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A cross-disciplinary review of crisis spillover research: Spillover types, risk factors, and response strategies

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ABSTRACT

The spillover effect of crises has become an emerging research topic in the field of crisis communication, however to our knowledge a cross-disciplinary review of the literature on the topic has not been conducted yet. Also, the complexities associated with crisis spillover and their management call for a synthesis of existing findings which can provide future research directions. This review focuses on empirical studies about crisis spillover and incorporates articles from different disciplines examining this topic. We identified 56 articles about crisis spillover that were published in 35 different journals between 1985 and 2021, and examined the conceptualization of crisis spillover across disciplines, crisis types, industries, stakeholder groups, spillover types, risk factors, and response strategies discussed in these articles. Our suggestions for future research based on the literature review will help guide researchers to explore areas that will help us gain a better understanding of the spillover effect phenomena, and how organizations can respond to spillover crises.

1. Introduction

A crisis spillover occurs when “events in an external organization create concern, uncertainty, or perceptions of harm for another organization.” (Veil et al., 2016, p.317). A crisis spillover can also occur between individuals such as politicians, athletes, and celebrities. This phenomenon is of particular importance in an age of social media increasing the speed by which a crisis can spread from one organization to another (Mehta et al., 2020). Examples of high profile crises that have spread from one organization to another include the Volkswagen emissions crisis spreading to other car manufacturers, United Airlines’ crisis in the USA involving the forceful removal of a passenger due to overbooking spreading to other airlines, and a spinach contamination crisis in the USA involving *E-coli* that occurred at Natural Selection Foods, LLC, which spread to the spinach industry (Laufer & Wang, 2018; Veil & Dillingham, 2020).

The spillover effect of crises has become an emerging research topic in the field of crisis communication, however to our knowledge a cross-disciplinary review of the literature on the topic has not been conducted yet. Also, the complexities associated with crisis spillover and their management call for a synthesis of existing findings which can provide future research directions.

Researchers in different disciplines have conducted studies related to spillover crises, including communication (Lee & Rim, 2016; Mehta et al., 2020), marketing (Chen et al., 2020; Robson & Farquhar, 2021), finance (Bouzzine & Lueg, 2020; Galloway et al., 2021), management (Barnett & King, 2008; Norheim-Hansen & Meschi, 2021), and political science (Chanley et al., 2000; Maier, 2011). However, despite examining a similar phenomenon with comparable research questions, the disciplines operate in silos, and do not benefit from cross-disciplinary insights (Li et al., 2022).

2. Review methodology

This review focuses on empirical studies about crisis spillover and incorporates articles from different disciplines examining this topic. In order to identify studies for inclusion in our review, we searched for articles with the terms “crisis spillover”, “spillover”, “spill over”, “crisis contagion”, “contagion” in International Scientific Indexing (ISI) journals in business, media and communication, management and marketing. Then, we expanded our review to include other studies on the topic cited in articles we found in our search.

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Throughout the review progress, two experienced researchers were involved in identifying studies, and their inclusion was based on mutual agreement. In addition, the inclusion of the studies was based on criteria previously used in published literature reviews (see e.g., Wang & Laufer, 2020).

Through our efforts we identified 56 articles about crisis spillover that were published in 35 different journals between 1985 and 2021. Fig. 1 shows the number of articles published in each year. It is worth noting that relatively few studies were published prior to 2000.

A wide range of research methodologies were used in the studies we identified through our review of the literature. These include experiments (18 articles, 32%), surveys (5 articles, 9%), interviews and focus groups (2 articles, 4%), event studies (12 articles, 21%), case studies (3 articles, 5%), and archival data analysis (16 articles, 29%). Experiments were the most frequently used methodology. On the other hand, qualitative interview turned out to be the least used methodology.

