Article:
Iveson, A, Hultman, M, Davvetas, V orcid.org/0000-0002-8905-7390 et al. (1 more author) (2023) Less speed more haste: the effect of crisis response speed and information strategy on the consumer-brand relationship. Psychology and Marketing, 40 (2). pp. 391-407. ISSN 0742-6046

https://doi.org/10.1002/mar.21726

Less speed more haste: the effect of crisis response speed and information strategy on the consumer-brand relationship

Dr Abbie Iveson
The University of Manchester
Alliance Manchester Business School, Booth Street West
M15 6PB, Manchester, United Kingdom
abbie.iveson@manchester.ac.uk

Dr Magnus Hultman
Brock University
812 Sir Isaac Brock Way,
St. Catharines, ON L2S 3A1, Canada
mhultman@brocku.ca

Dr Vasileios Davvetas
University of Leeds
Maurice Keyworth Building, Clarendon Road
LS6 1AN, Leeds, United Kingdom
v.davvetas@leeds.ac.uk

Prof. Pejvak Oghazi
Södertörn University
Alfred Nobels allé 7, 141 89 Huddinge, Sweden
pejvak.oghazi@sh.se

Less speed more haste: the effect of crisis response speed and communication strategy on the consumer-brand relationship

Abstract

This paper investigates the relationship between firm crisis behavior and the resulting consumer–brand relationship response. Drawing from theoretical traditions in brand transgressions, service failure, and crisis communications, we use longitudinal survey data combined with archival social media data to empirically test the effect of crisis response speed and crisis information strategy on the short-term consumer crisis response evaluations (1 month after crisis response), and the long-term consumer-brand relationship (1 year after crisis response). Results show that, contrary to intuitive expectations, a faster firm response is not always better, as a slower response was found to result in higher crisis response evaluations. We also show that this effect depends on the consistency of the communication strategy with the first active response. Specifically, when a firm prioritizes safety information *(instructing strategy*), a faster response is better. Whereas, when the firm prioritizes well-being information (*adjusting strategy*), a slower response is better. We argue the counterintuitive finding that a slower response is better implies that reacting too quickly may signal rashness and unpreparedness to the customer, leading to more negative evaluations. We term this distinction the difference between being responsive (fast but considered) and reactive (faster but rash).

Keywords: crisis speed; crisis communication; crisis response strategies; consumer-brand relationship; message framing

1 Introduction

A crisis is defined as "an event that is an unpredictable, major threat that can have a negative effect on the organization, industry, or stakeholders if handled improperly" (Coombs, 1999, p. 2). The power of a crisis is undoubtable, with many real-life successes (e.g., the Tylenol poisoning scandal) and failures (e.g., VW's emission scandal) highlighting the importance of a well devised response to maximize reputational protection post-crisis. For example, in the case of Tylenol, the firm quickly and decisively advertised the potential poisoning of their products, putting their own reputation at risk in the short-term but recovering their reputation in the long-term (Latson, 2014). On the contrary, VW continually delayed their active response to the defunct devise accusations, leading to much greater reputational damage in the long-term (Jung et al., 2019).

The extant literature supports the notion that quick and decisive action leads to a better crisis evaluation from stakeholders (Coombs, 2020; Kim & Sung, 2014). Complimentary to the actions of the firm, the manner in which it communicates whilst in a crisis is also shown to be of crucial importance to the consumers' evaluations of the response (Coombs, 2015). Kim et al. (2011) argue that there are two initial base responses available to a firm in reaction to a crisis. First, the firm may employ an instructing response. Instructing communication focuses on providing the information necessary to ensure the safety of their stakeholders (Kim et al., 2011). On the other hand, firms may choose to employ an adjusting communication strategy, offering psychological and well-being support to signal care, empathy, and understanding (Cheng, 2016). In this way, firms are faced with four options, they can react quickly or slowly and they can communicate using primarily adjusting or instructing information. However, no research has investigated which of the four options leads to better customer reactions in the short- and/or in the long-run. We aim to address this question in this study.

In addition, a key purpose of crisis management is to recover and rebuild the firm's relationship with its stakeholders. However, few studies investigate the long-term effects of the crisis strategy on the consumer's relationship with the brand. It seems logical that such an approach is necessary when determining the overall success of a crisis strategy, as previous research has shown that consumers'

responses to brand transgressions can change over time (Grégoire et al., 2009). When investigating the benefits of an informative versus empathetic communication response, it seems reasonable to assume that the relationship lens will have important implications on the interpretation of a 'successful' crisis management strategy. It may be that although an informative response improves short-term evaluation, an empathetic response will lead to a stronger consumer-brand relationship (CBR) in the long-term. Indeed, it is argued that empathetic understanding is critical in building relationships and interactions with others (Rogers, 1959), thus providing support for the use of an adjusting strategy in the long-term (see Table 1 a detailed summary of extant research in these areas). Therefore, this study's second aim is to investigate this additional relational dimension.

- Table 1 here -

Consequently, our study investigates the effect of crisis response speed on short-term crisis response evaluation and the long-term consumer-brand relationship (CBR) depending on the type of information strategy used by the firm. We employ several data sources in our research design. Our multi-data approach includes (1) objective data from fifteen UK universities measuring the timing of the move from face-to-face to fully online teaching following the COVID-19 outbreak, (2) content analysis of data from each of these universities' Twitter accounts to establish the type of crisis communication used and (3) survey data from students at the focal universities both one month after (short-term), and one year after the official UK lockdown (long-term) to measure the student's short-term crisis evaluation and long term consumer-brand relationship. Combining objective data and longitudinal panel survey data offers a real-time, empirical test of how brands could respond to crises of an ongoing and time-pressing nature.

Our research contributes to the brand crisis literature by showing that, contrary to conventional knowledge, a faster crisis response may not be always better. A number of different studies argue that brands' should respond quickly to crises to signal efficiency, control, and to be the first to shape the storyline (Kim et al., 2014). We show instead that a slower, yet measured, response actually results in greater

consumer evaluations. We specifically find that when brands emphasize safety information, the traditional notion of 'a faster response is better' is true. However, if the brand emphasizes well-being information they may not need to react as fast; in fact, a slower, more measured response is actually preferred by consumers. This finding contributes to situational crisis communication theory (SCCT) theory (Coombs, 2015; Park, 2017) – which has thus far proposed instructing (safety) information as a base response, and adjusting (well-being) information as a supplementary response – by showing that the 'supplementary' adjusting response can actually be preferential depending on the consistency with the firm's actions. It also contributes to the consumer-brand transgression literature by showing that a brand's initial response to a crisis has downstream effects on the long-term consumer-brand relationship.

The remainder of this paper explains the pertinent literature surrounding our topic and guides the development of our hypotheses and conceptual model. Subsequently, the data collection and analytical methods are described, followed by the study results. The paper concludes with a discussion of the findings in relation to the current literature, managerial implications of our results and study limitations.

2 Research Background and Hypotheses

2.1 Justice Theory and Speed of Crisis Response

A growing stream of research applies justice theory to crisis and service recovery events to help understand stakeholder reactions to a firms' recovery response (Sparks & McColl-Kennedy, 2001). Justice theory posits that a customer assesses the fairness of the service recovery on the basis of three fairness dimensions; (1) distributive, (2) procedural, and (3) interactional. Distributive fairness refers to the customer's perception of the fairness of the event outcome. Procedural fairness relates to the means at which the outcomes were delivered. Interactional fairness refers to the manner in which the outcomes were communicated. Each dimension has been investigated in the literature (Mattila & Cranage, 2005; Wirtz & Mattila, 2004), however, procedural justice is thought to be particularly important in cases where a positive outcome for both parties is unavailable. In that case, focusing on the way in which the issue is handled

becomes more important than the outcome of the recovery (Greenberg, 1990). In a crisis context, the outcome is often outside the firm's control and therefore how the firm handles the crisis event can become even more salient. Indeed, studies show that the procedural fairness dimension has a greater effect on consumer evaluations than distributive or interaction fairness (Grégoire et al., 2010). For this reason, the procedural justice dimension will be the focus of this study.

A commonly investigated aspect of procedural justice is the speed at which a firm responds to a crisis (Smith et al., 1999). Intuitively and commonly throughout the literature, it is expected that a faster response is better when dealing with a crisis or failure involving the brand. A crisis is an uncertain, anxious, and potentially damaging experience for both the firm and the customer (Coombs, 1999). From the moment a crisis event occurs, a vacuum of information is created. Stakeholders search for information about the cause of the crisis and the potential personal implications (Hearit, 1994). In the case where stakeholders are at potential health or financial risk, the need for the firm to act quickly is paramount, and is viewed as an ethical responsibility (Coombs, 2015). However, even in cases where customers are not in immediate danger, it is commonly recommended that the firm should fill this vacuum with their own information as quickly as possible, allowing them to frame the event in the most sympathetic and appropriate manner (Coombs & Holladay, 2011). Proactively taking control of the story before other sources do has been argued to be vitally important, as control is difficult to regain once lost (Lukaszewski, 1997). Indeed a positive relationship between response speed and customer evaluation is supported in a number of studies (Smith et al., 1999; Hoffman, Kelley, & Soulage, 1995; Johnston & Fern, 1999).

