibly because it called attention to the severity of their offenses, while the findings for defensive strategies suggest that denials might function differently than the other strategies, possibly because it is the only one that directly calls into question the validity of the allegations against the accused individual.

3.2.3. Comparison of statements

We conducted a doubly MANOVA—a special case of MANOVA where multiple dependent variables are measured repeatedly-on our indices of apology content (apology comprehensiveness; defensiveness) and effectiveness (statement evaluation; character evaluation; forgiveness; desired consequences), with statement (by Harvey Weinstein, Kevin Spacey, Russell Simmons, Al Franken, Roy Moore) as the withinsubjects factor. Significant differences existed between statements, Pillai's Trace = 0.73, F(24, 669) = 74.18, p < .001, $\eta_p^2 = 0.73$. We therefore proceeded by conducting within-subjects ANOVAs on each of the six dependent measures, using Greenhouse-Geiser adjustments because the compound symmetry assumption was violated for all measures. Significant differences existed between statements for apology comprehensiveness, $F(3.58, 2533.50) = 611.35, p < .001, \eta_p^2 = 0.46,$ defensiveness, F(3.48, 2436.85) = 300.88, p < .001, $\eta_p^2 = 0.30$, statement evaluation, F(3.38, 2420.29) = 205.20, p < .001, $\eta_p^2 = 0.22$, character evaluation, F(2.99, 2131.31) = 160.07, p < .001, $\eta_p^2 = 0.18$, forgiveness, F(3.03, 2155.23) = 156.22, p < .001, $\eta_p^2 = 0.18$, and desired consequences, F(3.12, 2238.37) = 117.37, p < .001, $\eta_p^2 = 0.14$. Similarly, a within-subjects ANOVA on the composite of positive reactions yielded a significant effect, F(2.90,2079.87) = 188.89, p < .001, $\eta_p^2 = 0.21$.

Pairwise comparisons between targets on each of the six dependent measures as well as the composite of positive reactions are reported in Table 4. Participants' ratings of apology comprehensiveness and

⁴ An additional way to test whether comprehensiveness and defensiveness predict reactions to the apologies would be to grand-mean-center raw comprehensiveness and defensiveness scores. This approach does not partition the variance into a between-person effect and within-person effect but simply examines whether higher levels of perceived comprehensiveness and defensiveness predict more positive reactions to the statements. Analyses including these predictors yielded significant associations between comprehensiveness and defensiveness and all four outcomes as well as the composite measure of positive reactions (all ps. < .001).

⁵ Although we did not measure participants' perceptions of the severity of the allegations against each of the accused, we coded the severity of the allegations against the four apologizers by giving each of them a score of either 0 (for 1 allegation) or 1 (for > 1 allegation) for the number of allegations against them, and a score of either 0 (for less severe forms of assault) or 1 (for more severe forms of assault) for the severity of the sexual misconduct. We then summed the scores across the two dimensions, to create a severity score that was either 0 (Al Franken), 1 (Kevin Spacey; Russell Simmons), or 2 (Harvey Weinstein). Including this severity score as a covariate in the main analyses reported below did not alter any of the results (all ps < .01). In addition, we coded the number of days between accusations and apology (Franken, Weinstein, and Simmons: 0 days; Spacey: 1 day; Moore: 2 days), the number of days between accusations and time of study (Weinstein: 85 days; Spacey: 61 days; Moore: 50 days; Franken: 43 days; Simmons: 29 days), and the method by which the statement was delivered (Franken, Weinstein, and Simmons: written statement; Spacey: tweet; Moore: press release). Including each of these as covariates did not weaken any of the associations between apology comprehensiveness or defensiveness and each of the outcomes (all ps < .001).

 $^{^6}$ Looking only within Moore's denial statement, regression analyses revealed associations with comprehensiveness and defensiveness that were similar to the associations found within the apology statements, all ps < .001.

 ${\bf Table~2}\\ {\bf Test~statistics~for~associations~with~apology~comprehensiveness~and~defensiveness,~Study~1.}$

	Parameter estimate (SE)	df	t value	p value	95% CI
Statement evaluations					_
BPC comprehensiveness	0.08 (0.002)	2689.15	39.79	< 0.001	0.0765, 0.0844
BPC defensiveness	-0.05 (0.003)	2708.18	-14.43	< 0.001	-0.0563, -0.0428
WPC comprehensiveness	0.08 (0.002)	936.04	32.12	< 0.001	0.0716, 0.0809
WPC defensiveness	-0.05 (0.004)	1834.01	-11.80	< 0.001	-0.0550, -0.0393
Character evaluations					
BPC comprehensiveness	0.05 (0.002)	2700.95	21.19	< 0.001	0.0422, 0.0508
BPC defensiveness	-0.06 (0.004)	2719.45	-16.89	< 0.001	-0.0703, -0.0557
WPC comprehensiveness	0.04 (0.003)	980.18	16.60	< 0.001	0.0375, 0.0476
WPC defensiveness	-0.04 (0.004)	1872.08	-9.24	< 0.001	-0.0485, -0.0315
Forgiveness					
BPC comprehensiveness	0.06 (0.003)	2688.63	23.79	< 0.001	0.0554, 0.0654
BPC defensiveness	-0.06 (0.004)	2707.71	-13.07	< 0.001	-0.0649, -0.0480
WPC comprehensiveness	0.04 (0.003)	951.73	14.58	< 0.001	0.0376, 0.0494
WPC defensiveness	-0.03 (0.005)	1847.08	-6.43	< 0.001	-0.0422, -0.0225
Desired consequences					
BPC comprehensiveness	0.07 (0.003)	2684.70	25.07	< 0.001	0.0626, 0.0733
BPC defensiveness	-0.01 (0.005)	2703.46	-2.94	0.003	-0.0226, -0.0045
WPC comprehensiveness	0.04 (0.003)	943.41	11.55	< 0.001	0.0307, 0.0433
WPC defensiveness	-0.02 (0.005)	1846.42	-4.42	< 0.001	-0.0343, -0.0132
Positive reactions composite					
BPC comprehensiveness	0.06 (0.002)	2679.38	32.24	< 0.001	0.0599, 0.0677
BPC defensiveness	-0.05 (0.003)	2697.49	-13.59	< 0.001	-0.0523, -0.0391
WPC comprehensiveness	0.05 (0.002)	951.97	21.01	< 0.001	0.0451, 0.0544
WPC defensiveness	-0.04 (0.004)	1862.71	-8.99	< 0.001	-0.0434, -0.0278

Note. BPC = between-person-centered; WPC = within-person-centered.

 $\begin{tabular}{ll} \textbf{Table 3} \\ \textbf{Test statistics for associations with individual elements and strategies, Study 1.} \\ \end{tabular}$

	Parameter estimate (SE)	df	t value	p value	95% CI
Model 1: apology elements					
Explanation	0.17 (0.018)	1535.20	9.38	< 0.001	0.1366, 0.2089
Expression of remorse	0.16 (0.022)	1565.87	7.12	< 0.001	0.1152, 0.2027
Acceptance of responsibility	0.14 (0.023)	1599.42	6.04	< 0.001	0.0942, 0.1848
Offer of repair	0.07 (0.020)	1546.17	3.53	< 0.001	0.0313, 0.1097
Request for forgiveness	0.03 (0.018)	1493.75	1.68	0.094	-0.0053, 0.0666
Forbearance	0.02 (0.020)	1567.59	1.00	0.317	-0.0190, 0.0587
Admission of wrongdoing	-0.02 (0.021)	1553.66	-0.70	0.484	-0.0560, 0.0265
Acknowledgement of harm	-0.08 (0.021)	1548.54	-3.62	< 0.001	-0.1155, -0.0343
Model 2: defensive strategies					
Denial	0.05 (0.021)	1084.35	2.63	0.009	0.0137, 0.0946
Victim blaming	0.01 (0.023)	1176.12	0.25	0.805	-0.0392, 0.0506
Justification	0.01 (0.021)	1056.37	0.38	0.701	-0.0333, 0.0495
Minimization	-0.19 (0.022)	1093.92	-8.78	< 0.001	-0.2309, -0.1466
Excuse	-0.26 (0.022)	1074.54	-11.52	< 0.001	-0.2994, -0.2123

Note. Outcome measure is the composite of positive reactions, which includes the four outcomes (statement evaluations, character evaluations, forgiveness, and desired consequences).

Table 4Pairwise comparisons between statements for each outcome measure, Study 1.

	Al Franken	Russell Simmons	Harvey Weinstein	Kevin Spacey	Roy Moore
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Apology comprehensiveness	40.03 (12.02)	33.23 (11.85)	31.45 (13.38)	28.96 (12.18)	14.33 (11.65)
Defensiveness	13.17 (7.51)	16.74 (7.11)	17.38 _a (7.50)	17.44 _a (6.83)	24.21 (7.32)
Statement evaluation	4.59 (1.45)	4.02 (1.38)	3.40 _a (1.49)	3.49 _a (1.39)	2.71 (1.58)
Character evaluation	4.23 (1.25)	4.03 (1.07)	3.11 _a (1.27)	3.69 (1.12)	3.08 _a (1.45)
Forgiveness	4.32 (1.41)	3.99 (1.23)	3.20 (1.40)	3.78 (1.31)	3.03 (1.54)
Consequences	3.89 (1.43)	3.57 _a (1.31)	2.81 _b (1.36)	3.51 _a (1.31)	2.89 _b (1.63)
Positive reactions composite	4.26 (1.24)	3.90 (1.10)	3.13 (1.23)	3.62 (1.13)	2.93 (1.43)

Note. Values that share a subscript within a row do not significantly differ from each other; all other values differ significantly at p < .05.

defensiveness generally tracked the objective coding of these statements, with Al Franken's statement being rated as the most comprehensive and least defensive, and Roy's Moore's statement being rated as the least comprehensive and most defensive. In addition, Al Franken's statement was the most effective at eliciting positive statement evaluations, character evaluations, forgiveness, and more lenient consequences. By contrast, Roy Moore's statement was the least effective at eliciting positive statement evaluations and forgiveness, and was tied with Harvey Weinstein's statement for being the least effective at eliciting positive character evaluations and lenient consequences. With the exception of these last two comparisons with Weinstein's statement, Roy Moore's denial appeared to be less effective than all four of the apologies—even those that also included statements of denial in them (e.g., Kevin Spacey: "I honestly do not remember the encounter").

