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Citation:

Luo, A and Ye, T and Xue, X and Mattila, AS (2021) Appreciation vs. apology: When and why does face covering requirement increase revisit intention? *Journal of Retailing and Consumer Services*, 63. ISSN 0969-6989 DOI: <https://doi.org/10.1016/j.jretconser.2021.102705>

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Document Version:

Article (Accepted Version)

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Appreciation vs. Apology: When and Why Does Face Covering Requirement Increase Revisit Intention?

Abstract

While many retailing businesses have responded to the Covid-19 crisis by instituting various new rules, there is scant research examining how to effectively communicate such preventive measures to customers. This study investigates the joint effect of policy type (mandatory versus voluntary) and message framing (appreciation versus apology) on customers' compliance and revisit intention. An online experiment was conducted with 201 US participants. Results suggest that when the message is framed with appreciation, a mandatory (vs. voluntary) mask-wearing policy causes less reactance, leading to higher compliance and revisit intention. However, such differences are attenuated with apologetic messaging. Practical implications for retailer-customer communications on crisis policies are discussed.

Keywords

Covid-19; policy communication; message framing; compliance; revisit intention

1. Introduction

The Covid-19 pandemic poses an enormous threat to humans across the globe with the highly contagious disease killing millions of people (Jordan, Yoeli, & Rand, 2020; Jung et al., 2020). Without a widely distributed vaccine in hand, individuals must engage in preventive behaviors that can slow the rate of transmission and death (Everett, Colombatto, Chituc, Brady, & Crockett, 2020). Following public policies and government guidelines, many businesses, such as grocery stores and restaurants, have responded to this crisis by instituting a number of new rules and posting signs at the entrance to clarify their policies. Common policies include requiring customers to wear a mask and social distancing in public settings. Some states and cities require face coverings in public places. Therefore, many businesses have made face masks mandatory (e.g., customers are required to wear a mask) while others consider wearing a face mask as a voluntary act (e.g., customers are encouraged to wear a mask). While it is undeniable that wearing a mask is effective in preventing the transmission of the virus, some customers refuse to do so. Many businesses are struggling to convince customers to wear face coverings (Meyersohn, 2020). As a Walmart spokesperson said, “it can be a bit more difficult to enforce this requirement in parts of the country where it is not mandatory.” To avoid antagonizing customers, some businesses have turned to different strategies such as installing plexiglass dividers and enforcing customer count limits. However, requiring customers to wear face coverings is less costly, and therefore, many small businesses such as restaurants and retail stores require face masks. But how to effectively communicate such a requirement to customers? For example, some retail stores utilize an appreciation message to thank customers for their understanding and cooperation,

whereas others apologize for any inconvenience. How do such crisis management policies (e.g., mandatory versus voluntary) and message framing (e.g., appreciation versus apology) jointly influence customers' compliance and revisit intention?

The purpose of this study is to answer the above question and to address several gaps in the literature. First, previous crisis management research has provided fruitful insight for practitioners to survive terrorist attacks (Green, Bartholomew, & Murrmann, 2004), financial crises (Alonso-Almeida & Bremser, 2013; Arrieta-Paredes, Hallsworth, & Coca-Stefaniak, 2020), SARS (Alan, So, & Sin, 2006; Jayawardena et al., 2008) and H1N1 (Lee et al., 2012). However, most of these studies focus on operation management fixes such as updated IT systems, security management, and employee training. The extant research provides little guidance on how to communicate provisional requirements that may cause inconvenience to consumers during the pandemic. Second, previous research indicates that explicit, strong, and forceful language might elicit reactance, thus resulting in low compliance (Shen, 2015). However, it is not clear how such reactance might influence customer responses to the retailer (e.g., revisit intention). Lastly, previous research on appreciation/apology framing focuses on service failures, service recovery, and prosocial behaviors (Bernstein & Simmons, 1974; Fehr & Gelfand, 2010; Joireman, Grégoire, & Tripp, 2016; McCullough et al., 2001) with scant attention to customer responses to retailers and service providers during crises.

In this research, we propose that a mandatory policy might be a double-edged sword. On the one hand, according to the psychological reactance theory (Brehm, 1966), a mandatory (vs. voluntary) policy may lead to high levels of reactance due to its highly restrictive nature. On the other hand, a mandatory policy might be considered more

effective in preventing virus transmission as everyone has to follow the rules. We argue that appreciation/apology framing can shift customers' attention between these two coins of the mandatory policy, resulting in different levels of reactance, compliance, and revisit intention. By examining the joint effect of policy type (mandatory vs. voluntary) and message framing (appreciation vs. apology) on customers' compliance and revisit intention, and the underlying mechanism – reactance, our research adds to the academic literature on crisis management, health communication and message framing. Also, to the best of our knowledge, we are the first to systematically examine the effectiveness and the underlying mechanism of Covid-19 prevention policies framed with either appreciation or apology message, a solution that is easy to employ. In doing so, we provide insight for practitioners on how to effectively implement mask-wearing policies in the retail context.