However, the literature on this effect is not as conclusive as one might expect. A number of studies have found that response speed has either no effect on response evaluation (Blodgett, Hill, & Tax, 1997) or mixed results as to its effect (Clark, Kaminski, & Rink, 1992; Boshoff, 1997; Davidow, 2000; Estelami, 2000). There are various explanations provided for these mixed findings. For instance, findings from Boshoff (1997) and Gilly (1987) raise the question of how fast is too fast in service recovery. Boshoff (1997) found that an immediate response has a statistically similar effect to a slightly delayed response. Thus, responding faster may not always be better. They explain this as a function of expectations; a slight

delay may be within expectations and therefore does not affect consumer response. Katz et al. (1991) and Gilly (1987) support this finding in the distinction between actual speed and perception of speed based on consumer's expectations, and this distinction may account for some of the contradictory findings.

Despite the existing debate within the literature in relation to the effect of response speed on consumer evaluation, in the context of a health crisis, it is still argued that the application of a fast response by a firm seems particularly pertinent, as the speed of action can have a detrimental effect on stakeholders' health and wellbeing (Kim et al., 2011). Moreover, given the mass disruption and potentially devastating effects of a large scale crisis, heightened levels of anger and anxiety are likely and, thus the containment of negative emotional reactions would be facilitated by a faster response (Larson et al., 1991). Therefore, we hypothesize that:

***H_1**: A faster crisis response generates a more positive crisis response evaluation.*

2.2 Disconfirmation Framework and the Consumer-Brand Relationship

Crises represent pivotal moments in a relationship, capable of breaking or making them (Aaker et al., 2004). The way in which a relationship partner reacts at times of crisis is shown to provide key partner quality inferences (Huber et al., 2010) which can have a greater effect compared to a peaceful relationship state (Rusbult et al., 1991). For this reason, scholars have proposed that a crisis or failure event provides an opportunity for a firm to go beyond the customer's expectations of the firm's crisis response and create a second disconfirmation judgement (McCollough et al., 2000; Oliver, 1993). The disconfirmation framework explains satisfaction as a function of the expectations customers set for their experience with a firm (Oliver, 1993). Expectations can be either; (1) positively disconfirmed (i.e., expectations are exceeded), (2) negatively disconfirmed, (i.e., expectations are not met), or (3) confirmed, (i.e., expectations are met yet not exceeded). These expectations are proposed to be formed from the beginning of a customer's relationship with a firm. By definition, a crisis would represent a negative disconfirmation for most customers, thus, one would expect a negative shift in satisfaction and other relationship outcomes. However, this is not always the case: depending on the recovery strategy, satisfaction levels do not

necessarily decline, and may, in fact, rise above pre-crisis levels (DeTienne & Westwood, 2019; Van Vaerenbergh et al., 2019).

Customers' evaluation of the behavior of a firm can lead to several long-term implications. Previous research has linked evaluation of brand behavior to positive word of mouth (Johnson et al., 2011), greater purchase intention (Yu et al., 2021), and willingness to pay price premiums (Nyffenegger et al., 2015). One particular outcome which has been investigated heavily in the literature is the consumer-brand relationship (Huber et al., 2010). The concept of consumer-brand relationships is centered on the notion that the bond between a consumer and a brand is analogous to that of interpersonal relationships (Fournier, 1998). Specifically, this research stream has focused on the building of a strong brand relationship as a long-term strategy and outcome for the brand, and various studies have shown that this is built on the basis of positive brand behavior leading to positive consumer evaluations (MacInnis & Folkes, 2017; Park & John, 2018; Razmus, 2022). The long-term relational focus has also shown to provide a better method of predicting buying behavior (Nyffenegger et al., 2015; Sarkar et al., 2021). In relation to consumer-brand relationships in the context of a crisis, extant research has shown that firms with stronger relationships with their consumer's enjoy more positive response evaluations (Ozuem et al., 2021; Vázquez-Casielles, Suárez Álvarez, & Diaz Martin, 2010). In addition, research has shown that a successful consumer-brand relationship building strategy can not only be a unique advantage in an increasingly crowded marketplace, but also provide a closer understanding of the consumer, allowing for more specific targeting strategies (Gómez-Suárez et al., 2017). Based on these arguments, we hypothesize that:

***H_2**: A positive crisis response evaluation positively impacts the consumer-brand relationship.*

2.3 Situational Crisis Communication Theory

Although the timing of crisis communication messages is known to affect a consumer's evaluation, the content and the way crises communication messages are conveyed are of equal, if not greater, importance (Coombs, 2015). Situational crisis communication theory (SCCT) provides a framework to structure a firm's strategy when responding to a crisis event (Coombs, 2015). The guidance is primarily split into

different strategies depending on the crisis. The two main areas are; (1) reputation repair strategies and (2) information strategies (Coombs, 2015). Reputation repair seeks to minimize the effect the crisis has on the firm's reputation. It prescribes strategies in four groups; (1) deny, (2) diminish, (3) rebuild, and (4) bolster. These strategies aim to, on the one hand, address the causality of the crisis and, on the other, engage in positive action to repair the reputational damage caused in a crisis. Given the focus on causality, reputation repair strategies are essential if the firm is in some way accountable for the crisis situation. However, these strategies are of less importance when the firm is not responsible for the crisis. In such cases, only crisis information strategies are required (Coombs, 2015). Crisis information strategies aim at providing information to stakeholders. In SCCT, crisis information strategies are referred to as an ethical base response. That is, the initial response in which the firm provides essential information about how the stakeholders should protect themselves, expresses sympathy, and provides psychological help. Unlike reputation strategies, crisis information strategies do not encompass activities of apology, compensation, or admittance of guilt. Coombs (2015) postulates that information strategies are, in fact, more widely used by firms than reputation strategies, despite the distinct lack of research focusing on them. There are two types of information to include in this strategy; instructing and adjusting. The distinction between these two types of information strategy is also consistent with the services marketing literature (Wei et al., 2020).

Instructing information is the first priority in a crisis (Coombs, 2007). It provides stakeholders with the information they need to protect themselves physically and financially and, as such, is particularly important in health crises (Kim et al., 2011). Instructing response strategies fulfil the minimum expectation by stakeholders to be protected without necessarily including any repair of the firm's reputation or improvement of stakeholder perceptions. However, by efficiently and comprehensively providing information, firms protect their reputation through signaling a higher level of control (Darling, 1994).

Contrary to the instructing strategy, the adjusting strategy aims to help stakeholders cope with the psychological stress caused by the crisis (Sturges, 1994); it can take the form of sympathy, offers of counselling, or corrective action. Adjusting information is necessary because crisis situations can be an extremely emotional and uncertain time for many stakeholders, often causing anxiety (Jin et al., 2010) and

anger (Coombs & Holladay, 2005). Despite information strategies being classified as 'base responses', they appear important in reputation repair and are thought improve reputation through a range of mechanisms (Kim et al., 2014; Park, 2017). First, by providing a wide array of information, firms are able to reduce uncertainty and ambiguity often created by a crisis situation (Jin et al., 2010). Second, providing compassionate and socially responsible information is shown to relieve feelings of anger (Coombs et al., 2005), thus helping to protect the organization's reputation (Siomkos & Shrivastava, 1993). Specifically, expressions of sympathy reduce anger, whilst offers of counselling help reduce severe anxiety (Coombs, 2015). Finally, giving a wealth of information, especially about corrective action to reduce the likelihood of crisis repetition, adjusting strategies improve the perception of credibility and control, ultimately resulting in reputation improvements (Coombs, 1999).

Consistent with the above, we hypothesize that the relationship between response speed and consumer evaluation will be strengthened when the firm follows an instructing compared to an adjusting crisis information strategy. This hypothesis is proposed on the basis that the potentially life-altering impact of instructing information heightens the expectation for this information to be provided quickly. In contrast, given that adjusting information is not essential to the lives of stakeholders, they have lower expectations of fast response time as customers do not require this information hastily. The strength of an expectation and the degree to which a relationship event deviates from this expectation jointly predict the perception of disconfirmation (Harmeling et al., 2015). Therefore, in the case of the adjusting condition, in which a fast response is not deemed as necessary, responding quickly will disconfirm this expectation and generate a less positive relationship between crisis response speed and crisis response evaluation. On the contrary, in the instructing condition, when a faster response will be perceived as better, the relationship between crisis response speed and crisis response evaluation will be more positive. Therefore, we hypothesize that:

> ***H_3**: The positive effect of crisis response speed on crisis response evaluation will be stronger when the firm follows an instructing (compared to an adjusting) crisis information strategy.*

A visual representation of each of these hypotheses can be found in Figure 1.