However, a significant gender difference emerged on reactions to Roy Moore's denial, with men reacting more positively to the denial than women ($p_{\text{statement_evaluation}} = 0.015$; $p_{\text{character_evaluation}} = 0.058$; $p_{\text{forgiveness}} = 0.004$; $p_{\text{desired_consequences}} = 0.061$; $p_{\text{composite}} = 0.014$). Gender differences did not emerge on reactions to the four apology statements (with the exception of women being less forgiving toward Franken than men, p = .035), all other ps > .14.

3.2.4. General attitudes toward public apologies for sexual misconduct

Participants reported slightly negative general attitudes toward the recent wave of public apologies for sexual misconduct (M=3.26, SD=1.20), with the mean on this measure falling significantly below the midpoint of the scale (4), t(719)=-16.51, p<.001, d=-0.62. These attitudes did not differ by participant gender (p=.149).

Participants also rated the apologies as being more beneficial to the apologizers (M=4.73, SD=1.74) than to the accusers/victims (M=3.23, SD=1.83), t(719)=15.98, p<.001, d=0.84. However, participants did rate the apologies as being moderately beneficial to raising awareness about the consequences of sexual misconduct (M=4.95, SD=1.72). These ratings did not differ by participant gender (all ps>.211).

3.2.5. Other means of redemption

Examining participants' open-ended responses regarding what the accused could do to redeem themselves, approximately 41% of participants wrote a response that indicated redemption was possible whereas approximately 33% indicated that redemption was not possible (e.g., "Absolutely nothing"; "No. Sexual assault is unforgivable"). An additional 4% of participants thought the possibility of redemption depended on certain factors (e.g., the severity of the offense), 2% were unsure, and fewer than 1% expressed doubt about the validity of the accusations (and thus the need for redemption). Finally, 5% gave irrelevant or incoherent responses and approximately 14% did not respond to this question. It is unclear whether this latter group chose not to respond because they did not believe redemption is possible or because of other reasons (e.g., they were unsure how to answer; they did not want to spend the extra time on the survey).

Among those who indicated redemption was possible, the most common responses were that the accused men need to engage in some sort of self-change (n=140; e.g., "I Believe actions are stronger than words. They need to demonstrate they changed their behavior") or offer an improved apology (n=123; e.g., "They can own up to their aggressive, immoral behavior and truly apologize for their actions"). The next most common response was making amends directly with their victims (n=43; e.g., "Apologize to the accuser in person and listen to them"), followed by advancing the cause (n=37; e.g., "Lead a campaign to fight sexual predation and abuse against women, men and children"), receiving some sort of legal punishment (n=32; e.g., "Serve time for what they did"), removing themselves from their position or the public sphere (n=28; e.g., "Remove themselves entirely from positions of power"), offering payment (n=27; e.g., "Forfeiture of some of their personal wealth payable directly to the victim"), doing

service (n=19; e.g., "Community service, charity work"), the passage of time (n=10; e.g., "Only time will tell"), and religious redemption (n=9; e.g., "Get right with God"). In general, these responses suggest that people believe moral redemption is possible for these men only if they back up their apology with further action, such as self-change and additional reparations.

3.3. Discussion

In Study 1, participants reacted more positively to real statements offered by public figures accused of sexual misconduct when those statements included more apology elements and fewer defensive strategies. These results provide initial evidence that public apologies for sexual misconduct-despite implicating the apologizer in severe offenses that call into question their morality-might signal something meaningful to the public. In a context where a majority of the accused completely deny any wrongful behavior or include highly defensive statements in their apologies, the public might interpret a comprehensive, non-defensive apology as evidence that the apologizer understands the consequences of his misconduct and is genuinely willing to face his mistakes. In light of the pilot data—which suggested that the public generally perceives public apologies for sexual misconduct as the least sincere of all apology types—the current study suggests that apologizers might partially mitigate these perceptions of insincerity by carefully constructing their apology to be comprehensive and non-defensive. This finding echoes work by Nigro et al. (2019) demonstrating that people paid attention to the content of #MeToo apologies (in the form of self-focus vs. self-other-focus) when judging the value of these statements. Moreover, the findings from Study 1 suggest that—at least amidst a wave of allegations of sexual misconduct—people (and women in particular) might doubt the authenticity of denials and instead give some moral credit to those who accept at least partial responsibility for the allegations against them.

Participants' general attitudes toward the recent wave of apologies were somewhat negative, reflecting the cynical view of these types of apologies observed in the pilot study. However, results also indicated that while many believe redemption is not possible for the accused men, a subset (approximately 40%) of people believe that at least some moral redemption could be attainable through certain actions, such as selfchange, making amends directly to the victim(s), advancing the cause, and accepting some form of punishment. Together, these findings suggest that some people view a high-quality apology as an appropriate starting point for the accused men, but expect their road to redemption to involve much more than a mea culpa. This parallels work on intergroup apologies demonstrating that victims' forgiveness following an apology wanes over time if the perpetrating group does not follow up their apology with prosocial changes toward the victimized group (e.g., Bombay, Matheson, & Anisman, 2013; Wohl et al., 2013; Wohl, Hornsey, & Philpot, 2011). In the context of #MeToo apologies, it will be informative to witness the types of actions that public figures take in the coming years to substantiate their apologies, and whether certain actions are especially effective at restoring their public image and

Study 1 aimed to approximate the conditions under which people evaluate real public statements. Participants therefore read multiple statements during one session and knew who had issued these statements. This method allowed us to capture people's reactions in a highly realistic manner, but participants' evaluations of any given statement could have been influenced by their evaluations of the statement(s) they read before it. Although we randomized the statements to prevent order effects, it is important to acknowledge that participants were likely making direct comparisons across statements, which could have enhanced the associations between the content of the statements and their outcomes. To test for the extent to which these comparisons were driving the associations, we conducted regression analyses using only the first statement that participants evaluated. These analyses revealed

that, with the exception of defensiveness predicting desired consequences, all other associations reported above remained significant. We therefore have confidence that the associations were not an artefact of the study design.

An additional limitation of Study 1 is that participants likely had preexisting attitudes toward each of the accused men, which might have influenced their reactions to the statements. We attempted to attenuate any problems this could cause by using five different statements that varied in content, but this sample of statements is likely too small to fully account for the influence of participants' preexisting attitudes. This is particularly problematic for the comparison of the four apologies to the denial, as participants' attitudes toward Roy Moore likely affected their evaluation of his denial. We attempted to address these limitations in the next four studies by using complementary methods.

4. Study 2

In Study 2, we attempted to maximize experimental control by having participants read and react to a fictitious public figure who had ostensibly been accused of sexual misconduct and offered one of three statements in response to the allegations. In so doing, we were able to standardize the accusations of misconduct and experimentally vary the content of the statement, which allowed us to better isolate the effects of this content on participants' reactions. In addition, by using a fictitious public figure, we were able to eliminate the influence of pre-existing attitudes toward the public figure offering the statement. Parallel results using this more controlled paradigm would provide greater confidence in the findings of Study 1.

4.1. Method

4.1.1. Participants

We used *Qualtrics* to recruit a nationally representative sample of 329 participants (162 females, 161 males; 6 non-binary; $M_{\rm age}=45.23$, SD=16.85; see Table S5 for comparisons of distributions of gender, age, ethnicity, and income of the current sample to population distributions obtained from the 2015 U.S. Census). No data collection took place after any stage of data analysis. A sensitivity analysis conducted in G*Power showed that based on the sample size, an alpha probability of 0.05, and power of 80%, this study was powered to detect small-medium effects (Cohen's f=0.17). As in Study 1, reliability questions were built into the survey to ensure that participants were providing valid responses; data from those who did not respond reliably were not recorded. Participants received monetary compensation upon completing the study.

4.1.2. Materials and procedure

Participants completed all materials online. They were informed that they would be reading a public statement that had recently been publicly offered in response to allegations of sexual misconduct. In this study and all other studies using a fictitious public figure (Studies 3 and 4), participants were under the impression that the public figure was a real person. Participants then saw a description of the allegations of sexual misconduct against the accused male, George Linton, which was modeled after typical cases of allegations made during the #MeToo movement and included several accusations of sexual harassment and unwanted touching in a work setting (see Table S6 in Supplementary Materials for full description). Participants were then randomly assigned to read one of three statements (matched for length at ~140 words) that had ostensibly been offered by Linton (see Table S6). In the denial statement, Linton completely denies the allegations against him and includes no apology elements. In the defensive apology statement (moderate comprehensiveness, moderate defensiveness), he includes a number of apology elements (e.g., remorse, responsibility, acknowledgement of harm, promise to behave better), but also denies some of the victims' account, justifies his actions, and deflects attention away

from the offense. In the high-quality apology statement (high comprehensiveness, low defensiveness), he includes a host of apology elements (e.g., remorse, responsibility, acknowledgement of harm, promise to behave better; admission of wrongdoing, offer of repair) and excludes all defensive strategies.

4.1.2.1. Attitudes toward the accused/statement. After reading Linton's statement, participants responded to the same six measures used in Study 1, including the two measuring perceived apology content (i.e., perceived apology comprehensiveness, which was comprised of the eight apology elements, and perceived defensiveness, which was comprised of the five defensive strategies), and the four outcomes measures (i.e., statement evaluations, $\alpha = 0.88$; character evaluations, $\alpha = 0.69$; forgiveness, $\alpha = 0.74$; and desired consequences, $\alpha = 0.77$). As in Study 1, these four outcome measures were highly correlated (rs ranging from 0.59 to 0.75) and thus were combined into a composite measure of positive reactions, which will be the focus of our analyses from now on for the sake of concision (see Table S7 in Supplementary Materials for results on each of the four dependent variables separately). Participants also completed the same general attitudes toward public apologies scale ($\alpha = 0.77$), and indicated the extent to which they believed these apologies were beneficial to the apologizer, to the accusers/victims, and to raising awareness about the consequences of sexual misconduct.