3. A cross-disciplinary synthesis of crisis spillover research

3.1. The conceptualization of crisis spillover across disciplines

As previously mentioned, the topic of spillover crises is of interest to researchers in several fields, and our review of the literature found support for a multidisciplinary approach (see Table 1). We identified 28 articles (50%) in the marketing discipline, 16 in finance and accounting (28%), seven in media and communication (13%), three in management (5%), and two in political science (4%). Despite applying different theoretical lenses to understanding crisis spillover, we found through our review of the literature that the different disciplines share a common conceptualization of crisis spillover. We carefully selected the words and terms repeatedly mentioned in reviewed studies and summarized them into the conceptualization of crisis spillover, as shown in Table 1. The meaning of summarized definitions of crisis spillover were checked multiple times by both researchers to ensure that they do not deviate from the essential information stated in original studies on one hand, and sufficiently represent the definitions covered in each discipline on the other hand. The various fields view crisis spillover as a risk for an organization in the sense that stakeholders may regard a crisis occurring at another organization also happening at their organization (see e.g., Bouzzine & Lueg, 2020; Kang, 2008; Robson & Farquhar, 2021). Based on our review of the literature, we also find that the different disciplines suggest that to reduce the negative spillover effect, organizations may need to respond to protect their reputation, for example, through using a crisis response strategy (see e.g., Norheim-Hansen & Meschi, 2021; Poroli & Huang, 2018; Zhang & Lim, 2021). This is consistent with Laufer and Wang's (2018) recommendation that taking timely actions can reduce the potential negative spillover effects for some organizations, provided that these organizations exhibit any of the crisis spillover risk factors.

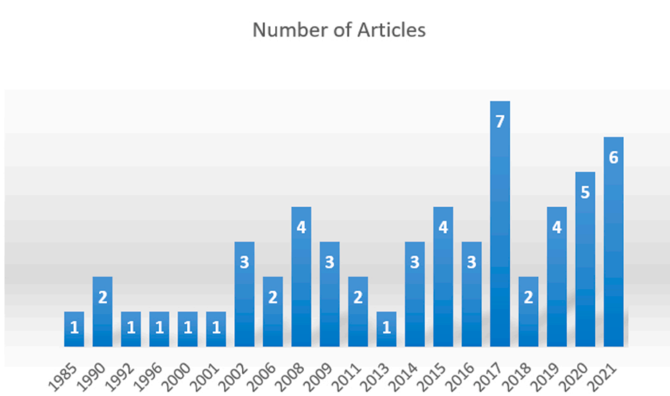

Fig. 1. Studies on crisis spillover published between 1985–2021.

However, the studies in each discipline also differ by focusing on distinct crisis types and different stakeholders when examining the mechanism of the spillover effect. For example, studies incorporating a marketing perspective tend to focus on product harm crises and customers as the stakeholder of interest (see e.g., Arne et al., 2017; Robson & Farquhar, 2021; Zhang & Lim, 2021).

Scholars in finance and accounting, on the other hand, focus on how the spillover effect of a crisis can impact investors. In particular, potential risk on other firms in the same industry are emphasized in several studies with the assumption that investors may perceive a negative firm event as reflective of a systematic and industry-wide problem (Bouzzine & Lueg, 2020; Kashmiri et al., 2017; Ramnath, 2002).

Media and communication researchers are interested in further understanding how information processed by individuals can help explain the occurrence of a crisis spillover. They assert that people make mental associations reflecting the extent to which a message influences beliefs related to attributes that are not contained in the message (Poroli & Huang, 2018; Sato et al., 2019). Individuals who possess more organized knowledge about the brand in crisis are likely to engage in a more elaborated information processing than those with less knowledge and thus, may judge other brands associated with the brand in crisis more negatively (Sato et al., 2019).

Management scholars define a crisis spillover effect as reputational penalties experienced by one firm spreading to another firm with similar characteristics or to a closely related firm (Barnett & King, 2008; Kang, 2008; Norheim-Hansen & Meschi, 2021). In other words, the transfer of spillover harm from one firm to other firms is dependent on the type of commons (i.e. a pooled risk) shared by them (Barnett & King, 2008). Essentially, the commons can be explained by the term "collective reputation" defined by Tirole (1996), which posits that the reputation of a group and those who compose the group, past and present, are intertwined. This logic has been applied by management scholars to explain crisis spillover at the interfirm level as well as industry level (Barnett & King, 2008).

Researchers in political science that examine the topic of crisis spillover view the concept as the extent to which one politician or political party's violation of social norms can influence citizens' trust on other politicians or political parties (Chanley et al., 2000; Maier, 2011). They argue that political scandals have a negative impact on public opinion overall and thus, other politicians or political parties can be judged as guilty by association. In other words, by reinforcing prejudices about politicians, political scandals foster skepticism about the political elite as a whole (Maier, 2011).

Table 2 describes the theoretical frameworks for explaining the mechanism of crisis spillover based on our review of the literature. These not only include the accessibility-diagnosticity framework, associative network theory, attribution theory, signaling theory, and reputation commons theory which were adopted by multiple studies, but also other theories which only appeared once in the review, including escalation theory, resource dependence theory, situational theory of problem solving (STOPS), and valued-based acceptance model. It is worth noting that not every article included in our review was based on a theoretical foundation.