- Figure 1 here –

3 Method

3.1 Sample and Procedure

To test our hypotheses, we conducted a multi-step data collection procedure which involved measuring crisis response speed, crisis response strategy, crisis response evaluation, and the consumer-brand relationship in the context of the UK university sector. The university sector was deemed an appropriate and meaningful empirical context for three main reasons. First, as in previous studies (Germann et al., 2014), the context of the university sector was deemed relevant in the study of consumer-brand relationships due to the depth of emotion reportedly felt by university students (McAlexander et al., 2005). Recent research has shown that as the university sector has become more competitive based on both internal and external pressures, universities are increasingly adopting branding strategies more typically associated with the for-profit sector (Balaji et al., 2016). Second, the mechanisms that emerge from close consumer–brand associations mirror those in the mainstream consumer markets. For example, Balaji et al. (2016) found that typical brand characteristics such as prestige and personality predicted consumer–brand identification and this serially predicted students' advocacy intentions. Thus, illustrating that the underlying brand associated mechanisms underpinning consumer–brand behavior in the university context are consistent with the wider consumer context. Third, the higher education sector in the UK represents a lucrative and crucial sector of the national economy. In 2021, the UK university sector has contributed £95 billion to the economy and supported 815,000 jobs in England (FrontiersEconomics, 2021) as the 'customers' of these institutions pay significant fees for their studies.

The COVID-19 pandemic was used as an operational context to investigate the university – student relationship in conditions of crisis. Specifically, the onset of the COVID-19 pandemic led to the government requiring all UK universities to close in person activities and move online (UKParliament, 2020). This represented a large disruption in the service the university provides to the students, not only in terms of

teaching, but also in terms of the experiential benefits of campus life, social aspects, housing, mentorship, and so on.

We collected secondary data from 15 UK universities. Specifically, we recorded (1) the days it took for each university to move to fully online teaching *before* the official announcement of the UK COVID-19 lockdown (where all universities were by law obliged to shut their physical operations) and (2) content from the universities' official Twitter accounts on their crisis strategies. We also collected primary longitudinal panel data from student respondents at these 15 universities to measure students' evaluation of the crisis at two points in time: (a) one month after the UK lockdown announcement (short-term), and (b) 12 months after UK lockdown announcement (long-term). The first round of the survey (one month after UK lockdown) resulted in 251 responses. The second round (12 months after UK lockdown) resulted in 204 responses. As we only used complete responses, the overall sample size for both waves was 204. The universities used in the sample ranged in rankings from 7th to 86th of 130 universities in the UK (M = 39, S.D = 25.5) (based on The Complete University Guide 2020). To recruit participants, invitations were originally sent to program directors on a range of programs in a random selection at all universities throughout the UK, asking if they would like their students to take part with the promise of a summary report of the findings in return. Program directors who agreed to participate then sent an invitation to the survey for forwarding on to their students. Participants were incentivized by a prize draw of a £50 gift voucher in both rounds.

It is noted that such a sampling method may give rise to non-response bias. We did not have data on those who chose not to be involved in the study. However, as a proxy, we used an independent sample t-test comparing those who completed both waves of the survey (non-dropouts) and those who did not (dropouts), following procedures from a similar study (Mazodier & Quester, 2014). The results of this test showed that there was no significant difference between the drop out and non-drop out groups in relation to crisis response and the consumer brand relayionship, implying that there was no serious non-response bias among respondents who completed all waves of the survey and those that did not.

We also checked for common method bias (CMB) in participants' responses both a-priori and ex-ante (Podsakoff et al., 2003). Before conducting the main study, we pretested our survey on 30 postgraduate students (Rogelberg & Stanton, 2007). The pre-test participants were excluded from the main sample. From the feedback received from the pre-test group, the wording of 5 items was altered slightly to ensure that the survey was of an appropriate length and easy to complete with suitable and clearly understandable questions. After collecting the data, we conducted a confirmatory factor analysis (CFA) in which all items were modelled as indicators of a single bias factor. The unsatisfactory result (chi-square (χ^2)/d.f. = 1585.930/230; Normed Fit Index (NFI) = .594; Non-Normed Fit Index (NNFI) = .592; Comparative Fit Index (CFI) = .629; and Root Mean Square Error of Approximation (RMSEA) = .170) indicates that CMB does not pose a serious problem.

3.2 Construct operationalization

Multi-item scales were used for crisis response evaluation and the dimensions of CBR. Where possible, items from previous literature were used with slight contextual modification. Each of the items for these constructs were measured on a 7-point Likert type scale ranging from (1) *strongly disagree* to (7) *strongly agree*. The items used in the survey can be found in Table 2.

3.2.1 Crisis Response Speed

To operationalize crisis response speed, we used the date that the university switched to online teaching and closed campus to all students based on an official announcement. At the point of UK lockdown announcement, the COVID-19 crisis was nationwide and, thus, affecting all universities comparably. For this reason, we chose to operationalize crisis response speed as the number of days before official UK lockdown (23rd March 2020) that the university switched to fully online teaching (e.g., 3 days before lockdown). Theoretically, response speed is conceptualized through the firm's active response, ensuring shareholders are safe and keeping them informed (Coombs, 2015). The date of campus closure acts as a

proxy for these measures as it implies an active, preventative action used to keep students safe and inform them as to how to proceed with travel, accommodation, and study arrangements.

3.2.2 Crisis Response Evaluation

Crisis response evaluation was operationalized with 3 items capturing participants' attitude towards their university's handling of the COVID-19 outbreak. Previous crisis response studies have used constructs such as satisfaction (McCollough et al., 2000), trust (Kim et al., 2009), or word of mouth (Kim et al., 2009) to measure a consumer's response to a crisis, inferring that a change in these constructs is due to the crisis response. However, given the context of our study at the time of the COVID-19 pandemic, it can be safely assumed that other factors may have impacted these consumer-brand relationship dimensions. Thus, in our study, we used a measure of crisis response evaluation to capture consumers' (i.e., students') perception of how successfully their university managed the COVID-19 outbreak as an explanatory variable underlying their consumer-brand relationship development during crisis conditions. By isolating this construct, we decouple crisis evaluation from the crisis' impact on consumer-brand relationship dimensions as two theoretically distinct concepts with the former determining changes in the latter.

3.2.3 Consumer-Brand Relationship

The consumer-brand relationship construct was split into five dimensions; passion, intimacy, commitment, self-connection, and trust. Passion and trust were measured with four items each, whilst intimacy, commitment, and self-connection were measured with three. Numerous conceptualizations of consumer-brand relationships have been proposed and used previously (e.g., Batra et al., 2012; Fournier, 1998). We chose to use these five dimensions to satisfy three main criteria; theoretically grounded, comprehensive, and parsimonious. First, passion, intimacy, and commitment were chosen to present the popular conceptualization of love proposed by Sternberg et al. (1986). Self-connection was added to represent Aron and Aron's (1986) conceptualization of love through identity, while trust was added as it is deemed an

essential element of the development of a relationship (Morgan & Hunt, 1994), fulfilling the criteria of theoretical grounding. Second, from a review of the literature, the five dimensions included in our conceptualization were the most used dimensions across the literature stream, fulfilling the criteria of comprehensiveness. Third, only five dimensions were used, compared to more complicated scales in other studies (e.g., Batra et al., 2012, Schmid & Huber, 2019) to fulfill the criterion of parsimony. Although we measured each dimension separately, in line with previous studies (Aaker et al., 2004) we analyzed the consumer-brand relationship as a second-order construct in our hypotheses testing.

3.2.4 Crisis Information Strategy Type

To operationalize crisis information strategy type, we sourced and analyzed Twitter data from each university's official Twitter account from March 9th 2020 (2 weeks before official UK lockdown) up until April 23rd 2020. Evidently this may not constitute the university's first communication on the crisis, as the COVID-19 pandemic progressed gradually since its outbreak in China, taking some weeks before directly affecting UK universities. Consequently, first communication about the pandemic varied across universities depending on various factors such as, the outbreak level in their region, the number of international students enrolled at the university, etc., but all were communicating about the crisis by March 9th.

We chose to use Twitter data to assess the university's crisis communications for a variety of reasons. First, we initially considered analysis of official communications on the university website. However, due to variability in how this information is stored (e.g., some universities email students directly and do not publish the information on the website), we disregarded this medium. Second, Twitter data is shown to provide superior communication in a time of crisis due to the speed of communication (Kaplan & Haenlein, 2010) and ability to facilitate two-way communication (Distaso et al., 2015). Third, from an initial check of each university's Twitter page, all universities seemed to be using this platform extensively over the allotted time period with over 50 tweets from each account. As such, Twitter seemed to be the outlet which provided the most comparable but also relevant data for the purposes of this study.

In coding this data, we categorized the extent to which universities used instructing and adjusting information in their tweets. To do this, definitions of instructing and adjusting information based on the literature (Coombs, 2007) were provided to two independent coders blind to our research hypotheses. The definition for the instructing condition was: '*Information which provides stakeholders with the information they need to protect themselves physically and financially'*, and the adjusting condition definition was: *'Information which helps stakeholders to cope with the psychological stress of a crisis situation, this may include sympathy, offers of counselling or corrective action'.* The coders read and reread each tweet from each university, giving each tweet 2 scores between 1 (no instructing/adjusting information present), to 7 (maximum instructing/adjusting information present), one for adjusting and one for instructing.

Once all tweets were coded, a mean score for each university on both adjusting and instructing information was generated. Generally, the coders displayed high agreement in their mean scores. Once the means were rounded to the nearest integer, inter-coder analysis showed a Kappa = 0.781, $p < .01$, above the common threshold of 0.6 (Landis & Koch, 1977), and with 84.3% exact inter-coder agreement. Discrepancies in the remaining scores were discussed between the coders before a final score was agreed upon. This process generated two scores for each university in the sample: (1) the extent to which they used an instructing strategy and (2) the extent to which they used an adjusting strategy. The instructing score was then subtracted from the adjusting score to create a difference measure with low scores indicating the prioritization of an instructing strategy and high scores indicating the prioritization of an adjusting strategy.