4.1.2.2. Support for the #MeToo movement. New to Study 2, we included 5 items tapping participants' degree of support for the #MeToo movement (e.g., "The #MeToo movement is important"; "People who come forward with allegations of sexual assault and/or harassment should have their voices heard"; $\alpha=0.91$). We included this measure as a potential covariate.

4.1.2.3. Additional measures. Participants answered demographic questions (gender, age, ethnicity, country of birth, first language, political orientation, religion (open-ended), and degree of religiosity (1 = not at all religious, 7 = extremely religious), as well as the same 6-item implicit theories of personality scale (Levy et al., 1998; $\alpha=0.84$) that was included as part of a separate investigation. Participants were then debriefed via an online feedback letter and thanked for their participation.

4.2. Results

4.2.1. Effects of statement condition

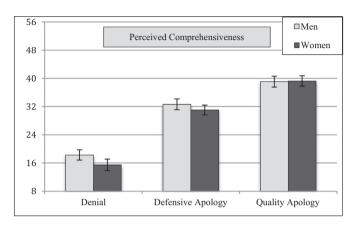
We first tested whether participants' perceptions of the statements mapped on to their manipulated content. Using univariate analyses of variance (ANOVAs), we found significant effects of condition on perceived apology comprehensiveness ($F(2, 325) = 112.52, p < .001, \eta_p^2 = 0.41$) and perceived defensiveness ($F(2, 325) = 28.06, p < .001, \eta_p^2 = 0.15$). To examine the nature of these effects, we conducted simple pairwise comparisons of the three statement conditions on each of these outcome variables. Means and standard deviations of all outcome variables by statement condition are displayed in Table 5. Participants' perceptions closely followed the objective content of the statements, rating the high-quality apology as the most comprehensive and least defensive, the denial statement as the least comprehensive and most defensive, and the defensive apology in between these two conditions.

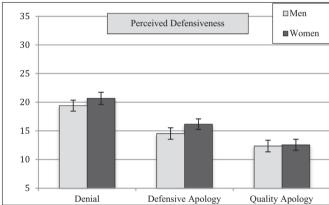
Next, we conducted an ANOVA on the composite measure of positive reactions. This analysis yielded a significant effect of statement condition, F(2, 326) = 3.24, p = .040, $\eta_{\rm p}^2 = 0.02$. Simple pairwise comparisons of the three statements revealed that the high-quality apology was preferred over the defensive apology, but the denial did not differ from either the high-quality or defensive apology (Table 5).

Table 5Effects of statement condition on outcomes, *Study 2*.

		Statement Condition			
	Denial Statement M (SD)	Defensive Apology M (SD)	High-quality Apology M (SD)		
Perceived comprehensiveness	17.09 _a (12.14)	31.57 _b (11.03)	39.13 _c (9.18)		
Perceived defensiveness	19.84 _a (7.47)	15.40 _b (6.91)	12.54 _c (7.15)		
Positive reactions composite	3.87 _{ab} (1.26)	3.66 _b (0.80)	4.02 _a (0.93)		

Note. Means within the same row that do not share a subscript differ significantly at p < .05. Possible range for comprehensiveness = 8–56; for defensiveness = 5–35; for all other non-standardized measures = 1–7.





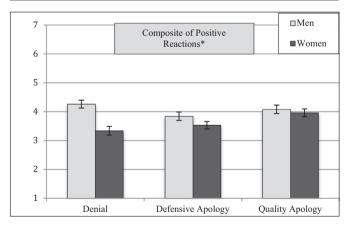


Fig. 1. Perceived apology comprehensiveness (top), perceived defensiveness (middle), and composite of positive reactions (bottom) as a function of statement condition and gender, Study 2. *Significant interaction. Error bars represent the standard error of the mean.

4.2.2. Effects of statement condition by gender

As in Study 1, we tested for any moderating effects of participant gender using 3 (statement condition: denial vs. defensive apology vs.

high-quality apology) X 2 (participant gender: men vs. women) ANOVAs on participants' perceptions of the content of Linton's statement (apology comprehensiveness; defensiveness). No interactions emerged, ps > .619. However, when examining the composite measure of positive reactions, we found a significant condition X gender interaction, F(2, 317) = 4.58, p = .011 (see Fig. 1).

Decomposing this interaction, we see that women reacted more positively to the high-quality apology than the defensive apology (p=.004) and denial (p<.001), whereas men did not prefer the high-quality apology over either the defensive apology (p=.271) or denial (p=.412). Rather, men preferred the denial over the defensive apology (p=.012), whereas women did not differentiate these two responses (p=.398). Looking at it differently, men reacted much more positively to the denial than did women (p<.001), and marginally more positively to the defensive apology than did women (p=.075), but men and women did not differ in their reactions to the high-quality apology (p=.819).

Notably, men and women significantly differed in their support for the #MeToo movement, with women reporting greater support for the movement (M = 5.76, SD = 1.30) than men (M = 4.76, SD = 1.54), t (321) = 6.33, p < .001. Including this measure as a covariate in the condition X gender analyses did not alter any of the effects, except to strengthen them slightly.⁷

4.2.3. General attitudes toward #MeToo apologies

Consistent with Study 1, participants reported slightly negative general attitudes toward the recent wave of public apologies for sexual misconduct (M = 3.50, SD = 1.22), with the mean on this measure falling significantly below the midpoint of the scale (4), t(321) = -7.36, p < .001, d = -0.41. However, these attitudes appeared to be influenced by the statement they had just evaluated, F(2,319) = 3.24, p = .040, $\eta_p^2 = 0.02$. Specifically, participants had less positive general attitudes toward apologies for sexual misconduct if they had just evaluated the defensive apology (M = 3.27, SD = 1.20) compared to either the high-quality apology (M = 3.68, SD = 1.17), p = .014, or the denial (M = 3.56, SD = 1.26), p = .080. However, a marginally significant interaction with gender also emerged, F(2,316) = 2.98, p = .052, $\eta_p^2 = 0.02$, such that only women's general attitudes toward apologies during the #MeToo movement became less positive after reading the defensive apology compared to either the high-quality apology (p = .003) or the denial (p = .007); men's general attitudes were not affected by statement condition (all ps > .366).

As in Study 1, participants also rated the apologies as being more beneficial to the apologizers (M = 4.51, SD = 1.63) than to the

 $^{^7}$ One might imagine that support for the #MeToo movement could have been affected by statement condition, with a denial weakening support and a high-quality apology increasing support for the movement. We did not find any effects of statement condition (p=.826), and no interaction between statement condition and gender (p=.818) on support for the #MeToo movement. However, to ensure that no influence of condition was present in this variable, we also regressed support for the #MeToo movement on statement condition and used the unstandardized residual as a covariate. Results were unchanged by including this covariate.

accusers/victims (M=3.56, SD=1.66), t(321)=7.34, p<.001, d=0.41. Again, however, participants rated the apologies as being moderately beneficial to raising awareness about the consequences of sexual misconduct (M=4.66, SD=1.54). No effects of statement condition or condition X gender interactions emerged on perceived benefits of #MeToo apologies to either the apologizer (ps>.236), the accusers/victims (ps>.163), or to raising awareness about the consequences of sexual misconduct (ps>.531).

4.3. Discussion

The results of Study 2 generally converged with those in Study 1 in that a highly comprehensive and non-defensive apology was preferred over a less comprehensive and defensive apology. Study 2 also clearly revealed a gender effect that resembled the main effect of gender observed in Study 1 on reactions to Moore's denial. Although men and women perceived similar levels of comprehensiveness and defensiveness in the statements and did not differ in their reactions to the highquality apology, they diverged in their reactions to the denial, with men reacting more positively to it than women. Gender therefore appeared to influence the extent to which people trusted these denial statements, possibly because men and women differentially empathized with the accused (male) and accusers (female) due to their shared social identities (Nigro et al., 2019; Tajfel & Turner, 1979). Thus, the results of Study 2 paint a slightly more complex picture of denials than that observed in Study 1; although the gender effect is consistent across studies, Study 2 suggests that, at least in the absence of pre-existing attitudes toward a public figure accused of sexual misconduct, denials might be received fairly well by men. We examine the robustness of this gender effect in the remaining studies.

Although Study 2 provided a more controlled comparison of various statements, it did not allow us to isolate the effects of individual apology elements or defensive strategies. Further, it kept constant the severity of the allegations against the accused, enabling us to test the effects of the various statements only at the level of low-moderate severity allegations. In Study 3, we examined reactions to each apology element and defensive strategy, and tested whether these reactions depended on the severity of the allegations against the accused and participant gender.

5. Study 3

In the aftermath of sexual misconduct allegations, what can public figures say to right their alleged wrongs and restore their public image? Are there certain apology elements that are particularly meaningful to the public? Are there certain defensive strategies that reflect poorly on the accused, and others that help cast doubt on their guilt? And does the severity of the accusations against the accused influence what they can say to make an impactful public statement? In Study 3, we attempted to answer these questions by presenting participants with a fictitious public figure accused of either lower vs. higher severity forms of sexual misconduct. However, unlike Study 2 in which participants read a full statement ostensibly made by the alleged offender, we presented participants with 15 different responses (9 apology elements and 6 defensive strategies) the offender could include in their public statement and asked them to react to each of these. Doing so allowed us to test reactions to each of the 15 responses without manipulating their presence in an unwieldy experimental design.

Although we also explored the effectiveness of the individual statements in Study 1, there are several notable differences in the methodology of these two studies. Whereas Study 1 used participants' perceptions of the extent to which apology elements and defensive strategies were present to predict their reactions, Study 3 gave participants a definition and example of each element and strategy and thus controlled their content. In addition, whereas participants saw elements and strategies in the context of full statements in Study 1, Study 3 asked

participants to focus on each element and defensive strategy in isolation. Both of these approaches have strengths and limitations that complement each other to offer a more complete picture of the individual effects of various apology elements and defensive strategies.