2. Literature Review

2.1 Psychological Reactance Theory

Psychological reactance refers to “the motivational state that is hypothesized to occur when freedom is eliminated or threatened” (Brehm & Brehm, 1981, p. 37). The reactance theory has four essential elements: perceived freedom, threat to freedom, reactance, and restoration of freedom (Brehm & Brehm, 1981). This framework suggests that when perceived freedom is threatened or restricted, an individual becomes psychologically aroused and motivated to restore the threatened freedom (Brehm, 1966; Dillard & Shen, 2005; Wicklund, 1974). Consequently, the individual tends to either directly engage in

the forbidden behavior or indirectly increase his/her liking for the proscribed act. For example, research on public health communication suggests that when presented with explicitly directive and overtly persuasive health messages (e.g., anti-smoking), young people are often unwilling to comply and more likely to reject the advocated behavior as a means of restoring their threatened freedom (Grandpre et al., 2003).

Perceived threat to freedom, the core antecedent of reactance, is often associated with the use of controlling, assertive, intrusive, and explicit language (Brehm & Brehm 1981; Miller et al., 2007). Such explicit messages or controlling commands frequently include forceful wording such as “ought,” “must,” and “should.” Previous research suggests that the more direct the message is, the stronger its threat to an individual’s need for autonomy and self-determination (Jenkins & Dragojevic, 2013). There is plenty of evidence to suggest that explicit, strong, and forceful language threatens an individual’s freedom, further resulting in resistance to persuasion (Shen, 2015). The boomerang effect (e.g., negative responses to the persuasion and refusal to comply) of assertive messages has been documented in various contexts. For instance, the use of assertive (vs. non-assertive) language in advertisements is ineffective, causing higher reactance and decreasing brand liking among committed consumers (Zemack-Rugar, Moore, & Fitzsimons, 2017). Similar backfiring effects have been revealed for explicitly persuasive messages regarding social and environmental issues (Kim et al., 2017; Rains & Turner, 2007), causing people to react with anger and be more likely to reject the advocacy.

In addition to the strength or intensity of language, previous studies have examined a number of other factors that may exacerbate or diminish reactance such as severity of the consequences (Rains & Turner, 2007), issue involvement (Quick, Scott, & Ledbetter,

2011), magnitude and legitimacy of the request (Rains & Turner, 2007; Zhang & Sapp, 2013), awareness of the intent (Laurin, Kay, Proudfoot, & Fitzsimons, 2013), and absoluteness of the restriction (Laurin, Kay, & Fitzsimons, 2012). Rains and Turner (2007), for example, suggest that health communications tend to result in less reactance when the topic has substantial (i.e., life-threatening) consequences compared to minor consequences. Zhang and Sapp (2013) indicate that the more the request is perceived as legitimate, the less reactance it will cause. In the context of government policies in the workplace, Laurin and colleagues (2012) found that participants responded to absolute restrictions (e.g., restrictions that were sure to come into effect) more favorably and displayed less reactance compared to non-absolute restrictions (e.g., restrictions have a small chance of not coming into effect). Moreover, when participants' attention was not drawn to the restrictive nature of a policy, they reacted more favorably and displayed fewer reactant responses (Laurin et al., 2013).

Retailing and service businesses can choose to communicate mask requirement policies as either mandatory or voluntary (e.g., wearing a mask is required vs. wearing a mask is strongly encouraged). In addition to compliance, we are interested in how such policies affect customers' perceptions of the source of the message (i.e., the retailer). While a mandatory policy seems more forceful and controlling, both message types use explicit and directive language. Thus, it is possible that mandatory (vs. voluntary) policies induce slightly higher levels of reactance. On the other hand, previous research shows that people have more positive attitudes toward a mandatory (vs. voluntary) HPV vaccination policy when they perceive the severity to be higher (Bell, McGlone, & Dragojevic, 2014). Since the severity of Covid-19 is widely recognized, customers may

prefer a mandatory policy and consider it as necessary and more effective in preventing transmission. To explain these two possible directions, we consider language framing as an important factor that might influence customers' responses to the two policies by shifting their attention to either the effectiveness or the restrictive nature of the policy.