3.2.5 Covariates

Considering the richness of the study context, we included several controls in the model. The first is program satisfaction. It is noted in several teaching publications that teaching and program delivery was negatively affected by the pandemic especially in the early post-lockdown months when universities were still adapting their approaches to online delivery (UKParliament, 2020; Watermeyer et al., 2021). It is possible that this general negative evaluation of program delivery could be a contributing factor to the student's evaluation of their universities' crisis response. Second, it is possible that the variance in the

university's abilities and resources may affect how they responded to the crisis and the resulting consumer evaluation. Therefore, the rank of the university according to The Times Higher Education Ranking 2021 (THE, 2021) was recorded and included as a covariate. Finally, given the restrictions on travel at this time, whether a student was a home (i.e., UK) student or an international student may impact their evaluation of the university's response. Some international students were not able to return home which may have changed how they felt the crisis should have been dealt with by their university.

3.3 Measurement Timing

As we sought to understand the short- and long-term effects of a brands crisis response, the study constructs were measured at different times. Crisis response speed was measured at the point of the crisis response, up to 9 days before full UK lockdown depending on when the university switched to online teaching (T1). Crisis information strategy was measured from 2 weeks before to 1 month after UK lockdown, so again at the point of the crisis (T1). Crisis response evaluation was measured 1 month after UK lockdown (T2), and finally, the consumer-brand relationship was measured 12 months after UK lockdown (T3).

4 Analysis and Results

4.1 Reliability and Validity Assessments

To validate the measurement model, we used EQS 6.2 to perform a confirmatory factor analysis (CFA) on the crisis response evaluation and CBR constructs using the elliptical reweighted least squares (ERLS) method. The ERLS method is less constrained by normality assumptions and therefore generates unbiased parameter estimates for both normal and nonnormal data (Sharma et al., 1989). Specifically, each item in the model was assigned to load on its theoretically preassigned factor, while the latent factors were set to correlate freely. As evident in Table 2, the model fit indices indicated good fit of the measurement model: χ^2(222df.) = 347.611; NFI = .963; NNFI = .984; CFI = .986; RMSEA = .053.

- Table 2 here -

To illustrate that all constructs demonstrate adequate psychometric properties, the standardized loadings and measurement errors were analyzed (Hair et al., 2010). Psychometric properties were assessed through the analysis of the composite reliability (CR), average variance extracted (AVE) and inter correlation of latent constructs. First, the CR for all constructs was above .78, exceeding the accepted threshold of 0.6 (Bagozzi et al., 1991) implying internal consistency. Second, we find that our constructs displayed evidence of discriminant validity, as the lowest AVE was .612, which was larger than the highest shared variance between any pair of constructs, as evidenced by the square root of the AVEs. The satisfactory AVE, CR scores, and latent intercorrelations can be found in Table 3, further indicating the constructs' reliabilities and convergent and discriminant validities.

- Table 3 here -

4.2 Hypotheses Testing

4.2.1 Indirect Effects

To test Hypothesis 1 and 2, a mediation analysis was performed using Model 4 of the PROCESS SPSS macro using 5,000 bootstrap samples (Hayes, 2012). Alongside the focal variables of crisis response speed, crisis response evaluation and crisis information strategy, we included the covariates year, home status, and program satisfaction. First, Hypothesis 1 stated that crisis response speed would have a positive effect on crisis response evaluation. However, our results showed that crisis response speed had a significant negative effect on crisis response evaluation (β = -.140, t = -2.465, $p < .05$), therefore Hypothesis 1 was not supported. Second, Hypothesis 2 stated that crisis response evaluation would have a positive effect on the consumer-brand relationship and our results found this to be the case (β = .110, t = 2.476, $p < .05$), thus Hypothesis 2 was supported. Finally, our model implies an indirect effect of crisis response speed on the consumer-brand relationship through crisis response evaluation, which again was tested in this model. At a bootstrap estimated 95% confidence interval, we found a lower bound of -.0353 and an upper bound of -

.0003. As the lower and upper bounds do not pass zero, we can also conclude that there is a significant negative indirect effect of crisis response speed on the consumer-brand relationship through crisis response evaluation.

4.2.2 Moderation Effect

To test Hypothesis 3, that crisis information strategy would have a moderating effect on the relationship between crisis response speed and crisis response evaluation, we first ran a series of OLS regressions in three hierarchical stages. The first model included only the covariates, university year, home status, and program satisfaction. Model 2 added the independent variable, crisis response speed, and the moderator variable, crisis information strategy, testing only their direct effects. Finally, Model 3 also included the interaction effect of crisis response speed and crisis information strategy. We compared the models by testing whether the addition of the direct and interaction effects significantly improved the explanatory power of the model and found that it did so in both cases ($p < .05$). The results of the OLS regression found in Table 4 show that crisis response speed is not significantly associated with an increase in crisis response evaluation when the crisis information strategy is accounted for ($\beta = .024$, $p = .770$). However, the crisis information strategy does significantly predict crisis response evaluation ($\beta = .606$, $p < .01$), such that prioritizing adjusting (compared to instructing) strategies was associated with more positive crisis response evaluations. Finally, the results show support for the interaction effect of crisis information strategy on the relationship between crisis response speed and crisis response evaluation ($\beta = -.410$, $p < .05$).

- Table 4 here -

To understand the meaning of the interaction for Hypothesis 3, a simple slope analysis, shown in Figure 2, displays the association of crisis response speed on crisis response evaluation in both the instructing and adjusting information strategy conditions. As shown, the relationship between crisis response speed and crisis response evaluation is negative in the adjusting condition and positive in the instructing condition. We originally hypothesized that the relationship between crisis response speed and

crisis response evaluation will be more positive in the instructing information condition relative to the adjusting information condition. In support for H3, we indeed find this expected pattern. Interestingly, though, we also find that the adjusting condition appears to generate a higher crisis response evaluation in general.

- Figure 2 here -

Finally, to ensure the robustness of our findings and given that our model implies a moderated mediation relationship, we tested this implicit structure using SPSS PROCESS Model 7 (based on 5,000 bootstrap samples) (Hayes, 2012). The results support the moderating effect of crisis information strategy. More specifically, the interaction between crisis information strategy and crisis response speed on crisis response evaluation is negative and significant ($\beta_{\text{crisis information strategy}\times\text{crisis response speed}} = -.078$, $t = -2.350$, $p < .05$). To shed further light on the interaction we then probed it at one standard deviation above and below the mean of crisis information strategy (see Table 5). The conditional indirect effects show that moving from mean (crisis information strategy$_{\text{Mean}} = .4069$, $\beta_{\text{mediation}} = -.0101$, 95% CI ranging from -.1404 to .1202) to high levels of crisis information strategy (i.e., the adjusting condition), renders the indirect effect significant (crisis information strategy$_{\text{M+SD}} = 2.336$, $\beta_{\text{mediation}} = -.1597$, 95% CI ranging from -.2906 to -.0287); whereas moving from the mean to low levels of crisis information strategy (i.e., the instructing condition), the effect remains insignificant (crisis information strategy$_{\text{M-SD}} = -1.522$, $\beta_{\text{mediation}} = .1395$, 95% CI ranging from -.0803 to .3592). Additionally, floodlight analysis indicates that for crisis information strategy scores above 1.8 the indirect effect is negative and significant; for crisis information strategy scores below 1.8 the indirect effect is rendered insignificant, therefore, showing that the indirect effect is activated at moderate levels of the adjusting information strategy.

- Table 5 here -

5 Discussion

5.1 Conclusions and Theoretical Contributions

The long-standing consensus in crisis literature has been that a firm should act quickly when responding to a crisis event. However, such decisive action is not always possible or beneficial to the firm, as highlighted by the vast negative financial impact of COVID-19 on firms around the world (TheWorldBank, 2020). Therefore, our study employed a multi-data research design including a longitudinal survey and archival social media data to test whether a faster response is in fact better and explore if a communication strategy can mitigate this effect.

Contrary to common belief, we find that faster responses are not always superior in the eyes of the consumer. Instead, we find that the slower the brand's response to the crisis, the greater the consumer evaluation of the crisis response. However, we also find that this counterintuitive finding is moderated by the type of crisis information strategy employed. Specifically, when firms prioritize an instructing communications strategy (i.e., focused on safety), a faster response is better. Whereas, when firms prioritize an adjusting communications strategy (i.e., focused on consumers' wellbeing), a slower response is better. Finally, by showing that the short-term crisis response evaluation significantly impacts the long-term relationship of the brand with the consumer, we clarify the importance for optimal crisis strategy design mindful of both short- and long-term relational implications. By studying the effect on both short- and long-term results, we provide recommendations for this crisis strategy design.