As noted earlier, we anticipated that the severity of the allegations against the accused would influence the effectiveness of public apologies for sexual misconduct, just as it influences the effectiveness of apologies in other domains (e.g., Bennett & Earwaker, 1994; Kirchhoff & Čehajić-Clancy, 2014). We therefore expected more favorable reactions to the apology elements in the low (vs. high) severity condition. We did not have clear hypotheses for how severity might influence reactions to the defensive strategies.

5.1. Method

5.1.1. Participants

We recruited 402 participants (201 female, 199 male, 2 non-binary; $M_{age} = 36.01$, SD = 12.73) from *Prolific*, an online research platform. A sensitivity analysis conducted in G*Power showed that based on the sample size, an alpha probability of 0.05, and power of 80%, this study was powered to detect approximately medium effects (Cohen's f = 0.21). In this study and the remaining two studies, we added an open-ended suspicion check at the end of the study, asking participants to let us know if there was anything they "thought we should know about (e.g., information that might invalidate your responses to this survey, such as something about you, suspicions about this study, or distractions/invalid responses while completing this study)?" They were promised that disclosing anything to us at this point would not lead to any penalty to them or loss of compensation. No participant in any of these three studies indicated any suspicion about the validity of the public figure or his statement. This is likely due to the hundreds of cases of sexual misconduct that have been exposed over the last few years, making it believable for there to have been a case they hadn't heard of before.

5.1.2. Materials and procedure

Participants completed all materials online. They were informed that they would be reading about the allegations of sexual misconduct against a public figure and then would be evaluating various responses this figure could offer in a statement. Participants then saw a description of the allegations of sexual misconduct against the male owner and CEO of a major technology company (see Table S8 in Supplementary Methods for a full description). Participants were randomly assigned to read allegations that were either relatively low in severity (involving inappropriate sexual comments and less severe unwanted touching) or relatively high in severity (involving forced sexual contact and assault).

5.1.2.1. Apology elements and defensive strategies. In randomized order, participants then read a description of each apology element and defensive strategy (see Table S8) the accused could include in a public statement addressing the allegations against him. Although not assessed in Studies 1 and 2, we added the apology element of commitment to change and the defensive strategy of deflection to this study to test for the effects of these responses. Commitment to change is similar to forbearance in that it focuses on how one will behave in the future. However, these elements differ in that forbearance is focused on not repeating the specific offensive behavior (e.g., "I will never do anything like this again") whereas commitment to change is focused on changing who you are as a person more broadly (e.g., "I am fully committed to looking inward and investing whatever effort is necessary to make important changes to who I am as a person"). Deflection is an attempt to divert attention away from one's offense, often toward something positive about the self (e.g., "I will now be channeling my energy into my charitable activities"). Participants rated each of the 15 responses on 10 items assessing the sincerity and value of the response (e.g., "This type of statement...seems sincere; ...seems offensive

[reverse-scored]; ...improves my perceptions of the accused.") using a 7-point scale ($1 = Completely \ disagree$, $7 = Completely \ agree$). Because these 10 items showed high internal consistency for all responses (Cronbach's alphas ranging from 0.85 to 0.93), we combined them into a composite measure of positive evaluations, which will be the focus of our analyses.

5.2. Results

We performed a profile analysis of repeated measures—an alternative to a repeated measures analysis with at least one between-subjects factor that is statistically more powerful when the assumption of compound symmetry has been violated (as it was with the present data)—to test for differences between the 15 apology elements and defensive strategies by offense severity (low vs. high) and participant gender (men vs. women). We analyzed the apology elements and defensive strategies separately, because we expected that participants would rate most apology elements more favorably than defensive strategies and we were less interested in exploring the magnitude of these expected differences.⁸

5.2.1. Apology elements

Participants' evaluations of the apology elements were influenced by the severity of the allegations against the accused, with elements being rated more favorably when offered for low (M = 3.78,SD = 0.95) compared to high (M = 3.34, SD = 0.94) severity allegations (see Table 6 for all test statistics). Evaluations were also influenced by participant gender, with men (M = 3.66, SD = 0.95) evaluating the elements more favorably than women (M = 3.45, SD = 0.94). In addition, we see an effect of the type of apology element, with commitment to change being rated most favorably and explanation being rated least favorably (see Fig. 2 for a visual representation of evaluations by element type and Table 7 for descriptive statistics and comparisons of elements). Admission of wrongdoing, offer of repair, request for forgiveness, expression of remorse, and acknowledgement of harm were all rated only slightly worse than commitment to change, whereas forbearance and acceptance of responsibility were rated less favorably than all of the above elements but more favorably than an explanation.

5.2.2. Defensive responses

Like apology elements, participants' evaluations of defensive strategies were influenced by participant gender, with men (M=2.18, SD=0.73) evaluating these strategies more favorably than women (M=1.71, SD=0.74; see Table 6 for all test statistics). Participants' evaluations were also influenced by the type of defensive element, with denial (M=2.59, SD=1.27) being evaluated most favorably, followed by deflection (M=2.39, SD=1.20), victim blaming (M=1.83, SD=1.05), minimization (M=1.70, SD=0.88), excuse (M=1.64, SD=0.86), and justification (M=1.53, SD=0.78; all strategies significantly different at the p<0.05 level, but the differences between denial vs. deflection and minimization vs. excuse were no longer significant after applying a Bonferroni correction for multiple

Wilk's λ (5, 382) = 0.44, F = 99.32, p < .001, $\eta_p^2 = 0.56$ F(1, 396) = 2.80, p = .10, $\eta_p^2 = 0.01$ $p = .24, \eta_p^2 = 0.02$ $rac{0}{r} = .001, \eta_p^2 = 0.05$ = 0.02F = 1.36, p =F = 4.27, p= 0.44,Defensive Strategies 05 us = 0.03 $F = 0.97, p = .15, \eta_p^2$ $F = 1.38, p = .20, \eta_p^2$ 38.26, p < 0.001= 0.59, p = .44, i 389) = 0.99, F == 0.56, F22.47, p <= 1.53,5.05, pApology Elements 05 Results of the profile analyses, Study 3. Severity * gender * element Severity * element Severity * gender Gender * element Severity

 $^{^8}$ To test the assumption that apology elements would be evaluated more favorably than defensive strategies, we also conducted an additional, exploratory profile analysis where we analyzed all comprehensive and defensive responses in a single model. We found a significant response by participant gender interaction (Wilk's λ (14, 383) = 0.92, F=2.44, p=.003, $\eta_p^{\ 2}=0.08$) and proceeded by testing for potential differences between responses for men and women separately. We found that women rated all apology elements more favorably than any of the defensive strategies. We found the same for men. However, applying a Bonferroni adjustment for multiple comparisons rendered men's reactions to the denial ($M=2.95,\ SD=1.31$) only marginally worse than forbearance ($M=3.32,\ SD=1.30$).

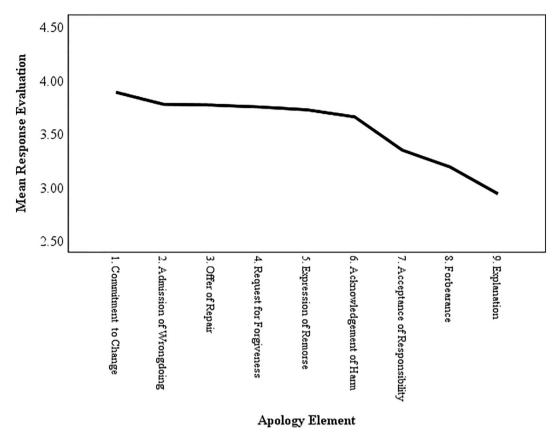


Fig. 2. Mean response evaluation (y-axis) by apology element (x-axis).

Table 7Comparison of apology elements, Study 3.

Apology element		M (SD)	Differences with Other Elements		
			Significant at $p \le .05$	Significant after Bonferroni adjustment	
1	Commitment to change	3.89 (1.28)	Differs from all elements	Differs from elements 6–9	
2	Admission of wrongdoing	3.773 (3.77)	Differs from elements 1, 6-9	Differs from elements 7-9	
3	Offer of repair	3.766 (1.29)	Differs from elements 1, 7-9	Differs from elements 7-9	
4	Request for forgiveness	3.75 (1.31)	Differs from elements 1, 7-9	Differs from elements 7-9	
5	Expression of remorse	3.72 (1.19)	Differs from elements 1, 7-9	Differs from elements 7-9	
6	Acknowledgement of harm	3.66 (1.30)	Differs from elements 1, 7-9	Differs from elements 1, 7-9	
7	Acceptance of responsibility	3.34 (1.37)	Differs from all elements	Differs from all except 8	
8	Forbearance	3.19 (1.21)	Differs from all elements	Differs from all except 7	
9	Explanation	2.94 (1.33)	Differs from all elements	Differs from all elements	

Note. Evaluation of apology elements (on a scale from 1 to 7), listed in descending order. To account for the large number of comparisons, we note whether differences are significant at the $p \le .05$ level and after a Bonferroni correction, *Study 3*.

comparisons).

We also found two interactions. The first, a gender by defensive strategy interaction, revealed that while men evaluated all defensive strategies more positively than women, and both men and women showed a similar pattern in their evaluations of defensive strategies (e.g., both men and women preferred denial over justification), men showed more pronounced differences in their evaluations of the different defensive strategies (see Fig. 3 for a visual representation of evaluations by strategy type and gender). Specifically, men evaluated nearly all strategies differently, whereas women showed fewer distinctions between their evaluations of the strategies (see Table 8 for descriptive statistics and comparisons of strategies).

The second, a marginally significant gender by offense severity interaction, showed that the extent to which the severity of the allegations influenced evaluations depended on participants' gender (see Table 9 for descriptive statistics and comparisons by gender and

severity). Specifically, men evaluated potential defensive strategies more favorably when being offered for lower (vs. higher) severity allegations, whereas women evaluated the potential defensive strategies similarly, regardless of the severity of the allegations against the accused.