2.2 Message Framing

Numerous studies have examined the impact of nuances in message framing on peoples' perceptions, judgments, and behaviors (Mogilner & Aaker, 2009; Packard, Moore, & McFerran, 2018; Patrick & Hagtvedt, 2012; Wolf, Lee, Sah, & Brooks, 2016). For example, Patrick and Hagtvedt (2012) examine how the framing of self-talk (I don't vs. I can't) influences peoples' choices when faced with temptations. They indicate that compared to "I can't", "I don't" evokes personal will with a firm attitude rather than a situational response, resulting in higher degrees of empowerment making people less tempted. Mogilner and Aaker (2009) suggest that emphasizing "time" (vs. "money") increases personal connection with the product by shifting customers' attention to product experience instead of product possession, leading to more favorable attitudes and purchase decisions. Moreover, Packard, Moore and McFerran (2018) demonstrate when the service provider uses "I" rather than "we" when communicating with the customer, the service provider is perceived as more empathetic, thus enhancing customer satisfaction.

In sum, these studies suggest that peoples' focus can shift depending on the message framing. Building on such findings, we posit that framing the mask requirement by stating "thank you" vs. "sorry" can influence customer responses by shifting their attention to either the effectiveness or the restrictive nature of the policy.

2.3 Apology vs. Appreciation

Psychologically, apology is a remedial strategy to reestablish a relationship by expressing guilt and remorse (Howell, Turowski, & Buro, 2012; Leary, 2010; Takaku, 2001).

Previous research asserts that apology implies the apologizers' admission of fault with regret (Darby & Schlenker, 1982; Kramer-Moore & Moore, 2003). In the service recovery context, apology is a form of symbolic recovery (Roschk & Kaiser, 2013; Tsarenko & Tojib, 2011; Wirtz & Mattila, 2004). It is an effective way to mitigate negative feelings following a service failure and to restore satisfaction by eliciting conciliatory responses such as forgiveness (Fehr & Gelfand, 2010; Joireman et al., 2016; Tsarenko & Tojib, 2011). Unlike apology, appreciation implies that the beneficiaries approve the benefactors' contributions and want to show their respect and gratitude (McCullough, Kimeldorf, & Cohen, 2008). In the service domain, Rind and Bordia (1995) reveal that appreciation can increase tipping. You, Yang, Wang, & Deng (2020) demonstrate that appreciation is more effective than apology in restoring customer satisfaction. While an apology may reduce customers' negative feelings immediately after a service failure, it can also induce blame attributions (You et al., 2020). Therefore, appreciation might result in more favorable outcomes as it shifts the customer's attention from the service provider's fault to their own self-esteem, thus enhancing satisfaction (You et al., 2020).

In our study context, appreciation for mask-wearing reminds customers of their responsibility as contributors to public health. Customers may thus focus more on the effectiveness of the policy rather than the restrictive nature of the policy. Therefore, when customers think public health is more important than their freedom, they may have less

reactance to a mask requirement. Since a mandatory policy is more effective in preventing transmission, customers may show less reactance to it. However, apologetic messages may highlight the restrictive nature of the policy. If so, the notion of freedom may become salient. Though a mandatory policy seems more forceful and controlling, both mandatory and voluntary policies are restrictive as they pose a threat to an individual's freedom. Therefore, framing the message with apology might lead to similar levels of compliance and revisit intention regardless of the policy type. Thus, we put forth the following predictions:

H1: Customers will be more willing to comply with a mandatory (vs. voluntary) mask-wearing policy when the message involves appreciation. Such differences will be attenuated with an apologetic message.

H2: A mandatory (vs. voluntary) policy will lead to higher revisit intention when the message involves appreciation. Such differences will be attenuated with an apologetic message.

H3: When the message involves appreciation, reactance will mediate the impact of policy type (mandatory vs. voluntary) on compliance, such that a mandatory policy will lead to less reactance and increased compliance. Such mediation will be attenuated with the apologetic message.

H4: When the message involves appreciation, reactance will mediate the impact of policy type (mandatory vs. voluntary) on revisit intention, such that a mandatory policy will lead to less reactance and increased revisit intention. Such mediation will be attenuated with the apologetic message.

The conceptual framework is shown below:

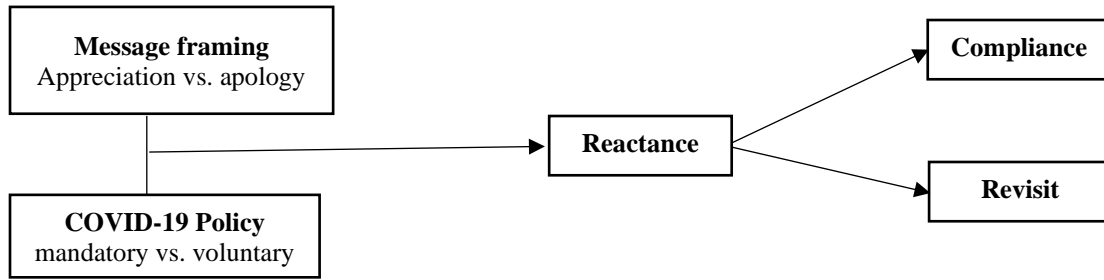


Figure 1. Conceptual framework

3. Methodology

3.1 Pretest

To gain an initial understanding of people's preference for a mandatory vs. voluntary mask-wearing policy, a pretest was conducted with 99 U.S. participants recruited from Mturk in June 2020. Participants were asked to indicate the extent they think the policy of wearing a mask when entering a grocery store should be mandatory or voluntary (bipolar scale; 1=mandatory/all customers are required to wear a mask before entering the store, 7=voluntary/all customers are encouraged to wear a mask before entering the store) and to explain their choice.