In relation to our direct effect, we find that crisis response speed had a significant negative effect on crisis response evaluation, implying that the faster the firm responded to the crisis, the less favorable the customer evaluation. Although this is against our hypothesized effect that a faster response is better and the supporting literature (Maxham et al., 2002; Coombs, 2015; Kim et al., 2011), it seems to support the previously elucidated argument that the effect of the speed of response may be based on the perception and expectations of that speed rather than the literal time taken to respond to a crisis (Gilly, 1987; Katz et al., 1991). Considering the context of a crisis, our finding that a faster response leads to a lower consumer evaluation implies that there exists too fast a response which violates consumer's expectations. In support of this finding, prior research posits that hastiness in crisis communication can be damaging (Roux-Dufort,

2009; Tracy, 2007). Traditional research argues that a crisis management team should respond without delay, but often in cases of large scale crises such as in the context we investigate, a well-considered action plan requires time to coordinate. By responding too hastily, a firm may signal reactivity rather than responsiveness, with potentially damaging consequences. A tragic example of this is the Sago coal mine disaster in 2006, in which it was communicated that 11/12 of the 13 men trapped had survived, when in reality 12 had perished and only one survived (Coombs, 2020). In a rush to respond, accuracy was not prioritized leading to further anguish for the relatives of the victims of this crisis. The negative effects of haste over speed are also found in other areas of management leadership (Kessler et al., 2001), in which moving too hastily is shown to result in ill-informed and potentially damaging decision making. In fact, inauthentic or inaccurate communication may even activate a consumer perception of manipulative intent from the firm (Antonetti & Crisafulli, 2022; Acuti et al., 2022). On this basis, in the context of a large scale crisis, consumers expect an accurate, informed and well-considered response, and by reacting hastily a firm may violate these expectations.

Therefore, our results support brand crisis action that is responsive rather than reactive. This semantic distinction is made on the basis that *responsive* action is fast, considered, sympathetic, and organized – it signals efficiency and control. However, a *reactive* action is again fast, but not considered with potential unorganized results. Such a distinction is likely very salient in this study's context, in which moving to online learning without provisions in place to deliver such learning may result in lower consumer evaluation despite being a 'fast' response. Therefore, the use of a fast crisis response may not be universally better, as proposed most commonly in previous literature (Coombs, 2015; Kim et al., 2011).

Crucially, however, our results suggest that the benefits of a fast response rely on its consistency with the brand's communication message. Im et al. (2021) found that the timing of a firm's response should take into account the context of the crisis and the strategy they intend to use. Our findings support that view. Similarly, Liu et al. (2018) found that firms tend to communicate with instructing information first, followed by adjusting information during recovery. We support this argument by finding that when prioritizing safety (instructing) information, a firm should react quickly. Whereas, if a firm is prioritizing

well-being (adjusting) information, they should react more slowly. Intuitively, this moderation effect seems logical. Specifically if a firm is communicating the importance of safety (in the case of COVID-19, to limit exposure with others), continuing to teach in person may signal inconsistency between its communication and its actions resulting in cognitive dissonance in the mind of the consumer (Telci et al., 2011). Inconsistency between the brands' communications and actions has been shown to reduce consumer evaluations in previous research (Du et al., 2010), whilst consistency in crisis communications is proposed to be important in demonstrating predictive value (Ulmer, 2001). Thus, the inconsistency in message and action in the instructing information condition may explain why a faster response is better.

In contrast, when a brand prioritizes information on well-being, the safety aspect of the crisis is less salient, therefore a slow response speed would be consistent with their communications. The resulting lack of cognitive dissonance in the mind of the consumer may then explain why, when using an adjusting strategy, a faster response is not rewarded. Moreover, as previously suggested, a slower responsive action is likely to provide a more comprehensive, considered strategy which will result in a better experience for the consumers. Therefore, in the adjusting condition, not only is being fast not rewarded, a slower more considered strategy may actually lead to greater consumer evaluations. Therefore, the notion of consistency could explain why only in the instructing condition was it better to respond quickly. On the contrary, in the adjusting condition, where the need to respond quickly was not salient in the brands' communication, a slower, more thought-out strategy was preferential.

Both the counterintuitive finding, that in general a slower response speed is received more positively than a faster response speed, and the fact that this depends on the information strategy employed by the brand contributes to the crisis response literature. The negative effect of crisis response speed challenges the traditional wisdom around the benefits of responding quickly (Maxham et al., 2002). From this finding, and the supporting moderation results, we argue that prioritizing speed over all else may not be the most beneficial strategy, and in fact, that a slower response can be more beneficial if paired with a consistent communication strategy. This notion warrants caution in SCCT's catch-all recommendation of a fast response for a firm. Therefore, based on these findings we make the managerial recommendation that

if a firm is unable to respond quickly they should not make safety and speed salient in their communication (i.e., they should instead use an adjusting communication strategy).

Finally, we empirically link crisis response variables speed, strategy, and consumer evaluation to the long-term outcome of the consumer-brand relationship 12 months later. In doing this, we illustrate the importance of a well-defined crisis response in shaping the long-term emotional bond consumers feel towards a brand. Previous research in the area of consumer-brand relationships and negative brand events (i.e., brand transgression literature) has shown that strong relationships can mitigate the effects of negative events (Sung & Choi, 2010) and are affected by positive brand behaviors (MacInnis et al., 2017), however, little research has shown the importance of how brands respond to negative relational events, especially in the long-term (Park et al., 2018). In this study, we add to the consumer brand behavior literature by showing that how crisis responses are evaluated by the consumer has downstream effects on the strength of the brand relationship (at least) a year after the response. In managerial terms, our study implies the importance of a firm to not only bolster that relationship with positive brand actions, but also be responsive to negative brand events. Our results show that by responding effectively, brands can help build their relationship in the long-term, and that the most effective way to do this is to respond relatively slowly (when immediate threat to safety is not an issue) through prioritizing wellbeing information.

5.2 Limitations and Future Research Avenues

We acknowledge a few limitations of the study, resulting in some exciting areas for further research. First, the use of an undergraduate student sample with the university as the focal brand provided interesting and relevant results. However, given that the type of industry is shown to affect the strategies proposed and the response to such strategies on a crisis (De Matos et al., 2007), a replication of the study in different sectors is advised. Particularly in consideration of the contextual factors surrounding the university–student relationship (such as the contractual element, the potential 'parental' role of the university, and the indirect financial transaction), replications in different industries are deemed useful. The tourism or airline sector,

for example, may be of particular interest in the COVID-19 context given the extent to which this industry has suffered due to the pandemic (Yang et al., 2020).

Second, the COVID-19 pandemic has had a devastating, global impact with strong cross-national variance (Davvetas et al., 2021). The extent of the COVID-19 spread, the impact on the economy, and the government's perspective on the pandemic all vary greatly from country to country (WHO, 2020). Therefore, we would recommend a cross-cultural study to understand the specific effects of the crisis in different nations. Some cross-cultural investigations in this area have already begun (Mattila & Patterson, 2004; Schoefer, 2010), but it seems that the unique context of the COVID-19 warrants further investigation.

Finally, the COVID-19 crisis is a continually developing phenomenon. Political, economic, health and social decisions and advancements have meant that the way in which COVID-19 has been dealt with has been continuously adapting. The same is true of universities which have changed their ways of dealing with the ramifications of the pandemic. The longitudinal element of our study attempts to capture some of this developmental heterogeneity, but we acknowledge that our results emerge from particular (i.e., early) time points in the development of the brands' response to COVID-19 and this may limit the generalizability of our results in later phases of the pandemic crisis.

References

Aaker, J., Fournier, S., & Brasel, S. A. (2004). When Good Brands Do Bad. *Journal of Consumer Research, 31*(1), 1-16.

Acuti, D., Pizzetti, M., & Dolnicar, S. (2022). When sustainability backfires: A review on the unintended negative side-effects of product and service sustainability on consumer behavior. *Psychology & Marketing,* 1– 13.

Antonetti, P., & Crisafulli, B. (2022). Revisiting power messaging in service failures: Pitfalls and proposed solutions. *Psychology & Marketing*, 1– 24.

Aron, A., & Aron, E. N. (1986*). Love and the expansion of self: Understanding attraction and satisfaction*. Hemisphere Publishing Corp/Harper & Row Publishers.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative science quarterly*, 421-458.

Balaji, M. S., Roy, S. K., & Sadeque, S. (2016). Antecedents and consequences of university brand identification. *Journal of Business Research, 69*(8), 3023-3032.

Batra, R., Ahuvia, A., & Bagozzi, R. P. (2012). Brand Love. *Journal of Marketing, 76*(2), 1-16.

Boshoff, C. (1997). An experimental study of service recovery options. *International Journal of Service Industry Management, 8*(2), 110-130.

Blodgett, J. G., Wakefield, K. L., & Barnes, J. H. (1995). The effects of customer service on consumer complaining behavior. *Journal of Services Marketing*. *9*(4), 31-42.

Blodgett, J. G., Hill, D. J., & Tax, S. S. (1997). The effects of distributive, procedural, and interactional justice on postcomplaint behavior. *Journal of Retailing*, *73*(2), 185-210.

Cheng, Y. (2018). How social media is changing crisis communication strategies: Evidence from the updated literature. *Journal of Contingencies and Crisis Management, 26*(1), 58-68.