5.3. Discussion

The results of Study 3 complement the results of the previous studies by investigating the perceived value of various apology elements and defensive strategies as a function of gender and the severity of the allegations against the accused. We found that men and women agreed on which apology elements they found most effective. For example, both men and women rated commitment to change more positively than any other apology element. This pattern resembles the open-ended responses collected in Study 1, which emphasized self-change as the most

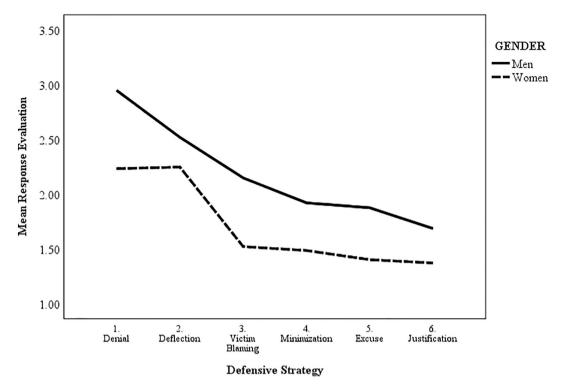


Fig. 3. Mean response evaluation (y-axis) by defensive strategy (x-axis) and participant gender (lines).

Table 8
Defensive strategy evaluation within men and women, Study 3.

Defensive Str	rategy	M (SD)	Differences with other strategies		
			Significant at $p \le .05$	Significant after Bonferroni adjustmen	
Men					
1	Denial	2.95 (1.31)	Differs from all strategies	Differs from all strategies	
2	Deflection	2.52 (1.26)	Differs from all strategies	Differs from all strategies	
3	Victim blaming	2.15 (1.22)	Differs from all strategies	Differs from all strategies	
4	Minimization	1.92 (1.04)	Differs from all except 5	Differs from all except 5	
5	Excuse	1.88 (1.02)	Differs from all except 4	Differs from all except 4	
6	Justification	1.69 (0.90)	Differs from all strategies	Differs from all strategies	
Women					
1	Denial	2.23 (1.12)	Differs from 3 to 6	Differs from 3 to 6	
2	Deflection	2.25 (1.11)	Differs from 3 to 6	Differs from 3 to 6	
3	Victim blaming	1.52 (0.71)	Differs from 1, 2, 5, 6	Differs from 1, 2	
4	Minimization	1.48 (0.61)	Differs from 1, 2, 6	Differs from 1, 2	
5	Excuse	1.40 (0.58)	Differs from 1 to 3	Differs from 1, 2	
6	Justification	1.37 (0.60)	Differs from 1 to 4	Differs from 1, 2	

Note. Evaluation of defensive strategies (on a scale from 1 to 7), listed in descending order within men (top) and women (bottom). To account for the large number of comparisons, we note whether differences are significant at the $p \le .05$ level and after a Bonferroni correction, *Study 3*.

Table 9Pairwise comparisons of defensive strategy evaluation by participant gender and offense severity, Study 3.

Gender	M (SD)		Differences bet	ween High/Low Severity
	Low Severity	High Severity	Significant at $p \le .05$	Significant after Bonferroni adjustment
Men Women	2.30 (1.04) 1.70 (1.06)	2.07 (1.06) 1.72 (1.03)	Significant ns	Significant ns

plausible path to moral redemption, and suggests that explicitly describing one's commitment to becoming a better person (rather than simply promising not to commit it again, which might be met with cynicism) is necessary in the context of egregious allegations that

threaten the moral character of the accused. People want to hear that the accused recognizes the moral shortcomings that underlie his sexual misconduct, and that he is ready to put in the work to improve upon these shortcomings so that he will not be tempted to engage in this type of behavior (or other obscene acts) again. These statements are likely most powerful when they provide details as to *how* the accused plans to achieve self-change (e.g., therapy; undergoing restorative justice procedures that help transgressors understand the consequences of their actions; spiritual growth), but we do not empirically test this possibility in the current paper.

Consistent with Study 1 and previous research, expressions of remorse and offers of repair also emerged as some of the more highly regarded elements. Contrary to Study 1 and previous research, however, an acceptance of responsibility was rated lower than many other elements in this study. This may be because the example we presented

to participants ("I acknowledge that some of my behavior toward them was unacceptable") implied that he was only accepting partial responsibility for his actions. The explanation statement also received low ratings, the lowest of all the apology elements. This differs dramatically from Study 1 where it was the strongest predictor of positive reactions. This discrepancy is possibly due to the nature of the example we presented to participants in Study 3 ("I clearly misjudged these situations"), which might have been interpreted as an attempt to excuse the sexual misconduct away as being a simple misunderstanding. Indeed, explanations are sometimes treated as a form of excuse or justification (rather than apology element) in the literature (e.g., Scher & Darley, 1997; Shaw, Wild, & Colquitt, 2003) due to them being interpreted as a mitigating strategy. Our findings suggest that explanations need to be very clearly non-defensive for them to receive positive reactions, at least in the current context.

As in Study 1, we found that both men and women rated denials more positively than most of the other defensive strategies, likely because the denial cast some doubt on the accused individual's guilt. Deflections were also received relatively well, suggesting that—at least when judging a public figure they are unfamiliar with—people used the positive information presented in the deflection (i.e., focusing on his charitable activities) to evaluate his character.

Despite similarities between men and women in the order of their preferences, men and women diverged in how positively they rated the responses, with men evaluating all potential apology elements and defensive strategies more positively than women. As noted earlier, it is possible that men and women differentially empathized with the accused (man) and accusers (women) due to their shared social identities with these two gender groups (Nigro et al., 2019; Tajfel & Turner, 1979). We continue to test this gender difference in Studies 4 and 5.

In this study we also experimentally varied the severity of the allegations against the accused and found that, consistent with our expectations and past research, the potential apology elements were rated less positively when being offered for more (vs. less) severe offenses. We found a slightly more complex pattern for defensive strategies, with men rating these strategies less positively when being offered for more (vs. less) severe offenses, whereas women were similarly negative toward these strategies across both levels of severity.

On the whole, the findings from this study and Study 1 suggest that public apologies for sexual misconduct and interpersonal apologies share similarities in the type of content that is most (and least) effective. However, it is also worth noting that the various apology elements and defensive strategies varied in degrees of *dissatisfaction*, with even the highest rated element falling below the midpoint of the scale. Thus, although the specific elements that are valued resemble the interpersonal literature, the benefits of these elements are much more muted in the current apology context.

The findings from Studies 1–3 suggest that comprehensive and non-defensive apologies are preferred over less comprehensive and more defensive apologies. In the remaining two studies, we focused on these highly comprehensive and non-defensive apologies (hereafter referred to as *high-quality apologies*), with the goal of examining their effectiveness relative to the two other most common responses to allegations of sexual misconduct: denials (Studies 4 and 5) and "no comment" statements (Study 5). Further, we added measures assessing participants' behavioral intentions toward the accused individuals (e.g., their willingness to purchase their products or services in the future) to better assess whether these apologies are effective at restoring their public support.

6. Study 4

Study 4 had three primary goals. First, we compared the relative effectiveness of a high-quality apology and denial in promoting more positive behavioral intentions toward the accused individual's company. Although Studies 1 and 2 suggested that a high-quality apology

mitigated some of the negative attitudes and feelings toward the accused individuals (relative to more defensive apologies and denials, and only for women in Study 2), we do not yet know whether these benefits extend to more tangible consequences for the accused individual. Second, we experimentally varied the severity of the allegations against the accused to directly examine reactions to apologies and denials under these different circumstances. In line with the findings of Study 3 and previous work demonstrating that apologies are less effective for more severe offenses, we predicted that the benefits of a high-quality apology would be attenuated when offered in response to more severe allegations of sexual misconduct. Finally, we again tested for moderating effects of gender in this study, to examine the robustness of the gender difference in reactions to denials observed in Studies 1–3. To achieve these goals, we used a fictitious public figure and statement to permit experimental control over the severity of the allegations and the content of his public statement.

6.1. Method

6.1.1. Participants

We recruited 300 participants (151 female, 147 male, 2 non-binary; $M_{\rm age}=35.19,\,SD=13.19$) from *Prolific*, an online research platform. In the open-ended suspicion check included at the end of the study, one participant indicated that their screen had advanced before they saw the description of the allegations/statement. The data from this participant were excluded, leaving a sample of 299 (151 female, 146 male, 2 non-binary; $M_{\rm age}=35.19,\,SD=13.22$). A sensitivity analysis conducted in G*Power showed that based on the sample size, an alpha probability of 0.05, and power of 80%, this study was powered to detect small-medium effects (Cohen's f=0.16).

6.1.2. Materials and procedure

Participants completed all materials online. They were informed that they would be reading about the allegations of sexual misconduct against a public figure and this individual's public response to those allegations. Participants then saw a description of the allegations of sexual misconduct against the owner and CEO of a major technology company (see Table S9 for full description). Participants were randomly assigned to read allegations that were either relatively high in severity (involving forced sexual contact and assault) or relatively low in severity (involving inappropriate sexual comments and less severe unwanted touching). Participants were also randomly assigned to read one of two statements (denial; high-quality apology) that had ostensibly been offered by the accused individual (see Table S9).

6.1.2.1. Attitudes toward the accused/statement. After reading the accused individual's statement, participants responded to the same six measures used in Studies 1 and 2, including perceived apology comprehensiveness (comprised of the original eight apology elements and a new item assessing commitment to self-change: "describe his commitment to changing who he is as a person"), perceived defensiveness (comprised of the original five defensive strategies and a new item assessing deflection: "deflect attention away from the allegations against him"), statement evaluations ($\alpha = 0.92$), character evaluations ($\alpha = 0.78$), forgiveness ($\alpha = 0.81$), and desired consequences ($\alpha = 0.82$). Participants also completed two items assessing trust toward the accused individual ("I trust the accused individual"; "The accused individual seems like a trustworthy person"; r = 0.92), because restored trust is considered a primary goal of public apologies (MacLachlin, 2015). The four original outcome measures and trust shared high correlations (rs ranging from 0.60 to 0.83) and thus were combined to create a composite of positive reactions (see Table S10 in Supplementary Materials for results on each of the four dependent variables separately).