Our review identified two characteristics shared by the different theoretical frameworks used in the literature to explain the spillover effect. First, the perceived association between an organization experiencing a crisis and another organization has an impact on the crisis spillover effect. For example, the accessibility-diagnosticity framework argues that there are two elements which can be tied to the strength of association: (1) whether the firm in crisis is typical of a category, and (2) whether the scandal relates to an attribute linked to the category. If both conditions are met, a negative spillover effect is likely to occur (Ahluwalia et al., 2001; Liu & Varki, 2021; Roehm & Tybout, 2006). The typicality of a crisis is also regarded as an indicator of attribution characteristics by the attribution theory. In particular, when consumers form the first impression about typicality of the crisis with regard to a

Table 1
The conceptualization of crisis spillover in different disciplines.

Discipline (Number of articles, percentage)	Conceptualization of crisis spillover	Examples
Marketing (n = 28, 50%)	The extent to which a negative firm event can influence competing brands at various levels and result in negative consequences (e.g. consumer evaluations and attitudes, sales losses)	Arne et al. (2017),Robson and Farquhar (2021),Zhang and Lim (2021)
Finance and accounting (n = 16, 28%)	Investors' belief about a negative firm event as reflective of a systematic industry-wide problem	Bouzzine and Lueg (2020),Ramnath (2002)
Media and communication (n = 7, 13%)	The extent to which a scandal surrounding one individual/organization may influence people's attitudes toward other individuals/organizations	Poroli and Huang (2018),Sato et al. (2019)
Management (n = 3, 5%)	Reputational penalties experienced by one firm spreading to another firm with similar characteristics or to a closely related firm	Barnett and King (2008),Kang (2008),Norheim-Hansen and Meschi (2021)
Political science (n = 2, 4%)	The extent to which one politician or political party's violation of social norms can influence citizens' trust of other politicians or parties	Chanley et al. (2000),Maier (2011)

focal category, they are inclined to retain this perceptual bias and discount additional information that is not in alignment with their initial impressions (Gao et al., 2015; Kang, 2008; Mehta et al., 2020). The associative network theory provides an explanation of the perceptual bias among the consumers. It states that in an individual's memory network, the mental representations of a brand or product are conceptualized as nodes and these nodes are interconnected. The strength of association between two nodes affects the likelihood of activation spreading positively within this associative network. A stronger brand association (i.e. the association between two or more brands in a person's mind) is more likely to retrieve similar attributes that are accessible in a consumer's mind, compared with a weaker brand association (Sanchez et al., 2020; Sato et al., 2019; Zhang & Lim, 2021).

Second, stakeholders tend to attribute the causes of a crisis to a category. The signaling theory addresses this from a risk perspective and posits that the crisis of one brand reveals the risk of a focal category as other brands in the category share similar conditions and characteristics. Therefore, the crisis signals an inherent category risk and makes the stakeholders reassess their assumptions about the whole category (Bouzzine & Lueg, 2020; Kang, 2008). Other scholars adopting the reputation commons theory argue that when one firm's actions influence the judgements stakeholders make of another firm or an industry as a whole, a commons arises. The reputation commons intertwines the fates of firms in an industry because all firms suffer when any firm engages in actions that damage the industry's shared reputation (Barnett & King, 2008; Kashmiri et al., 2017). Although an industry is often mentioned as a focal category, it is worth mentioning that the stakeholders may attribute the causes of a crisis to other categories as well. For example, Laufer and Wang (2018) identify four categories (i.e. risk factors) in relation to crisis spillover in their conceptual paper. In addition to the industry factor, they point out that the country of origin, organizational type, and positioning strategy are three other categories which can also strengthen the association between an organization experiencing a crisis, and other similar organizations. For example, an organizational type is related to a company's mission, ownership, and structure. Different from a for-profit entity's mission to generate income, a non-profit focuses on serving a humanitarian need. Laufer and Wang (2018) posit that if the crisis is related to the categorical feature of an organizational type, it will be perceived as more diagnostic, and thus more likely to affect companies in the same category.