Clark, G. L., Kaminski, P. F., & Rink, D. R. (1992). Consumer complaints: Advice on how companies should respond based on an empirical study. *Journal of Consumer Marketing*, *9*(3), 5-14.

Coombs, T. (1999). Information and Compassion in Crisis Responses: A Test of Their Effects. *Journal of Public Relations Research, 11*(2), 125-142.

____. (2007). Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory. *Corporate Reputation Review, 10*(3), 163-176.

____. (2015). The value of communication during a crisis: Insights from strategic communication research. *Business Horizons, 58*(2), 141-148.

____. (2020). Conceptualizing crisis communication. *In Handbook of risk and crisis communication* (pp. 99-118). Routledge.

Coombs, T., & Holladay, S. (2005). An Exploratory Study of Stakeholder Emotions: Affect and Crises. *Research on Emotion in Organizations, 1*, 263-280.

Coombs, T., & Holladay, S. (2011). *The handbook of crisis communication* (Vol. 22): John Wiley & Sons.

Darling, J. R. (1994). Crisis management in international business. *Leadership & Organization Development Journal*.

Davidow, M. (2000). The bottom line impact of organizational responses to customer complaints. *Journal of Hospitality & Tourism Research, 24*(4), 473-490.

Davvetas, V., Ulqinaku, A., & Abi, G. S. (2021). Local Impact of Global Crises, Institutional Trust, and Consumer Well-Being: Evidence from the COVID-19 Pandemic. *Journal of international marketing*, 1069031X211022688.

De Matos, C. A., Henrique, J. L., & Alberto Vargas Rossi, C. (2007). Service Recovery Paradox: A Meta-Analysis. *Journal of Service Research, 10*(1), 60-77.

DeTienne, K. B., & Westwood, J. (2019). An empirical study of service recovery quality and customer retention. *Journal of Management Research,* 19(4).

Distaso, M. W., Vafeiadis, M., & Amaral, C. (2015). Managing a health crisis on Facebook: How the response strategies of apology, sympathy, and information influence public relations. *Public Relations Review, 41*(2), 222-231.

Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication. *International Journal of Management Reviews, 12*(1), 8-19.

Estelami, H. (2000). Competitive and Procedural Determinants of Delight and Disappointment in Consumer Complaint Outcomes. *2*(3), 285-300.

Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *Journal of Consumer Research, 24*(4), 343-353.

FrontiersEconomics. (2021). *The Economic Contribution of the Higher Education Sector in England*. Retrieved from

Germann, F., Grewal, R., Ross, W. T., & Srivastava, R. K. (2014). Product recalls and the moderating role of brand commitment. *25*(2), 179-191.

Gilly, M. C. (1987), Postcomplaint Processes: From Organizational Response to Repurchase Behavior, *Journal of Consumer Affairs*, *21*(2), 293-313.

Gómez-Suárez, M., Martínez-Ruiz, M. P., & Martínez-Caraballo, N. (2017). Consumer-Brand Relationships under the Marketing 3.0 Paradigm: A Literature Review. *Frontiers in Psychology, 8*(252).

Greenberg, J. (1990). Organizational Justice: Yesterday, Today, and Tomorrow. *Journal of Management, 16*(2), 399-432.

Grégoire, Y., Laufer, D., & Tripp, T. M. (2010). A comprehensive model of customer direct and indirect revenge: understanding the effects of perceived greed and customer power. *Journal of the Academy of Marketing Science, 38*(6), 738-758.

Grégoire, Y., Tripp, T. M., & Legoux, R. (2009). When Customer Love Turns into Lasting Hate:The Effects of Relationship Strength and Time on Customer Revenge and Avoidance. *Journal of Marketing, 73*(6), 18-32.

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis.* London: Prentice Hall.

Harmeling, C. M., Palmatier, R. W., Houston, M. B., Arnold, M. J., & Samaha, S. A. (2015). Transformational Relationship Events. *79*(5), 39-62.

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling. In: University of Kansas, KS.

Hearit, K. M. (1994). Apologies and public relations crises at Chrysler, Toshiba, and Volvo. *Public Relations Review, 20*(2), 113-125.

Hoffman, K. D., Kelley, S. W., & Soulage, L. (1995). Customer defection analysis: a critical incident approach. In *Proceedings of the American Marketing Association Summer Educators Conference, American Marketing Association*, Chicago, IL (346-352).

Huber, F., Vollhardt, K., Matthes, I., & Vogel, J. (2010). Brand misconduct: Consequences on consumer–brand relationships. *Journal of Business Research, 63*(11), 1113-1120.

Im, W. J., Youk, S., & Park, H. S. (2021). Apologies combined with other crisis response strategies: Do the fulfillment of individuals' needs to be heard and the timing of response message affect apology appropriateness? *Public Relations Review, 47*(1), 102.

IpsosMori. (2020). Public divided on whether isolation, travel bans prevent COVID-19 spread; border closures become more acceptable. Retrieved from https://www.ipsos.com/ipsos-mori/en-uk/public-divided-whether-isolation-travel-bans-prevent-covid-19-spread-border-closures-more-acceptable

Jin, Y., Pang, A., & Cameron, G. (2010). The role of emotions in crisis responses: Inaugural test of the integrated crisis mapping (ICM) model. *Corporate Communications: An International Journal, 15*, 428-452.

Johnson, A. R., Matear, M., & Thomson, M. (2011). A coal in the heart: Self-relevance as a post-exit predictor of consumer anti-brand actions. *Journal of Consumer Research, 38*(1), 108-125.

Jung, J. C., Sharon, E. J. G. B., & Excellence, O. (2019). The Volkswagen emissions scandal and its aftermath. *38*(4), 6-15.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons, 53*(1), 59-68.

Katz, K., Larson, B., & Larson, R. (2003). Prescription for the waiting-in-line blues entertain, enlighten, and engage. *Operations Management Critical Perspectives of Business Management, 2*, 160.

Kelley, S. W., Hoffman, K. D., & Davis, M. A. (1993). A typology of retail failures and recoveries. *Journal of Retailing, 69*(4), 429-452.

Kim, S., Avery, E. J., & Lariscy, R. W. (2011). Reputation Repair at the Expense of Providing Instructing and Adjusting Information Following Crises. *International Journal of Strategic Communication, 5*(3), 183-199.

Kim, S., & Sung, K. H. (2014). Revisiting the effectiveness of base crisis response strategies in comparison of reputation management crisis responses. *Journal of Public Relations Research, 26*(1), 62-78.

Kim, T., Kim, W. G., & Kim, H.-B. (2009). The effects of perceived justice on recovery satisfaction, trust, word-of-mouth, and revisit intention in upscale hotels. *Tourism Management, 30*(1), 51-62.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 159-174.

Larson, R., Larson, B., & Katz, K. (1991). Prescription for waiting–in line blues: Entertain, enlighten and engage. *Sloan Management review,(winter), 32*(2), 44-55.

Latson, J. (2014). How poisoned Tylenol became a crisis-management teaching model. *Time.com.* Available at: https://time.com/3423136/tylenol-deaths-1982/

Liu, W., Lai, C. H., & Xu, W. W. (2018). Tweeting about emergency: A semantic network analysis of government organizations' social media messaging during hurricane Harvey. *Public relations Review*, 44(5), 807-819.

Lukaszewski, J. E. (1997). Establishing individual and corporate crisis communication standards: The principles and protocols. *Public Relations Quarterly, 42*(3), 7.

MacInnis, D. J., & Folkes, V. S. (2017). Humanizing brands: When brands seem to be like me, part of me, and in a relationship with me. *Journal of Consumer Psychology, 27*(3), 355-374.

Mattila, A., & Cranage, D. (2005). The impact of choice on fairness in the context of service recovery. *Journal of Services Marketing, 19*, 271-279.

Mattila, A. S., & Patterson, P. G. (2004). The impact of culture on consumers' perceptions of service recovery efforts. *Journal of Retailing, 80*(3), 196-206.

Maxham, J. G., & Netemeyer, R. G. (2002). A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts. *Journal of Marketing, 66*(4), 57-71.

Mazodier, M., & Quester, P. (2014). The role of sponsorship fit for changing brand affect: A latent growth modeling approach. International *Journal of Research in Marketing*, 31(1), 16-29.

McAlexander, J. H., Koenig, H. F., & Schouten, J. W. (2005). Building a university brand community: The long-term impact of shared experiences. *Journal of Marketing for Higher Education, 14*(2), 61-79.

McCollough, M. A., Berry, L. L., & Yadav, M. S. (2000). An Empirical Investigation of Customer Satisfaction after Service Failure and Recovery. *Journal of Service Research, 3*(2), 121-137.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.

Mohr, L. A., & Bitner, M. J. (1995). The role of employee effort in satisfaction with service transactions. *Journal of business research, 32*(3), 239-252.

Mora Cortez, R., & Johnston, W. J. (2020). The Coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory. *Industrial Marketing Management, 88*, 125-135.

Nyffenegger, B., Krohmer, H., Hoyer, W. D., & Malaer, L. (2015). Service brand relationship quality: hot or cold? *Journal of Service Research, 18*(1), 90-106.

Oliver, R. (1993). Cognitive, Affective, and Attribute Bases of the Satisfaction Response. *Journal of Consumer Research, 20*(3), 418-430.