The majority of participants (56%) indicated a preference for a mandatory policy (with a score below the mid-point), 40% preferred a voluntary policy (with a score above the mid-point), and 4% were neutral (with a score of 4). Forty-five participants gave specific explanations for their preferences. Most of these explanations (80%) reflected the importance of mask-wearing during the pandemic, and that the store should take care of

its customers and employees. In other words, a mandatory policy is needed to ensure everyone's safety. Some participants (20%) preferred a voluntary policy, because they think everyone has a right to personal freedom and people should be trusted to make wise decisions. These initial results support our prediction that there are two divergent views on mask-wearing policies and that safety considerations (vs. limit of freedom) seem to be more salient.

Table 1. Participants' explanations for their preferred policy

Examples of participants' responses	
Mandatory	In this time where we are facing a highly contagious virus, we should take no chances and require everyone to protect themselves and others.
	Wearing masks is one of the best ways to combat the spread of COVID and there is almost no legitimate reason why it shouldn't be mandatory
	It is for the best interest of everyone's health to prevent further spread of the virus
	Because it's a matter of life or death in many cases. It can even cost the life of someone that doesn't enter that store if this policy is not enforced.
	it adds another level of protection for everyone while the pandemic is still active
	It is for the safety of myself and vulnerable others.
	I think that everyone has a responsibility to wear a mask. It is a large part of controlling the spread of the virus. If people don't like the policy, they can look elsewhere or just not go shopping and order for delivery.
	It should be mandatory to curb the spread of the virus and not to infect her staffs too.
Voluntary	Everyone has a right of personal freedom/liberty to do as they see fit for their own person, so the policy should be voluntary.

	I think people should be trusted to make wise decisions and care for themselves.
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3.2 Study design

The main study employed a 2 (Mask wearing policy: mandatory vs. voluntary) \times 2 (language framing: appreciation vs. apology) between-subjects factorial design.

Participants were recruited via Mturk in June 2020, a widely used online platform that enables researchers to collect data conveniently with sufficient quality (Buhrmester, Talaifar, & Gosling, 2018; Paolacci, Chandler, & Ipeirotis, 2010). Of the total sample of 201 US participants, 86 percent were between the ages of 18 and 49, 65 percent were male, 77 percent had a four-year college degree, and 67 percent earned more than \$40,000 annually.

Participants were randomly assigned to one of the four conditions. They were asked to imagine that they went to a grocery store to pick up the store's signature mac & cheese dish and saw a sign at the door. The policy was either mandatory (e.g., "All customers are required to wear a mask before entering the store) or voluntary (e.g., "All customers are strongly encouraged to wear a mask before entering the store"). The message was framed by using appreciation (e.g., "Thank you for your cooperation. We appreciate it.") or apology (e.g., "Sorry for any inconvenience. Our apologies.")

Next, participants were asked to indicate the likelihood of complying with the request "How willing are you to wear a mask when entering the store?" (Jordan et al., 2020). Reactance was captured via five items adapted from Jonas et al. (2009) (e.g., "How much would this policy bother you?" "How much would you feel restricted in your freedom of

choice with this policy?"; 1 = not at all, 7 = very much; $\alpha=0.91$). Consistent with Han, Back, and Barrett (2009), revisit intention was captured via three items (e.g., "I am willing to revisit this grocery store in the near future."; $\alpha=0.90$). To assess the effectiveness of our experimental manipulations, participants were asked to indicate their agreement with two statements: "According to the policy posted by the grocery store, I must wear a mask or I can't enter the store," "According to the policy posted by the grocery store, I am encouraged to wear a mask but I can still enter the store if I don't." Scenario realism was also assessed "How would you rate the realism of the scenario?" (1 = unrealistic, 7 = realistic). Finally, participants completed demographic questions and were thanked for their participation.

