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# Physician gender and apologies in clinical interactions

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ABSTRACT

*Objective:* We examine whether patients have a preference for affective (i.e., focused on patient's emotions) or cognitive (i.e., focused on the process that led to the error) apologies that are dependent on the apologizing physician's gender. We hypothesize patients will prefer gender-congruent apologies (i.e., when females offer affective apologies and males offer cognitive apologies).
*Methods:* We randomly assigned analogue patients (APs: participants instructed to imagine they were a patient) to read a scenario in which a female or male physician makes an error and provides a gender-congruent or incongruent apology. APs reported on their perceptions of the physician and legal intentions.
*Results:* An apology-type and gender congruency effect was found such that APs preferred apologies congruent with the gender of the apologizing physician. An indirect effect of congruency on legal intentions through physician perceptions was confirmed ($b = -0.24$, $p = 0.02$).
*Conclusion:* Our results suggest that physician gender plays a role in patient reactions to different apology types.
*Practice implications:* Apology trainings should incorporate how physician characteristics can influence how patients assess and respond to apologies.



## 1. Introduction

Despite training, high standards, and good intentions, medical errors are highly prevalent and can be costly to patients and medical institutions [1,2]. Physician apology is associated with reduced negative emotional reactions from the patient, more positive perceptions of the physician, and expectations for a positive future relationship between the physician and patient [3–7]. When medical errors are disclosed and apologized for, patients are also 40% less likely to litigate [8].

Considering these positive outcomes, it is no surprise apology training has become a formal part of medical education in many medical school and residency training programs [9,10]. The majority of these trainings involve techniques such as lectures, feedback, vignettes and role play and assess outcomes such as physicians' ratings of self-efficacy, changes in attitudes, and behavioral changes [9]. However, these trainings are often delivered with a "one size fits all" approach in which all medical professionals are taught to apologize in a similar manner. Most programs do not tailor advice or consider how the characteristics of physicians may affect the expectations and outcomes of an apology.

Social psychological theory suggests that gender can have a powerful effect on how communication is perceived, with unfavorable impressions emerging when expectations about gender and observed behavior are incongruent [11]. In order to provide effective apologies, we must understand how physician gender impacts patient reactions to medical apologies. The purpose of this study is to examine the effects of physician gender on patient reactions to the type of apology provided by a physician after a medical error. Specifically, we examine whether patients have preferences for affective (i.e., focused on the patient's emotions and well-being) or cognitive (i.e., focused on the process that led to the error and the steps to correct it) apologies that are dependent on the gender of their physician.

### 1.1. Apology type

Apologies refer to an encounter in which a physician will acknowledge an error and express remorse or regret to a patient or a patient's family [12]. Apologies vary and can include various strategies such as compensation, empathy, and information/explanation [13]. Compensation involves rewarding something to the patient while information/explanation occurs when a

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physician explains what failure occurred and why it happened. A provider experiencing empathy for a patient will identify how the patient is feeling and possibly experience her or his own negative affect in response to the patient's state [14].

When delivering an apology, physicians can vary the use and intensity of these strategies and therefore frame or tone the apology in a way they believe will be successful. Specifically, a physician may choose to frame their apology as "cognitive" (i.e., focused on the process that led to the error and the steps to correct it) or "affective" (i.e., focused on the patient's emotions and well-being) [15,16]. A cognitively framed apology is more systematic and information-based. This type of apology will utilize the compensation and information/explanation strategies. An affectively framed apology is more emotional and will address the patient's loss and help to restore his or her sense of security. When crafting an affectively framed apology, the physician will rely heavily on the empathy strategy.

Apologies work when they are able to 1) restore equity between the apologizer and apology receiver and 2) help the apologizer feel safe again. Both cognitively and affectively framed apologies are associated with equity and trust [13,17,18] as well as downstream effects such as reducing the likelihood of litigation and improving patients' perceptions of and relationship with physicians [4–8,19–22]. However, recent research suggests physicians may wish to consider various factors (e.g., the severity of the error, the type of error, the type of patient) that may moderate the relationship between apology type and positive outcomes. More specifically, they may want to craft apologies that are framed in a manner that will match the receiving patient's expectations. For example, in marketing, researchers have found cognitively framed apologies are preferred after failures related to the core service offering (e.g., burnt food at a restaurant) while affectively framed recoveries are more effective after failures related to the manner in which the service is delivered (e.g., rude waitress at a restaurant) [22]. One

**Medical Error Scenario (Female Version)**

You are being treated for acne by a local dermatologist, Dr. Susan Bender. You just started seeing her a couple of months ago when you began to feel that your acne was really interfering with your social life and causing poor self-esteem.

Dr. Bender assured you not to worry, she says that acne is a common health issue for people your age, and after receiving treatment your acne should clear up within a few months. She prescribes you a popular medication that has worked very well for other patients and tells you to apply the cream nightly to all affected areas. You take the prescription and Dr. Bender has you schedule a follow-up appointment with her for next month.

You fill the prescription she gave you and start religiously wearing the cream at night, eager to see positive results. However, the cream burns when applied, causing you to wake up every morning with a very red complexion that is more embarrassing to you than your continuing acne. After a week of using the cream, blisters with a whitish puss start appearing and when they painfully break open, brown marks are left in their place. They looked like scars.

Worried, you call Dr. Bender's office and describe the reaction you've been having to her. An emergency appointment is scheduled for you early the next day. Dr. Bender is very confused about your reaction to the medication until she looks back at your chart and sees that you use another clinical strength dry skin cream during the day. She didn't ask you during your first visit if you were taking any other skin medications. She then leaves the room for a few minutes before coming back.

**Scenario adapted from Nazione and Pace [16]

| Cognitively-Framed Apology | Affectively-Framed Apology |
|---|---|
| Upon returning Dr. Bender says, "Your skin cream is negatively interacting with the acne cream I prescribed. That is what is causing your redness, blisters and brown spots. Unfortunately, those brown spots may leave scars. I recommend you stop using this acne cream immediately and we can try something else. I apologize that this happened. I just spoke with my nurse and we're taking steps to ensure this doesn't happen to another patient. We've added a new spot on our patient visit forms which forces our staff to check for any medications a patient is on each time they have an appointment. These new forms will be used right away. | Upon returning Dr. Bender says, "Your skin cream is negatively interacting with the acne cream I prescribed. That is what is causing your redness, blisters and brown spots. Unfortunately, those brown spots may leave scars. I recommend you stop using this acne cream immediately and we can try something else. I apologize that this happened. I imagine this must be very upsetting for you, especially because when you came to me, you were concerned about your facial appearance. |

**Fig. 1.** Affective and Cognitive Apology Manipulation.

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