Ozuem, W., Ranfagni, S., Willis, M., Rovai, S., & Howell, K. (2021). Exploring customers' responses to online service failure and recovery strategies during Covid-19 pandemic: An actor–network theory perspective. *Psychology & Marketing, 38*(9), 1440-1459.

Pantano, E., Pizzi, G., Scarpi, D., & Dennis, C. (2020). Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak. *Journal of business research, 116*, 209-213.

Park, H. (2017). Exploring effective crisis response strategies. *Public Relations Review, 43*(1), 190-192.

Park, J. K., & John, D. R. (2018). Developing Brand Relationships after a Brand Transgression: The Role of Implicit Theories of Relationships. *Journal of the Association for Consumer Research, 3*(2), 175-187.

Podsakoff, P., MacKenzie, S., Lee, J.-Y., & Podsakoff, N. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology, 88*, 879-903.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, computers, 36*(4), 717-731.

Razmus, W., Grabner-Kräuter, S., Kostyra, M., & Zawadzka, A. M. (2022). Buying happiness: How brand engagement in self-concept affects purchase happiness. *Psychology & Marketing*. 1-14

Rogelberg, S. G., & Stanton, J. M. (2007). Introduction: Understanding and dealing with organizational survey nonresponse. In: Sage Publications Sage CA: Los Angeles, CA.

Rogers, C. R. (1959). *A theory of therapy, personality, and interpersonal relationships: As developed in the client-centered framework* (Vol. 3): McGraw-Hill New York.

Roux-Dufort, C. (2009). The devil lies in details! How crises build up within organizations. *Journal of Contingencies and Crisis Management, 17*(1), 4-11.
Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology, 60*(1), 53.
Sarkar, J. G., Sreejesh, S., Sarkar, A., & Dwivedi, Y. K. (2021). Impact of self-brand connection on willingness to pay premium: Relevant mediators and moderators. *Psychology & Marketing, 38*(11), 1942-1959.
Schmid, D., & Huber, F. (2019). Brand love: Emotionality and development of its elements across the relationship lifecycle. *Psychology & Marketing, 36*(4), 305-320.
Schoefer, K. (2010). Cultural moderation in the formation of recovery satisfaction judgments: a cognitive-affective perspective. *Journal of Service Research, 13*(1), 52-66.
Sharma, S., Durvasula, S., & Dillon, W. R. (1989). Some results on the behavior of alternate covariance structure estimation procedures in the presence of non-normal data. *Journal of Marketing Research, 26*(2), 214-221.
Siomkos, G., & Shrivastava, P. (1993). Responding to product liability crises. *Long Range Planning, 26*(5), 72-79.
Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery. *Journal of Marketing Research, 36*(3), 356.
Sparks, B. A., & McColl-Kennedy, J. R. J. J. o. B. R. (2001). Justice strategy options for increased customer satisfaction in a services recovery setting. *54*(3), 209-218.
Spiller, S. A., Fitzsimons, G. J., Lynch, J. G., & Mcclelland, G. H. (2013). Spotlights, Floodlights, and the Magic Number Zero: Simple Effects Tests in Moderated Regression. *50*(2), 277-288.
Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, 93(2), 119.
Sturges, D. L. (1994). Communicating through Crisis: A Strategy for Organizational Survival. *Management Communication Quarterly, 7*(3), 297-316.
Sung, Y., & Choi, S. M. (2010). "I won't leave you although you disappoint me": The interplay between satisfaction, investment, and alternatives in determining consumer–brand relationship commitment. *Psychology & Marketing, 27*(11), 1050-1073.
Telci, E. E., Maden, C., & Kantur, D. (2011). The theory of cognitive dissonance: A marketing and management perspective. *Procedia-Social Behavioral Sciences, 24*, 378-386.
THE. (2021). The Times Higher Education Ranking 2021. Retrieved from https://www.timeshighereducation.com/world-university-rankings/2022/world-ranking#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats
Tracy, K. (2007) The Discourse of Crisis in Public Meetings: Case Study of a School District's Multimillion Dollar Error*, Journal of Applied Communication Research, 35*(4), 418-441
TheWorldBank. (2020). COVID-19 to Plunge Global Economy into Worst Recession since World War II [Press release]. Retrieved from COVID-19 to Plunge Global Economy into Worst Recession since World War II
UKParliament. (2020). *How the Covid-19 outbreak has affected university courses*. Retrieved from https://publications.parliament.uk/pa/cm5801/cmselect/cmpetitions/527/52705.htm
Ulmer, R. R. (2001). Effective Crisis Management through Established Stakeholder Relationships. *Management Communication Quarterly, 14*(4), 590-615.
Van Vaerenbergh, Y., Varga, D., De Keyser, A., & Orsingher, C. (2019). The service recovery journey: Conceptualization, integration, and directions for future research. *Journal of Service Research*, 22(2), 103-119.
Vázquez-Casielles, R., Suárez Álvarez, L., & Diaz Martin, A. M. (2010). Perceived justice of service recovery strategies: Impact on customer satisfaction and quality relationship. *Psychology & Marketing, 27*(5), 487-509.
Watermeyer, R., Crick, T., Knight, C., & Goodall, J. J. H. E. (2021). COVID-19 and digital disruption in UK universities: Afflictions and affordances of emergency online migration. *81*, 623-641.

Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work.

WHO. (2020). Coronavirus disease (COVID-19) advice for the public. Retrieved from https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

____. (2020). WHO Coronavirus Disease (COVID-19) Dashboard. Retrieved from https://covid19.who.int/?gclid=EAIaIQobChMIscH8mYHA6gIVAuDtCh2fkw67EAAYASAAEgLyt_D_BwE

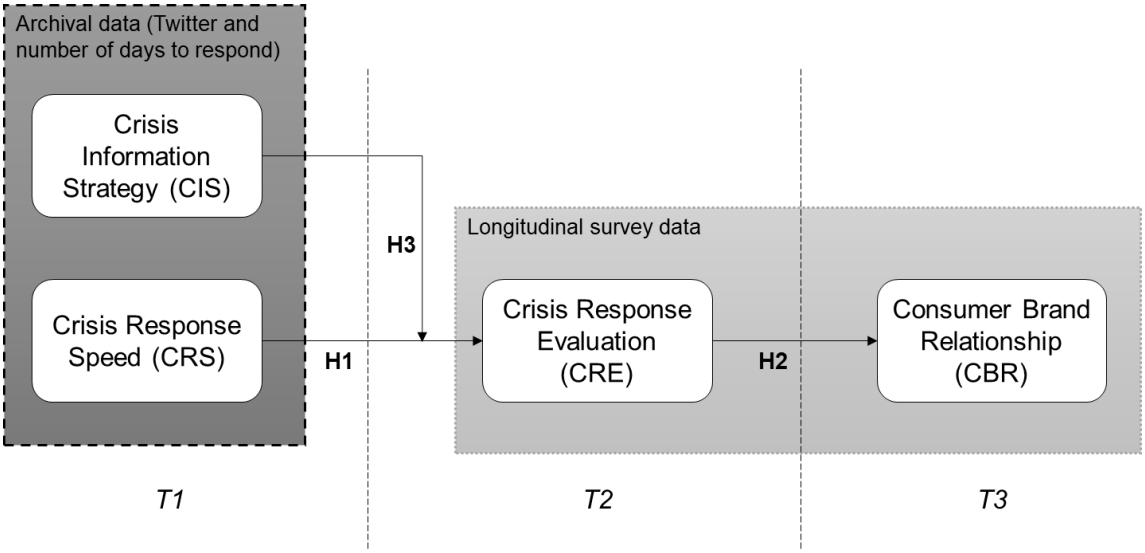
____. (2021). WHO Coronavirus Dashboard.

Wirtz, J., & Mattila, A. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure. *International Journal of Service Industry Management, 15*(2), 150-166.

Yang, Y., Zhang, H., & Chen, X. (2020). Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak. *Annals of Tourism Research*.

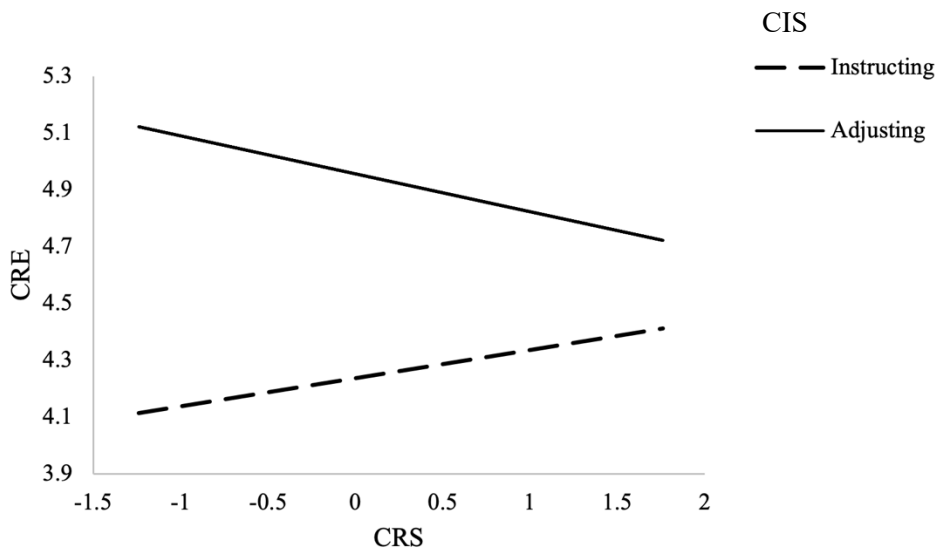
Yu, H., Legendre, T. S., & Ma, J. J. (2021). We stand by our brand: Consumers' post-food safety crisis purchase intention and moral reasoning. *Journal of Business Research, 132*, 79-87.