4. Results

4.1 Manipulation Checks

Scenarios were perceived as realistic across the two policies ($M_{\text{mandatory}} = 6.35$, $SD_{\text{mandatory}} = 1.05$; $M_{\text{voluntary}} = 6.04$, $SD_{\text{voluntary}} = 0.99$) and the two framing conditions ($M_{\text{appreciation}} = 6.25$, $SD_{\text{appreciation}} = 1.01$; $M_{\text{apology}} = 6.17$, $SD_{\text{apology}} = 1.06$). A MANOVA was used to check the manipulation of policy type since two items were used to capture the nature of the policy (mandatory or voluntary). The results (Table 2) indicate that the manipulation of policy type was successful ($p < 0.001$) and was not influenced by the message framing ($p > 0.05$) or the interaction ($p > 0.05$). In addition, respondents in the mandatory policy condition agreed that wearing a mask is mandatory ($M_{\text{appreciation}} = 6.25$, $SD_{\text{appreciation}} = 1.35$; $M_{\text{apology}} = 6.40$, $SD_{\text{apology}} = 1.18$) more than their counterparts in the voluntary policy condition ($M_{\text{appreciation}} = 3.24$, $SD_{\text{appreciation}} = 2.26$; $M_{\text{apology}} = 3.94$, $SD_{\text{apology}} = 2.34$) (mean difference = 3.01, $t = 7.86$, $p < .001$ for appreciation; mean difference

= 2.46, $t = 6.59$, $p < .001$ for apology). On the other hand, respondents in the voluntary condition agreed that wearing a mask is optional ($M_{\text{appreciation}} = 5.65$, $SD_{\text{appreciation}} = 1.85$; $M_{\text{apology}} = 5.89$, $SD_{\text{apology}} = 1.55$) more than their counterparts in the mandatory condition ($M_{\text{appreciation}} = 2.94$, $SD_{\text{appreciation}} = 2.23$; $M_{\text{apology}} = 3.04$, $SD_{\text{apology}} = 2.44$) (mean difference = 2.71, $t = 6.50$, $p < .001$ for appreciation; mean difference: 2.85, $t = 7.26$, $p < .001$ for apology). As a result, our manipulations were effective.

Table 2. Manipulation Check

Source	Multivariate Pillai's Trace	Degree of Freedom	F-Value	P-Value
Multivariate Results				
<i>Main Effects</i>				
Policy type	0.41	2	68.62	<0.001
Message framing	0.03	2	2.57	0.079
<i>Interaction Effect</i>				
Policy type x Message framing	0.01	2	0.95	0.388

4.2 Compliance

To test H1, we conducted a two-way ANOVA on customers' compliance with the policy. The results are shown in Table 3. The main effect of policy type is significant ($F(1, 197) = 5.99$, $p < 0.05$). More importantly, it is qualified by a significant interaction between policy type and message framing ($F(1, 197) = 4.33$, $p < 0.05$). The results of simple effect contrasts (see Figure 2) show that participants were more willing to comply with the mandatory policy than with the voluntary policy in the appreciation condition ($M_{\text{mandatory}} = 6.65$, $SD_{\text{mandatory}} = 0.82$; $M_{\text{voluntary}} = 5.72$, $SD_{\text{voluntary}} = 1.71$; $F(1, 197) = 9.94$, $p = 0.002$). However, in the apology condition, customers' willingness to comply was

similar across the two policies ($M_{\text{mandatory}} = 6.25$, $SD_{\text{mandatory}} = 1.62$; $M_{\text{voluntary}} = 6.17$, $SD_{\text{voluntary}} = 1.49$; $F(1, 197) = 0.07$, $p = 0.792$). Therefore, H1 is supported.

Table 3. The ANOVA results (Dependent variable: Compliance)

Source	Sum of Square	Degree of Freedom	F-Value	P-Value
Constant	7659.75	1	3643.33	<0.001***
Policy type	12.60	1	5.99	0.015*
Message framing	0.03	1	0.02	0.901
Policy type x Message framing	9.10	1	4.33	0.039*
Error	414.17	197		
Total	8184.00	201		

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

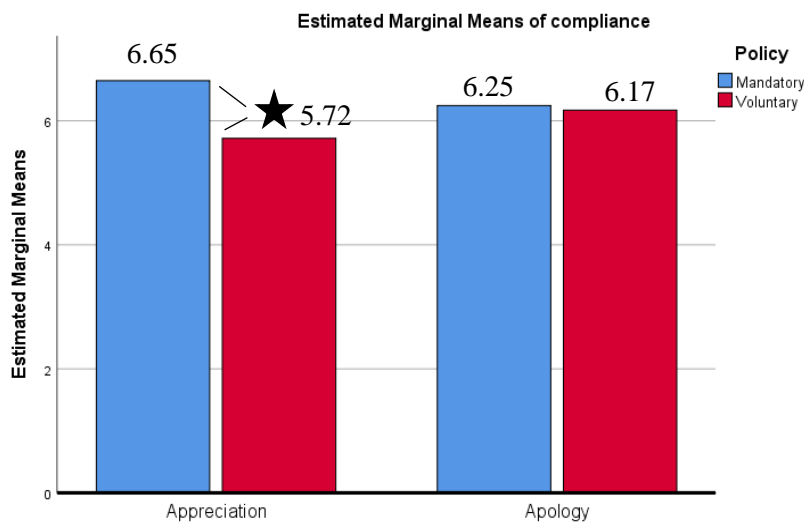


Figure 2. Interaction plot for compliance

4.3 Revisit intention

To test H2, a two-way ANOVA was conducted by using revisit intention as the dependent variable. The results are shown in Table 4. The interaction of policy type and message framing is significant ($F(1, 197) = 10.21$, $p < 0.01$) and it is visualized in Figure 3. Specifically, participants reported higher levels of revisit intention when the policy of