6.1.2.2. Intended behavior toward the accused. Next, participants were

asked to answer questions about the accused individual's company. They read, "If this company was revealed to you as a company that sells products you like and have purchased in the past, how likely would you be to do the following (assuming the owner/CEO remained in his position)?" Participants then responded to three items on a 7-point scale (1 = extremely unlikely, 7 = extremely likely) that assessed likelihood of supporting the accused individual's company in the future ("Purchase from this company in the future"; "Intentionally boycott this company (i.e., refuse to purchase from this company)"; "Try to convince people you know to boycott this company"). These three items were averaged to create a reliable index of support for the company.

Finally, participants completed demographics, answered an openended suspicion check, and then were thoroughly debriefed online via a debriefing letter.

6.2. Results

6.2.1. Effects of statement condition by severity condition

We first tested whether participants' perceptions of the statements mapped on to their manipulated content, and whether these perceptions depended on the severity of the allegations. We conducted 2 (statement condition: denial vs. apology) X 2 (severity of allegations: low vs. high) ANOVAs on participants' perceptions of the content of Friedman's statement (apology comprehensiveness; defensiveness). We found significant effects of statement condition on perceived apology comprehensiveness (F(1, 288) = 430.10, p < .001, $\eta_p^2 = 0.60$) and defensiveness (F(1, 290) = 49.34, p < .001, $\eta_p^2 = 0.15$), such that the apology was perceived as more comprehensive and less defensive than the denial (see Table 10 for means and standard deviations by condition). We also found a significant effect of severity condition on perceived apology comprehensiveness (F(1, 288) = 11.81, p = .001, $\eta_p^2 = 0.04$), such that the lower severity allegations resulted in perceptions of greater comprehensiveness relative to the higher severity allegations. In addition, significant interactions emerged on both apology comprehensiveness ($F(1, 288) = 4.92, p = .027, \eta_p^2 = 0.02$) and defensiveness ($F(1, 288) = 9.94, p = .002, \eta_p^2 = 0.03$). These interaction patterns suggested that, although the apology was always rated as more comprehensive and less defensive than the denial (all ps < .01), the apology was rated as more comprehensive (p < .001) and marginally less defensive (p = .079) when it was offered for lower (vs. higher) severity allegations, whereas the denial was perceived as more defensive (p = .007) when it was offered for lower (vs. higher) severity allegations (see Fig. 4).

We then conducted a 2 \times 2 ANOVA on the positive reactions composite. Statement condition significantly influenced reactions, F(1, 295) = 4.43, p = .036, $\eta_{\rm p}^2 = 0.02$, such that the apology was rated more favorably than the denial (see Table 10 for means and standard deviations by condition). Severity condition also influenced reactions, F(1, 295) = 25.07, p < .001, $\eta_{\rm p}^2 = 0.08$, such that the lower severity allegations resulted in more positive reactions relative to the higher severity allegations. However, a significant interaction between statement condition and severity also emerged, F(1, 295) = 11.79,

Effects of statement and severity condition on outcomes, Study 4.

p=.001, $\eta_p^2=0.04$ (see Fig. 4). This interaction pattern suggested that although the apology was rated more positively than the denial when it was offered for lower severity allegations (p<.001), the apology was rated similarly to the denial when it was offered for higher severity allegations (p=.352). Looking at the interaction differently, people responded more favorably to the apology when it was offered for lower (vs. higher) severity allegations (p<.001), whereas people responded to the denial similarly across levels of severity (p=.266).

Next, a 2 \times 2 ANOVA on participants' intended support for the CEO's company revealed a main effect of statement condition, F(1, 295) = 6.89, p = .009, $\eta_{\rm p}^2 = 0.02$, such that the apology led to more support for the company relative to the denial (see Table 10 and Fig. 4). A main effect of severity condition also emerged, F(1, 295) = 19.93, p < .001, $\eta_{\rm p}^2 = 0.06$, such that the lower severity allegations resulted in greater support for the company relative to the higher severity allegations. Interestingly, unlike with the composite of positive reactions, no interaction emerged for support for company, F(1, 295) = 0.89, p = .346, $\eta_{\rm p}^2 = 0.003$, suggesting that participants were significantly more likely to indicate continued support for the accused individual's company when he offered an apology (vs. denial), regardless of the severity of the allegations against him.

6.2.2. Effects of statement condition by severity condition and gender

We tested for any moderating effects of participant gender using 2 (statement condition: denial vs. high-quality apology) \times 2 (severity of allegations: low vs. high) × 2 (participant gender: men vs. women) ANOVAs on participants' perceptions of the content of the CEO's statement (apology comprehensiveness; defensiveness). No interactions with gender emerged, $p_s > .124$. However, a 2 \times 2 \times 2 ANOVA on the composite of positive reactions revealed a marginal 3-way interaction, F(1, 289) = 2.91, p = .089, $\eta_p^2 = 0.01$ (see Fig. 5). Decomposing this marginal interaction further, we found a significant statement condition X gender interaction in the low severity condition, $F(1, \frac{1}{2})$ 289) = 4.63, p = .032), but not the high severity condition, F(1, 1)(289) = 0.08, p = .778. Examining the simple effects within the low severity interaction, we see a moderating effect of gender similar to that observed throughout this paper, with women reacting more positively to the high-quality apology compared to the denial (p < .001), and men not differentiating the two responses (p = .195). Looking at the interaction differently, men and women did not differ in their reactions to the apology (p = .976), but differed in their reactions to the denial (p = .002), such that men reacted more positively to denial than did women. No 3-way interaction emerged on support for the CEO's company, F(1, 289) = 0.80, p = .372, $\eta_p^2 = 0.003$.

6.3. Discussion

Study 4 revealed additional complexity to how public apologies for sexual misconduct function. Consistent with the findings from Study 3 which showed that apology elements were rated less favorably when potentially being offered for higher (vs. lower) severity allegations, the high-quality apology in this study resulted in less favorable reactions when offered for higher (vs. lower) severity allegations. These findings

	Lower Severity Allegations		Higher Severity Allegations	
	Denial Statement M (SD)	High-quality Apology M (SD)	Denial Statement M (SD)	High-quality Apology M (SD)
Perceived comprehensiveness	14.34 _a (9.33)	41.47 _b (10.74)	12.90 _a (9.28)	34.79 _b (10.92)
Perceived defensiveness	24.30 _a (7.57)	15.39 _b (7.26)	20.97 _a (7.40)	17.58 _b (7.77)
Positive reactions composite	3.20 _a (1.01)	3.88 _b (1.08)	3.00 _a (1.11)	2.84 _a (1.05)
Support for company	4.23 _a (1.65)	4.90 _b (1.51)	3.56 _a (1.74)	3.88 _a (1.61)

Note. We tested for simple effects of statement condition within each level of severity. Means within the same row and level of severity that do not share a subscript differ significantly at p < .05.

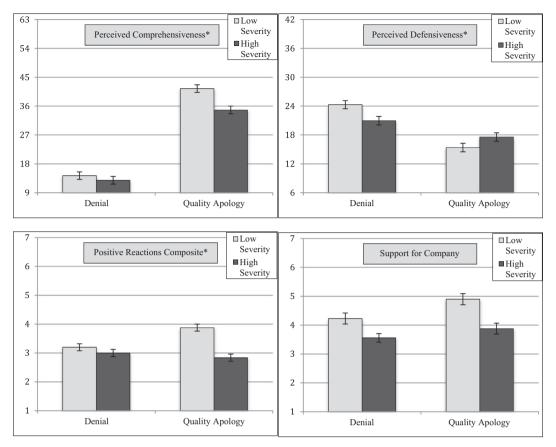


Fig. 4. Perceived apology comprehensiveness (top left), perceived defensiveness (top right), composite of positive reactions (bottom left), and support for company (bottom right) as a function of statement condition and severity condition, Study 4. *Significant interactions. Error bars represent the standard error of the mean.

are consistent with research from the interpersonal and intergroup literatures demonstrating that the benefits of apologies are attenuated as offenses become more severe (e.g., Bennett & Earwaker, 1994; Kirchhoff et al., 2012; Kirchhoff & Čehajić-Clancy, 2014). Thus, the already muted benefits of apologies for sexual misconduct become even more muted when being offered for more egregious offenses. Notably, however, the high-quality apology was more effective than a denial across levels of severity when it came to participants' support for the accused individual's company, possibly because they were completing this measure under the premise that they liked this company's products and had purchased from it in the past. This might suggest that the public is more positively influenced by a high-quality apology when they are motivated to restore their image of the accused (e.g., because they like the accused or their products).

We also found an interesting interaction with gender on the positive reactions composite, such that the pattern observed in previous studies (with women preferring a high-quality apology over a denial and men not differentiating these responses) was only borne out when the allegations were less severe. This finding suggests that men and women might be differentially sensitive to apology and denial statements only they are being offered for lower severity allegations. As the allegations become more severe, the apology appears to lose its effectiveness (relative to a denial) for men and women alike.

7. Study 5

In the final study in this package, we tested whether a high-quality apology would lead to more positive tangible consequences when offered by a real public figure accused of sexual misconduct (restaurant owner and chef, Ken Friedman). We also examined how a high-quality apology would fare against a "no comment" statement, another

common response offered by public figures during the #MeToo movement. Based on previous research from the corporate crisis literature suggesting that both "no comment" statements and refusing to issue a comment result in less favorable evaluations than does issuing an apology (Lee, 2004; Uhrich & Flöter, 2014), we expected the "no comment" statement to result in less positive reactions than the high-quality apology.