Figure 1: Conceptual Model



Note: Crisis response speed (CRS), crisis information strategy (CIS), crisis response evaluation (CRE)

Figure 2: Interaction Graph of CRS and CIS on CRE



Note: Crisis response speed (CRS), crisis information strategy (CIS), crisis response evaluation (CRE)

Table 1: Empirical work on consumers' response to crises and similar

Reference	Elements Investigated Related to the Current Study			Study Context	IV	Mediators	Moderators	DV	Area	Related Findings
	Speed	CBR	Comms Strategy							
Coombs (1999)			X	Cross sectional experiment of 114 managers	Adjusting information; instructing information	n/a	n/a	Potential supportive behaviour; account honouring; reputation perception	Crisis	• Compassionate (adjusting) messages have a positive effect of organization reputation • Instructing messages have no effect on organization reputation
Estelami (2000)	X			Cross sectional survey of 279 participants	Response speed; employee behaviour; compensation; loyalty; competitive intensity	n/a	n/a	Complaint resolution satisfaction	Service failure	• Response speed was the second most important determinant of satisfaction
Aaker et al. (2004)	X			Longitudinal (8 weeks) field experiment of 48 participants	Brand personality; Brand transgression	Partner quality	n/a	Consumer brand relationship	Brand transgression	• A brand transgression from an exciting brand relates to short term lowering of self-connection but long term increasing • A brand transgression from a sincere brand relates to short and long term lowering of self-connection
Wirtz and Mattila (2004)	X			Cross sectional experiment of 186 participants	Response speed; response fairness; apology	Service failure attributions	n/a	Service recovery satisfaction; repatronage intentions; word-of-mouth behaviour	Service failure	• The faster the response to failure, the greater the customer satisfaction • Compensation is affective in increasing satisfaction in a 'mixed bag' recovery process • Compensation will not improve satisfaction when the recovery is well executed or poorly executed
Grégoire, Tripp, and Legoux (2009)	X			Longitudinal (8 weeks) field experiment of 172 participants	Time	n/a	Relationship quality	Desire for revenge; Desire for avoidance	Service failure	• Revenge decreases over time • Avoidance increases over time • Strong relationship customer's revenge decreases more slowly and avoidance increases faster than weak relationship consumers • Strong relationship consumers are more amenable to an apology
Claeys and Cauberghe (2014)		X		Cross sectional survey of 274 participants	Match of crisis type and crisis communication, involvement, message framing (emotional/rational)	n/a	n/a	Post crisis attitude	Crisis	• In the case of rational framing, crisis response communication which matches the crisis type increases attitude • In the case of emotional framing, matching has no impact on attitude

Kim and Sung (2014)			X	Cross sectional experiment of 242 participants	Adjusting information; instructing information; denial; rebuilding	n/a	n/a	Crisis responsibility attribution	Crisis	• Denial and rebuilding strategies provide no better response than information strategies (adjusting/instructing) • In a victim crisis, sharing both positive and negative information provide a better response than sharing only one
Ozuem et al. (2021)		X		Longitudinal (4 weeks) qualitative survey and interviews of 70 participants	n/a	n/a	n/a	n/a	Service failure	• CBR strength mitigates a consumer's response to service failure in the Covid-19 pandemic • Consumer's react more emotionally in a large scale crisis such as Covid-19
Our Study	**X**	**X**	**X**	**Longitudinal (12 months) survey of 192 participants and archival data**	**Crisis response speed**	**Crisis response evaluation**	**Crisis information strategy (adjusting vs instructing)**	**Consumer brand relationship**	**Crisis**	• **The slower the crisis response, the better the crisis response evaluation** • **Higher short term crisis response evaluation leads to higher long term consumer brand relationship levels** • **When instructing information is prioritised, a faster response is better** • **When adjusting information is prioritised, a slower response is better**

Table 2: Measurement Model Results

Factors and Loadings	Standardized Loadings
Crisis Response Evaluation	
I feel the university responded to the COVID-19 outbreak effectively	.925
I am happy with the way the university responded to the COVID-19 outbreak	.985
I would not change how the university responded to the COVID-19 outbreak	.835
First order CBR Dimensions	
Passion	
I take pleasure in being a student at my university	.868
I am passionate about my university	.914
I idealize my university's image	.750
I find studying at my university captivating	.779
Intimacy	
My university understands how to meet my needs	.918
I can count on my university when I need to	.903
I feel like my university is really interested in me	.827
Commitment	
If I decide to continue with further study (e.g., masters, PhD), I would choose to study at my current university	.733
My current university will continue to be my first choice university	.713
I will continue to feel committed to my current university after I graduate	.889
Self-Connection	
My university is part of me	.985
Being a student at my university makes a statement about who I am	.761
By being a student at my university, I feel I am part of a shared community	.743
Trust	
My university experience always meets expectations	.783
My university is reliable	.906
My university can always be trusted	.856
My university can be counted on to satisfy my needs	.886
Second Order Factor: CBR	
Passion	.893
Intimacy	.906
Commitment	.847
Self-Connection	.823
Trust	.859
Satisfaction	
How satisfied are you with your programme overall?	.864
How satisfied are you with the teaching on your programme?	.781
How satisfied are you with the extra-curricular activities provided by your university (e.g. clubs, societies)?	.668

Fit Indices: $\chi^2_{(222\ d.f.)} = 347.611$; NFI = .963; NNFI = .984; CFI = .986; RMSEA = .053

[a] All factor loadings are significant at the .01 level.

Table 3: Composite Reliability, Average Variance Extract, and Discriminant Validity Scores

	Construct	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1	CRS	1										
2	CIS	-.31	1									
3	CRE	-.17	.31	1								
4	Passion	-.01	.05	.23	1							
5	Intimacy	-.07	.13	.35	.70	1						
6	Commitment	.04	.07	.27	.72	.64	1					
7	Self-Connection	.04	.16	.21	.77	.60	.68	1				
8	Trust	-.06	.16	.37	.64	.82	.60	.56	1			
9	Uni. Rank	.10	.14	.11	-.04	.11	.00	-.04	.05	1		
10	Home Status	-.11	.02	-.02	-.07	.07	-.05	-.04	.08	-.17	1	
11	Prog. Satisfaction	-.03	.22	.43	.40	.47	.40	.32	.45	.16	-.10	1
	M	4.24	0.41	4.67	4.77	4.22	4.74	4.96	4.30	26.93	1.11	4.96
	SD	2.04	1.93	1.81	1.28	1.39	1.29	1.24	1.38	16.61	.32	1.09
	α	-	-	.94	.89	.91	.80	.82	.92	-	-	.81
	CR	-	-	.94	.90	.91	.82	.87	.92	-	-	.82
	AVE	-	-	.84	.69	.78	.61	.70	.74	-	-	.60
	√AVE	-	-	.92	.83	.88	.78	.84	.86	-	-	.78

Note: Correlations > +/– 0.141 are significant at the 0.05 level
Crisis response speed (CRS), crisis information strategy (CIS), crisis response evaluation (CRE)

Table 4: OLS Regression Moderation Results Predicting CRE

	OLS Model 1		**OLS Model 2**		**OLS Model 3**	
	β	t	β	t	β	t
Control paths						
University Rank	.016	.251	.001	.022	.008	.128
Home Status	.016	.252	-.005	-.086	-.010	-.167
Prog. Satisfaction	.425	6.554***	.379	5.910***	.366	5.748***
Direct effects						
CRS			-.095	-1.430	.024	.292
CIS			.201	2.976**	.606	3.277**
Moderating effects						
CRS×CIS					-.410	-2.249*
F		14.859***		12.537***		11.606***
r^2		.182		.240		.261
Adjusted r^2		.170		.221		.239
Δ r^2		.182		.058		.021

Note: [a] < 0.1, * $p < .05$, ** $p < .01$, *** $p < .001$, DV: CRE

Crisis response speed (CRS), crisis information strategy (CIS), crisis response evaluation (CRE)

Table 5: Moderated mediation results and conditional indirect effects

CIS M +/-1SD	95% Lower Bootstrap CI	Mean Effect	95% Upper Bootstrap CI
-1.522	-.080	.140	.359
.407	-.140	-.010	.120
2.336	-.291	-.160	-.029
Moderated Mediation Index	β = -.0083, BootSE = .0054, LLCI = -.021, ULCI = .0000		
Johnson-Neyman points	Crisis Information Strategy (CIS) < 1.8: Negative indirect effect Crisis Information Strategy (CIS) > 1.8: Not significant indirect effect		

Note: Johnson-Neyman points refer to the points in the moderator above/below which the significant of the indirect effect changes (Spiller et al., 2013)