wearing a mask was mandatory (vs. voluntary) and framed with appreciation ($M_{\text{mandatory}} = 5.85$, $SD_{\text{mandatory}} = 1.09$; $M_{\text{voluntary}} = 5.01$, $SD_{\text{voluntary}} = 1.60$; $F(1, 197) = 8.48$, $p = 0.004$). Conversely, participants reported similar levels of revisit intention across the two types of policy in the apology condition ($M_{\text{mandatory}} = 5.24$, $SD_{\text{mandatory}} = 1.74$; $M_{\text{voluntary}} = 5.68$, $SD_{\text{voluntary}} = 1.02$; $F(1, 197) = 2.52$, $p = 0.114$). Therefore, H2 is supported.

Table 4. The ANOVA results (Dependent variable: Revisit intention)

Source	Sum of Square	Degree of Freedom	F-Value	P-Value
Constant	5919.82	1	2975.04	<0.001***
Policy type	1.94	1	0.97	0.325
Message framing	0.04	1	0.02	0.888
Policy type x Message framing	20.32	1	10.21	0.002**
Error	391.99	197		
Total	6375.56	201		

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

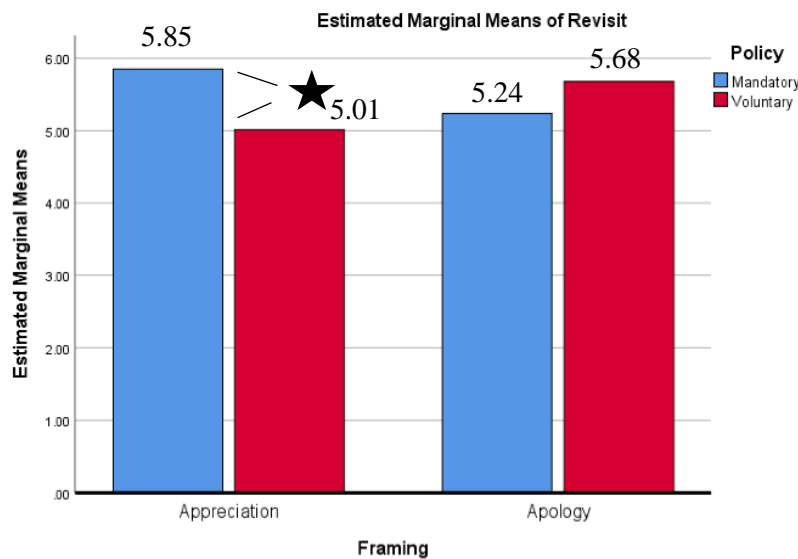


Figure 3. Interaction plot for revisit intention

4.4 Mediation analysis

To examine the mediating effect of reactance (H3 and H4), PROCESS Model 7 was used. The policy type (mandatory vs. voluntary) was entered into the moderated mediation model as the independent variable. Mandatory policy was coded as 0 and voluntary policy was coded as 1. The type of message framing (appreciation vs. apology) was entered into the model as the moderator. Appreciation was coded as 0 and apology was coded as 1. Perceived reactance was the mediator.

The interaction between policy type and message framing type significantly predicts reactance ($B = -1.09$, $SE = 0.45$, $95\% CI = [-1.970, -.207]$). Specifically, a mandatory (vs. voluntary) policy elicited less reactance when the policy was framed with appreciation ($M_{\text{mandatory}} = 2.25$, $SD_{\text{mandatory}} = 1.43$; $M_{\text{voluntary}} = 3.04$, $SD_{\text{voluntary}} = 1.49$; $F(1, 197) = 6.05$, $p = 0.015$). However, in the apology condition, the reactance was similar across the two policies ($M_{\text{mandatory}} = 3.10$, $SD_{\text{mandatory}} = 1.83$; $M_{\text{voluntary}} = 2.8$, $SD_{\text{voluntary}} = 1.47$; $F(1, 197) = 0.921$, $p = 0.338$). Reactance also significantly predicted compliance ($B = -0.47$, $SE = 0.06$, $95\% CI = [-.575, -.355]$) and revisit intention ($B = -0.52$, $SE = 0.05$, $95\% CI = [-.631, -.428]$). Furthermore, the index of moderated mediation is significant ($B = 0.51$, $SE = 0.24$, $95\% CI = [.099, 1.029]$ for compliance; $B = 0.56$, $SE = 0.26$, $95\% CI = [.101, 1.106]$ for revisit intention). Specifically, reactance mediated the impact of policy type on compliance and revisit intention in the appreciation condition ($B = -0.37$, $SE = 0.16$, $95\% CI = [-.702, -.083]$ for compliance; $B = -0.41$, $SE = 0.17$, $95\% CI = [-.758, -.102]$ for revisit intention). However, reactance failed to mediate the impact of policy type on compliance and revisit intention in the apology condition ($B = 0.14$, $SE = 0.16$, $95\% CI =$