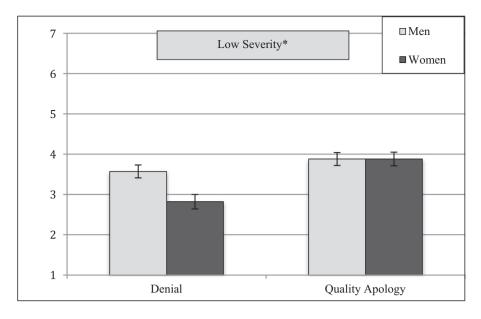
7.1. Method

7.1.1. Participants

We recruited 199 participants (114 female, 79 male, 6 non-binary; $M_{\rm age}=19.19$, SD=1.71) from an undergraduate subject pool to participate in an online study. Sample size was determined by the number of participant credits allotted to the lab. Due to the high level of deception in this study (see materials and procedure), participants were given the option of withdrawing their data after being informed of the full purpose of the study in a debriefing letter (this was the only study in the package to include this option). Nineteen participants requested to withdraw their data, leaving a sample of 180 (107 female, 67 male, 6 non-binary; $M_{\rm age}=19.19$, SD=1.75). A sensitivity analysis showed that based on the sample size, an alpha probability of 0.05, and power of 80%, this study was powered to detect medium effects (Cohen's f=0.23).

7.1.2. Materials and procedure

Participants completed all materials online. They were informed that they would be reading about the allegations of sexual misconduct against a public figure and this individual's public response to those allegations. Participants then saw a description of the allegations of sexual misconduct against New York City restaurateur, Ken Friedman,



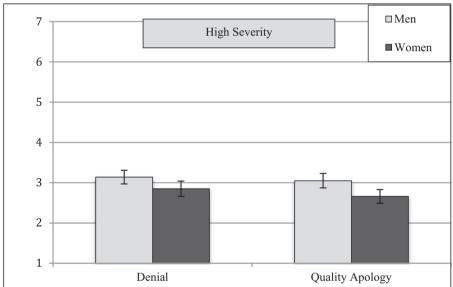


Fig. 5. Marginal 3-way interaction between statement condition, severity condition, and gender on composite of positive reactions, Study 4. *Significant 2-way interaction between statement condition and gender. Error bars represent the standard error of the mean.

which represented real allegations against him (see Table S11 for full description). These allegations fell somewhere between the low and high severity conditions presented in Study 4. Participants were then randomly assigned to read one of three statements (denial; no comment; high-quality apology) that had ostensibly been offered by Friedman (see Table S11).

7.1.2.1. Attitudes toward Friedman/statement. After reading Friedman's statement, participants responded to the same seven outcome measures used in Study 4, including perceived apology comprehensiveness, perceived defensiveness, statement evaluations ($\alpha=0.89$), character evaluations ($\alpha=0.73$), forgiveness ($\alpha=0.78$), trust (r=0.78), and desired consequences ($\alpha=0.78$). As in Study 4, the five outcomes shared high correlations (rs ranging from 0.50 to 0.80) and thus were combined to create a composite measure of positive reactions (see Table S12 in Supplementary Materials for results on each of the four

dependent variables separately).

7.1.2.2. Intended behavior toward Friedman. Next, participants were informed that after stepping away from his restaurants for some time, Friedman now had a planned partnership to open a new restaurant in the city where the research was being conducted. They read that "given the allegations that were made against him, there is some controversy regarding the possibility of Friedman opening a restaurant in [city where research conducted]. Some people are opposed to it due to the allegations against him. Others welcome a chef of such a high caliber to the growing restaurant scene here, stating that it would be beneficial to the city of [city where research conducted]." Participants then read that we were interested in their reactions to the possible opening of this restaurant, and responded to two items assessing their intended behavior: "If Friedman's restaurant were to open, how likely would you be to go there for dinner?" (answered on a scale from 1 = extremely unlikely to 7 = extremely likely), and "If Friedman's restaurant were to open, how much money would you be willing to spend on dinner there?" (answered on a scale from \$0 to \$101+,

⁹ The commitment to change item included in Study 4 was omitted from this study due to a programming error.

increasing in \$10 increments, e.g., \$0, \$1–\$10, \$11–\$20...). These two items were highly correlated (r = 0.64) and therefore were standardized and averaged to create a composite of *positive intentions toward Friedman's restaurant*.

Participants then had an opportunity to take action to support or oppose the opening of Friedman's restaurant in their city. They read that "given the controversy regarding the possibility of Friedman opening a restaurant in [city where research conducted], we are interested in learning which actions, if any, you would like to take regarding Friedman." After being reminded that their responses would be completely anonymous and they would not be penalized in any way based on their responses, participants had the choice between taking any of three actions to oppose Friedman's restaurant. These included (1) anonymously signing a petition opposing Friedman's restaurant in [city], (2) receiving a post to share on any of their social media accounts opposing Friedman's restaurant in [city], and (3) receiving information at the end of the study regarding how you can take other actions to oppose Friedman's restaurant in [city]. We also included three parallel actions in support of Friedman's restaurant as fillers to make the survey appear more balanced (e.g., anonymously signing a petition supporting Friedman's restaurant in [city]). For each of the six actions (presented in randomized order), participants could click one of two responses, one where they took the action, and one where they declined to take the action. We summed the three "oppose" responses to create an index (out of 3) representing greater behavioral opposition to Friedman's restaurant.

Finally, participants completed demographics, answered an openended suspicion check, and then were thoroughly debriefed online via a debriefing letter.

7.2. Results

7.2.1. Effects of statement condition

As in Studies 2 and 4, we first tested whether participants' perceptions of the statements mapped on to their manipulated content. Using ANOVAs, we found significant effects of condition on perceived apology comprehensiveness, F(2, 177) = 73.35, p < .001, $\eta_p^2 = 0.45$, and perceived defensiveness, F(2, 177) = 35.70, p < .001, $\eta_p^2 = 0.29$. We then conducted simple pairwise comparisons of the three statement conditions on each of these outcome variables (see Table 11 for means and standard deviations). Participants' perceptions closely followed the objective content of the statements, rating the high-quality apology as the most comprehensive, the denial statement as the most defensive, and the "no comment" statement as lowest on both comprehensiveness and defensiveness.

Next, we conducted an ANOVA on the positive reactions composite. Statement condition significantly influenced reactions, F(2, 177) = 8.00, p < .001, $\eta_p^2 = 0.08$. Simple pairwise comparisons of the three statement conditions revealed that participants preferred a high-quality apology over both the denial and "no comment"

Table 11Effects of statement condition on outcomes, Study 5.

Statement Condition			
Denial Statement M (SD)	No Comment Statement M (SD)	High-quality Apology <i>M</i> (<i>SD</i>)	
14.74 _a (10.65)	11.67 _a (7.79)	31.53 _b (10.62)	
25.50 _a (7.19)	13.88 _b (7.76)	19.28 _c (7.28)	
2.74 _a (0.97)	2.64 _a (0.83)	3.24 _b (0.90)	
-0.17_a (0.83)	0.09_a (0.78)	0.07_a (1.05)	
0.78_a (1.06)	0.74_a (1.05)	0.56_a (0.89)	
	Denial Statement M (SD) 14.74 _a (10.65) 25.50 _a (7.19) 2.74 _a (0.97) -0.17 _a (0.83)	Denial No Comment Statement M (SD) Statement M (SD) 14.74a (10.65) 11.67a (7.79) 25.50a (7.19) 13.88b (7.76) 2.74a (0.97) 2.64a (0.83) -0.17a (0.83) 0.09a (0.78)	

Note. Means within the same row that do not share a subscript differ significantly at p < .05.

statements, which did not significantly differ from each other (see Table 11).

7.2.2. Effects of statement condition by gender

As in the previous studies, we tested for any moderating effects of participant gender using 3 (statement condition: denial vs. no comment vs. high-quality apology) × 2 (participant gender: men vs. women) ANOVAs on participants' perceptions of the content of Friedman's statement (apology comprehensiveness; defensiveness). No interactions emerged, ps > .575. However, a 3 \times 2 ANOVA on the positive reactions composite revealed a significant interaction, F(2, 168) = 4.42, p = .013, $\eta_p^2 = 0.05$ (see Fig. 6). Examining this interaction, we see that the effects of statement condition were qualified by the gender of the participant, such that women reacted more positively to the highquality apology compared to the denial and "no comment" statement (ps < .001), whereas men did not differentiate the three responses (ps > .270). Neither women (p = .771) nor men (p = .203) significantly differentiated the denial from the "no comment" statement. Looking at the interaction differently, men and women did not differ in their reactions to the apology (p = .980), but differed in their reactions to the denial (p < .001), and the "no comment" statement (p = .008), such that men reacted more positively to these statements than did women.

Next, we conducted a 3×2 ANOVA on positive intentions toward Friedman's restaurant. This analysis yielded a significant interaction, F $(2, 168) = 4.11, p = .018, \eta_p^2 = 0.05$. Examining this interaction, we see that the effects of statement condition were again qualified by the gender of the participant, such that women indicated more positive intentions toward Friedman's restaurant following the high-quality apology compared to the denial (p = .001), whereas men did not differentiate the two responses (p = .271). However, neither women (p = .421) nor men (p = .138) preferred the apology over the "no comment" statement when it came to positive intentions toward Friedman's restaurant, and women (p = .022) but not men (p = .719) preferred the "no comment" statement over the denial. Looking at the interaction differently, men and women did not differ in their reactions to the apology (p = .382), but differed in their reactions to the denial (p < .001), and the "no comment" statement (p = .001), such that men indicated more positive intentions toward Friedman's restaurant following these statements than did women.

Finally, we conducted a 3 \times 2 ANOVA on behavioral opposition to Friedman's restaurant. Although the pattern was similar to the interaction found on standardized positive reactions (with similar significant or marginally significant simple effects), the interaction was not significant, F(2, 168) = 1.01, p = .367, $\eta_p^2 = 0.01$ (see Fig. 6 for pattern).

7.3. Discussion

Study 5 yielded results that are highly consistent with those observed in the previous studies. Relative to both a denial and a "no comment" statement, a high-quality apology resulted in more positive reactions and greater intentions to support Ken Friedman's restaurant, but only for women. Men were equally positive toward the apology but did not differentiate the apology from the denial and "no comment" statement. Again, this pattern of results suggests that the gender of the audience is a critical factor when considering reactions to public statements for allegations of sexual misconduct.

Although it showed the same pattern of results, we did not see significant effects of the type of statement on participants' behavioral opposition to the restaurant. This null effect might suggest that public

 $^{^{10}}$ A 3 \times 2 ANOVA on behavioral support for Friedman's restaurant did not yield significant main effects of gender (p=.159) or statement condition (p=.414), or a significant interaction, (p=.744).