3.2. Crisis types, industries, and stakeholder groups

Through the review (see Table 3), we identified 10 crisis types from the sample of articles which are mostly related to a preventable or intentional crisis cluster according to situational crisis communication theory (Coombs, 2004, 2007). These crisis types include for example, product harm crises/product recall (17 articles, 30%), corporate misconduct (13 articles, 23%), information disclosure and negative publicity (8 articles, 14%), athlete/celebrity/political scandals (6 articles, 11%), strategic change (5 articles, 9%), bankruptcy (2 articles, 4%), and data breach (2 articles, 4%). These articles include two studies which examine crisis spillover in the context of corporate social irresponsibility, tackling the ongoing debate about how the businesses should "walk-the-talk" towards sustainable development (Schoeneborn et al., 2020). For example, Norheim-Hansen and Meschi (2021) argue that when a firm needs to decide whether to adopt a supportive or non-supportive response as a result of the threat of negative reputation spillover from an alliance partner accused of environmental misconduct, the firm will face a commitment escalation dilemma. They find that firms are more likely to choose an adversary response (i.e. distancing itself from the alliance partner) when the alliance is of high strategic importance, and are more likely to select an advocacy response (i.e. defending its crisis-stricken partner) when the alliance is of low strategic importance. In another study, Antonetti and Valor (2021) examined the spillover of anger following corporate social irresponsibility and found that appraisals of blame moderate the spillover of anger, and corporate communication can reduce emotion spillover when the relevant appraisals are effectively targeted. Clearly, both studies emphasize the value of corporate communication in mitigating the risk of being associated with a crisis.

It is worth noting that only one article falls under the victim or accidental cluster based on situational crisis communication theory. This article focuses on a paracrisis, and how media reporting of a near-miss affects organizational trustworthiness, technology acceptance, and consumer trust towards other brands in the same industry. A paracrisis is defined as a visible threat that associates an organization with irresponsible or unethical practice and threatens reputation (Coombs & Holladay, 2012). Examples include near collisions between drones and passenger jets reported in media (Tiller & Bliss, 2017). Through empirically testing the impact of a paracrisis on other brands, Mehta et al. (2020) find a trust transfer effect beyond the organization with negative publicity which warrant further exploration of a crisis spillover effect in this unique context.

Our review covers a variety of industries, among which the automobile industry (8 articles, 14%, e.g., Bouzzine & Lueg, 2020; Liu & Varki, 2021) and the food industry (8 articles, 14%, e.g. Gao et al., 2015; Roehm & Tybout, 2006; Zhang & Lim, 2021) are studied the most, followed by the financial sector (4 articles, 7%, e.g. Galloway et al., 2021; Robson & Farquhar, 2021). Some newly emerged commercial industries are also addressed in recent literature, such as the social networks (Li & Agarwal, 2017). Only two studies focused on a non-business context. For example, Lee and Rim (2016) explore whether negative spillover effects occur in the context of a corporate-nonprofit partnership when a crisis strikes a partner organization. They found that nonprofit organizations can suffer decreased word-of-mouth intention among the public as a

Table 2
The most frequently adopted theories for explaining the crisis spillover effect.

Theory (Number of articles, percentage)	Description	Examples
Accessibility-diagnosticity framework (n = 17, 30%)	A firm scandal is likely to spill over when the firm is typical of the category and the scandal relates to an attribute highly associated with the category. A competing brand is likely to be affected by the scandal if it is similar to the scandalized firm on the scandal attribute.	Ahluwalia et al. (2001), Arne et al. (2017), Liu and Varki (2021), Roehm and Tybout (2006)
Associative network theory (n = 4, 7%)	In an individual's memory network, the mental representations of a brand or product are conceptualized as nodes and these nodes are interconnected. The strength of association between two nodes affects the likelihood of activation spreading positively within this associative network. A stronger brand association is more likely to retrieve similar attributes that are accessible in a consumer's mind, compared with a weaker brand association.	Lei et al. (2008), Sanchez et al. (2020), Sato et al. (2019), Zhang and Lim (2021)
Attribution theory (n = 3, 5%)	Typicality of a crisis is an indicator of attribution characteristics. When consumers form the first impression about typicality of the crisis with regard to a focal category, they are inclined to retain this perceptual bias and discount additional information that is not in alignment with their initial impressions. As a result, consumers will tend to attribute the causes of the crisis to the focal category.	Gao et al. (2015),Kang (2008), Mehta et al. (2020)
Signaling theory (n = 2, 4%)	The crisis of one brand reveals the risk of a focal category as other brands in the category share similar conditions and characteristics. Therefore, the crisis signals an inherent category risk and makes the stakeholders reassess their assumptions about the whole category.	Bouzzine and Lueg (2020), Kang (2008)
Reputation commons theory, collective stakeholder sanctions (n = 2, 4%)	When one firm's actions influence the judgements stakeholders make of another firm or an industry as a whole, a commons arises. This "reputation commons" intertwines the fates of firms in an industry because all firms suffer when any firm engages in actions that damage the industry's shared reputation.	Barnett and King (2008), Kashmiri et al. (2017)
Escalation theory, resource dependence theory (n = 1, 2%)	To what extent two partner firms are closely related to each other will determine the likelihood of a reputation spillover. When an alliance partner has a high strategic importance or involves a high cost for terminating the alliance, it is more likely to be affected by the reputation spillover, compared to other alliance partners that are with a low strategic importance or termination cost.	Norheim-Hansen and Meschi (2021)
Situational theory of problem solving (STOPS) (n = 1, 2%)	People make individual mental associations between two organizations around critical issues. This type of association is particularly strong when they recognize that a non-culpable organization is also in a problematic situation.	Poroli and Huang (2018)
Valued-based acceptance model (n = 1, 2%)	Consumers' cognitive bias where the relevant schema of one type of service (e.g., web payment services) is likely to have a negative influence on their evaluations and use of extended services (e.g., mobile payment services).	Zhang et al. (2019)