[-.129, .485] for compliance; $B = 0.15$, $SE = 0.18$, $95\% \text{ CI} = [-.157, .524]$ for revisit intention). Thus, H3 and H4 are supported.

5. Discussion

This study provides some guidance on how to communicate health prevention requirements (e.g., mask-wearing) with customers during the COVID-19 pandemic. Specifically, we examine the joint effect of policy type (mandatory versus voluntary) and message framing (appreciation versus apology) on customers' compliance and revisit intention. Qualitative data in the pretest reveal that there are two divergent views on mask-wearing policies and that safety considerations (vs. threat to freedom) seem to be more salient. Findings from the main study provide further support for our predictions. When the message was framed with appreciation, a mandatory (vs. voluntary) mask-wearing policy induced less reactance, leading to higher compliance rate and revisit intention. However, such differences were attenuated with apologetic messaging.

5.1 Theoretical implications

This research makes several theoretical contributions. First, it adds to the literature on crisis management and health communication by showing the interaction effect of policy type and message framing on customer responses. Previous research has examined how businesses respond to various epidemics (e.g., SARS, H1N1), natural disasters (e.g., Hurricane Harvey) and human-made disasters (e.g., terrorist attacks, financial crisis; Jayawardena et al., 2008). However, the main focus of these studies is on operation management issues (Barton, 1994; Israeli, 2007; Jayawardena et al., 2008). There is scant guidance on how companies should communicate their crisis management policies

externally, in particular during health-related crises (Liu & Pennington-Gray, 2015). Effective communication strategies are extremely important during a global health crisis such as the Covid-19 pandemic (Lim et al., 2020). Recent studies have examined how to use various communication strategies to mitigate undesirable customer behaviors such as panic buying and stockpiling (Kim et al., 2020; Laato et al., 2020). Our research provides empirical evidence to demonstrate the role of message framing in driving desirable customer behaviors (e.g., compliance). Moreover, effective communications can modify customer perceptions of the crisis, remedy negative outcomes and repair brand image (Coombs, 2007; Liu et al., 2015), eventually contributing to a positive impact on the company (McKercher & Chon, 2004). Our study findings suggest that effective communication regarding crisis-related policies (e.g., face-covering requirement) can enhance revisit intention.

Second, this research extends our understanding of psychological reactance in health policy communication. Though the psychological reactance theory suggests that a mandatory (vs. voluntary) policy tends to elicit more reactance due to its forceful and restrictive nature, such an effect can be eliminated or even reversed when taking into consideration other situational factors. Previous research has identified several factors, such as severity of consequences (Bell et al., 2014; Rains & Turner, 2007) and issue involvement (Quick et al., 2011), that might moderate the effect of a mandatory (vs. voluntary) policy on people's attitude and compliance intention. Our research enriches this stream of literature by identifying message framing as a novel contextual factor. While some businesses believe that enforcing pandemic-related policies might antagonize customers (Meyersohn, 2020; Severson, 2020), we demonstrate that reactance to a

mandatory mask-wearing policy depends on message framing. Framing a mandatory policy with appreciation (vs. apology) can shift the customer's attention from the restrictive nature of the policy to public health, thus resulting in less reactance. Our findings are in line with previous research showing that signaling the importance of the topic can reduce reactance (Kronrod, Grinstein, & Wathieu, 2012). Moreover, we extend previous research on health policy communication from non-business contexts to a retailing setting, and show that the impact of reactance as a psychological mechanism explaining customer responses to face mask policies is not limited to compliance. Our findings indicate that a mandatory mask-wearing policy framed with appreciation leads to lower levels of reactance, thus contributing to a positive downstream consequence such as revisit intention.

Finally, this study contributes to research on message framing. Though previous research has investigated the framing effect from various angles such as gain/loss, local/global, emotional/rational in policy communication (Bertolotti & Catellani, 2014; Göksen et al., 2002; Kolandai-Matchett, 2009), the current study is the first to investigate the effect of appreciation/apology framing on customer responses to crisis management policies. While Chu et al. (2020) identify several communication strategies, such as providing explanations and early disclosure, to mitigate the negative influence of mandatory policies, our results show that a mere gratitude expression can make the mandatory policy effective in inducing compliance and revisit intention.