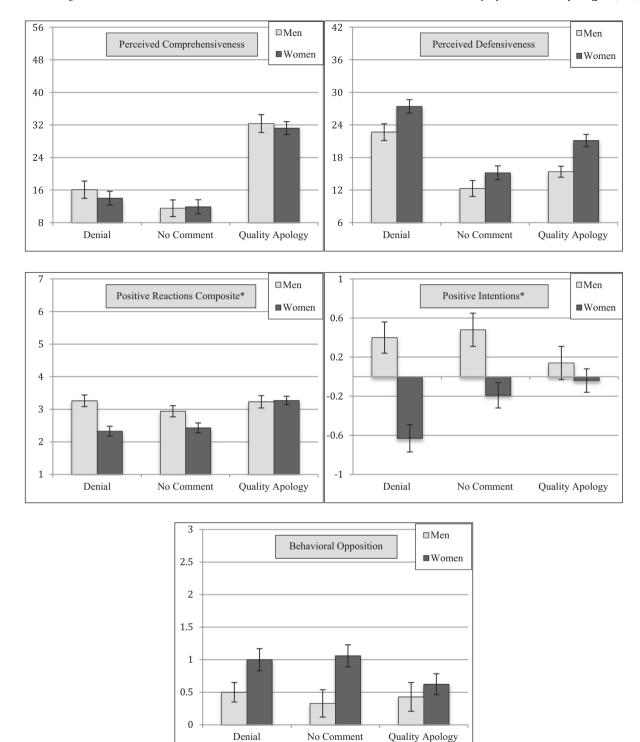


Fig. 6. Ratings of perceived apology comprehensiveness (top left), perceived defensiveness (top right), composite of positive reactions (middle left) positive intentions toward Friedman's restaurant (middle right), and behavioral opposition toward Friedman's restaurant (bottom center) as a function of statement condition and gender, Study 5. *Significant interactions. Error bars represent the standard error of the mean.

statements for sexual misconduct have little influence on people's actual behavior toward those offering the statement. However, it might also reflect a floor effect on this outcome, as very few participants were willing to take action against the opening of Friedman's restaurant. In combination with the two outcomes in this package that measured intended behavior toward the accused (i.e., support for the CEO's company in Study 4 and support for Friedman's restaurant in Study 5), we believe these data suggest that public statements have real

consequences on how people feel and behave toward the accused individuals offering them.

One limitation of this study is that used a "no comment" statement rather than simply informing participants that no statement had been issued by the accused. We opted to use a "no comment" statement because (a) that type of response was commonly offered in response to allegations during the #MeToo movement, (b) it allowed us to keep our outcome measures the same as in the previous studies, including the

measure of statement evaluations, and (c) previous work on corporate apologies shows similar effects of a "no comment" statement and withholding a public comment. However, it is possible that issuing a statement of comment differs qualitatively than issuing no statement in the current context, and future work could examine this possibility.

8. General discussion

The reaction to the sexual misconduct allegations against Harvey Weinstein in October of 2017 suggests that we live in an age of both moral accountability and apology. While hundreds of people were coming forward to accuse powerful public figures of sexual misconduct, the #MeToo campaign spread globally, encouraging people to share their experiences of sexual violence so that society could understand the magnitude of the problem and take a stand against it. In this context of public awareness about sexual misconduct, those who had been accused were faced with an important decision regarding how to respond. Although a majority chose to deny the allegations against them, many others chose to issue an apology statement with varying degrees of comprehensiveness and defensiveness. We examined the impact of these statements across 5 studies using a range of real and fictitious public figures accused of misconduct with varying levels of severity.

The results of these studies largely converged to paint a consistent (albeit somewhat complicated) picture of how public apologies for sexual misconduct function based on their content, the gender of the audience, and the severity of the allegations against the accused individual. Studies 1-3 demonstrated that what the accused men said in their statements indeed mattered, with more comprehensive and nondefensive apologies being regarded more favorably than less comprehensive and more defensive apologies. This finding parallels those found in other apology contexts (e.g., Griffin et al., 1991; Kirchhoff et al., 2012; Kirchhoff & Čehajić-Clancy, 2014; Scher & Darley, 1997), and one study demonstrating benefits of a self-other-focused over a selffocused #MeToo apology (Nigro et al., 2019). Thus, even in this context where apologies are generally perceived as insincere and manipulative (as evidenced in the pilot study), apologizers can partially mitigate these perceptions of insincerity by offering a comprehensive and nondefensive apology. In particular, the examination of the effectiveness of individual elements and strategies suggests that apologies might be most well received when they include a commitment to change, an offer of repair, and an expression of remorse, as well as exclude minimizations, excuses, and justifications. Such an apology might signal heartfelt remorse and a willingness to follow up the apology with personal changes and additional reparative efforts.

Studies 1-5 also revealed reliable effects of audience gender. Women and men almost never differed in their reactions to apologies (especially high-quality apologies), but consistently differed in their reactions to denials, with women reacting more negatively to denials relative to men and to high-quality apologies. As suggested by previous work on the conditions under which denials are effective, perhaps men were slightly more likely to believe the sincerity of the denials and, in turn, the innocence of the accused (Kim et al., 2004). Future work might examine how certain emotions, motives, and prior experiences (e.g., empathy for the accused; fear of being falsely accused; desire to see one's group favorably; personal experience with victimization) influence men's and women's reactions to both apologies and denials for sexual misconduct. Future work might also examine whether the ambiguity of the allegations against the accused man moderates these gender differences, with gender differences only emerging when there is some level of ambiguity surrounding the accused individual's guilt. Additionally, future work might examine how men and women react to denials offered by women accused of sexual misconduct to determine if women show a preference for a denial offered by another woman. Although women are far less likely than men to be accused of sexual misconduct, understanding how people react to apologies and denials issued by both men and women could provide important insights regarding the conditions under which certain statements are effective.

More broadly, future research is needed to understand whether gender differences emerge on reactions to apologies and denials for offenses in other contexts. For now, the current work contributes to the literature on social accounts by revealing how men and women react to denials in this unique context—one where the primary audience is not comprised of the direct victims and thus substantial ambiguity exists regarding the guilt of the accused. The findings indicate that although denials of sexual misconduct receive somewhat favorable reactions from certain demographics, high-quality apologies might receive equally favorable or more favorable reactions from a broader representation of the public. Thus, if coming from a place of heartfelt remorse and genuine commitment to change, these apologies might be worth the risk. However, public apologies and denials typically occur under very complex circumstances in the real world, varying by diverse features of the accused (e.g., status), the accusers (e.g., credibility), the nature of the allegations against the accused (e.g., severity, frequency, recency), and other contextual factors surrounding the accusations. These features likely combine in complicated ways to influence the effects of these statements, and the current research only captures a small piece of this complexity.

In addition to the content of the apology and the gender of the audience, the severity of the allegations against the accused influenced participants' reactions to their statements. Consistent with previous work from various apology contexts (Bennett & Earwaker, 1994; Kirchhoff et al., 2012; Kirchhoff & Čehajić-Clancy, 2014), apology elements were rated as less valuable (Study 3) and a high-quality apology received less favorable reactions (Study 4) when offered for higher severity allegations of sexual misconduct. This dampened effect of an apology for more severe offenses is likely caused by the apology being less capable of repairing the damage caused by the offense, as well as greater cynicism regarding the authenticity of the apologizer's remorse and commitment to change. Given the egregiousness of so many of the recent sexual misconduct accusations, it is likely that those who have apologized for these more severe offenses have conferred very few benefits from issuing an apology statement.

Indeed, it is important to note that nearly every apology examined in this paper—even the highest quality ones—received ratings that fell below the midpoint of the scale. This general dissatisfaction likely reflects their presumed insincerity, thus resembling the more muted effects of apologies observed in other public contexts. In the pilot study, all four public apology contexts received sincerity ratings well below the midpoint of the scale, suggesting that apologies that occur in these contexts are generally met with cynicism and are therefore more limited in their value relative to interpersonal apologies. This dissatisfaction also suggests that words alone cannot produce moral redemption in the context of these obscene accusations of sexual misconduct. Instead, high-quality apologies might simply signal the start of something far more important—a commitment to more substantive amends and personal change. As with intergroup apologies, failure to follow up one's apology with additional conciliatory efforts would likely diminish any long-term benefits of the apology (Bombay et al., 2013; Wohl et al., 2011; Wohl et al., 2013). Thus, rather than viewing an apology as endgame, the public will undoubtedly expect further positive action before accepting offenders back into a moral community. Future work might examine whether apology content predicts future remedial action and self-improvement, and whether these types of behaviors predict moral redemption in the eye of the public. Future work might also examine how other cues of sincerity—such as embodied remorse (e.g., crying when delivering apology; Hornsey et al., 2019) or the method of apology delivery (e.g., press conference vs. tweet; Hosseinali-Mirza, de Marcellis-Warin, & Warin, 2015)-influence public reactions to the

On the whole, the current findings provide a window into the conditions under which a public apology for sexual misconduct might be more (versus less) effective. When the apology is comprehensive,

non-defensive, and is offered in response to lower severity allegations, it can hold some value. Despite being considered the most insincere of all apology contexts, the public still seems to take high-quality apologies into account when judging the accused. Thus, although the benefits of these apologies were weaker compared to those typically found in the interpersonal apology literature, their effectiveness appears to be affected by similar conditions across these contexts. Notably, however, the current study did not assess victims' reactions and thus cannot speak to whether these public apologies are able to promote reconciliation with victims rather than the general public. Although public figures are undoubtedly interested in repairing their public image, an apology should have at its core the purpose of rebuilding one's relationship with the offended person. Future work might therefore examine how victims perceive high-quality public apologies, and whether these apologies serve as a valuable starting point in the reconciliation process.

Open practices

The studies in this article earned Open Materials and Open Data badges for transparent practices. Materials and data for the studies are available at: https://osf.io/9jrqd/.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jesp.2020.104002.

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