5.2 Practical implications

A major point of contention amid the COVID-19 pandemic is whether strict limitations on citizen behaviors restrict people's freedom (Appiah, 2020). Many people view measures such as mask rules, social-distancing policies and bans on large gatherings as intolerable autocracy, infringing on individuals' liberties and autonomy (Andrew, 2020; Appiah, 2020; Buchwald, 2020). For instance, in December 2020, a group of Arizona anti-maskers paraded through Walmart and Target stores to protest COVID-19 regulations (Crowley, 2020). Many retail stores are struggling to convince customers to comply with mask-wearing requests via either forceful requirements or more discretionary policies. As the psychological reactance theory suggests, consumers high in reactance tend to reject advocated behaviors to restore their threatened freedom (Grandpre et al., 2003). We suggest that shifting consumers' attention to the positive side of the policy, which can effectively diminish perceived reactance, might be an effective solution to the problem.

Specifically, our findings reveal that communicating "forceful" mask requirements with appreciation framing increases compliance. Such framing shifts the customer's attention from the restrictive nature of the policy to their civic responsibility (e.g., protect public health). To increase compliance, retailers can remind customers of their contributions to public health by clarifying their reasons for gratitude. For example, statements such "thank you for showing courtesy to others" or "thank you for helping to ensure the safety and well-being of our customers and team members" might be effective in inducing compliance.

Google Trends in December 2020 shows a dramatic 26% decrease in the use of retail and grocery services in the United States. This is partly due to the increasing

governmental regulations and partly due to individuals' choice to stay put (Bartik et al., 2020; Google, 2020; Laato et al., 2020). Therefore, boosting consumers' confidence to come back via effective policy statements is quite a tussle for many retailers. Contrary to the intuition that mandatory policies might create confrontation and turn customers away (Meyersohn, 2020), our findings suggest otherwise. Framing a mandatory mask-wearing policy with appreciation reduces reactance as customers may feel that the company is concerned about their health and well-being, thus increasing revisit intention. Retail stores might want to use thank-you signs, posters and information kiosks to communicate mandatory policies, not only to comply with state guidelines but also to win customers back. They can also use online communications (e.g., website messages, social media posts) to reassure that it is safe to shop in the store (e.g., messages highlighting the strict cleaning procedures). In sum, retailers might want to use a combination of a "mandatory policy with appreciation framing" for effective crisis communications.

5.3 Limitations and future research

Our research was conducted in the early stages of COVID-19 (June 2020) when many grocery stores had just started to implement a mask-wearing policy. At that time, it was not uncommon for consumers to have mixed attitudes and reactions to such a policy. However, as the situation of COVID-19 keeps involving, new factors such as the vaccination rollout and new CDC guidelines render mask-wearing policies less important. Therefore, our findings apply to the early stages of the crisis. Moreover, individual factors such as people's acceptance of face masks and usage frequency may play a role in their responses to face masking policies. For people with high levels of mask acceptance and frequent use, their responses to retailers' crisis-related policies (e.g.,

face-covering requirements) may be positive regardless of the policy type or message framing.

In addition, it is well documented that individuals' responses to message framing are culture-dependent (Jonas et al., 2009; Mattila, 2018). For instance, previous research suggests that significant differences exist in reactance to assertive environmental advertising between South Koreans and Americans (Kim et al., 2017). Similarly, the effects of mandatory/voluntary policy and appreciation/apology messages might vary across cultures. Future research should explore the moderating role of culture (e.g., individualism vs. collectivism) and other message framing methods (e.g., fear appeal vs. prosocial appeal) in the pandemic context.

Although this research demonstrates that reactance explains the interaction effect of policy type and message framing, there might be other alternative mechanisms. The first is perceived conscientiousness of the store, as consumers may feel that the retailer has their best interests at heart by implementing a mandatory policy. In our pretest, the most frequently stated reason was safety concerns for preferring a mandatory policy and personal freedom for preferring a voluntary policy. However, none of the respondents explicitly mentioned conscientiousness of the store. Thus, we didn't include perceived conscientiousness of the store in our framework. Future research should investigate the effect of reactance and perceived conscientiousness in other communication contexts involving newly implemented policies. The second potential mechanism is processing fluency, which is an important factor driving the "matching effect" in the communication and persuasion literature (Lee & Aaker, 2004; Teeny, Siev, Briñol, & Petty, 2020).

However, this account may be less critical in our study context since our messages were very simple, thus not requiring large amounts of cognitive processing.

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Appendix

Sample scenario (Mandatory policy + Appreciation framing)