consequence of their partner organization being accused of a wrongdoing. In another study examining universities, Poroli and Huang (2018) found that a green rooftop's structure failure at one Hong Kong university can spillover to other non-culpable universities as well. They argue that the crisis spillover effect is triggered by the students' concern of other universities adopting a similar sustainability strategy.

With respect to the stakeholder groups most studied in the literature, consumers attracted the most attention. This was not only the case in the marketing or management disciplines, but also in the media and communication discipline (e.g. Mehta et al., 2020; Sato et al., 2019). Interestingly, 22 articles (39%) which investigated the perceptions among consumers all confirm the occurrence of a crisis spillover effect

Table 3
An overview of the crisis types, industries, and stakeholder groups.

Crisis types (Number of articles, percentage)	Industries	Stakeholder groups	Country and region	Examples
Product harm/ recall (n = 17, 30%)	Automobile, chemical, diary, drug stores, fast moving consumer good, food, grocery stores, large merchandisers, pharmaceutical, restaurants, wireless telecommunications	Consumers, investors, physicians	Australia, China, Netherlands, Switzerland, UK, USA	Liu and Varki (2021),Shaaban et al. (2019),Zhang and Lim (2021)
Corporate misconduct (n = 13, 23%)	Automobile, banks, fast food, household food, manufacturing, mutual funds, sports, supermarket	CEOs, consumers, investors, Media	China, Germany, Norway, Sweden, USA	Chen et al. (2020),Galloway et al. (2021),Jonsson et al. (2009)
Information disclosure and negative publicity (n = 8, 14%)	Stigmatized industries, shoe manufacturing, soft drinks, supermarket,	Consumers, investors	Europe, Israel, Japan, Russia, USA	Dahlen and Lange (2006),Pyo and Lustgarten (1990)
Athlete, celebrity, and political scandals (n = 6, 11%)	Politicians, sponsorship, sport	Consumers, general public, investors	Germany, Hong Kong, USA	Lee and Ho (2018),Knittel and Stango (2014),Sato et al. (2019)
Strategic change (n = 5, 9%)	Consumer packaged goods, drugs, online payment, social networks, toothpaste and toothbrushes	Consumers	China, UK, USA	Caldieraro et al. (2015),Janakiraman et al. (2009),Li and Agarwal (2017)
Bankruptcy (n = 2, 4%)	Automobile, banks	Consumers, investors	USA	Lang and Stulz (1992),Ozturk et al. (2019)
Data breach (n = 2, 4%)	Retail	Consumers, investors	USA	Kashmiri et al. (2017),Martin et al. (2017)
Industry crisis (n = 1, 2%)	Insurance	Consumers	UK	Robson and Farquhar (2021)
Accident (n = 1, 2%)	University	Students	Hong Kong	Poroli and Huang (2018)
Paracrisis (n = 1, 2%)	Commercial drone	Consumers	Australia	Mehta et al. (2020)

through their empirical exploration. After consumers, investors were the second most examined stakeholder group based on our literature review. Sixteen (29%) out of the 17 articles found a negative spillover effect involving investors. Only one study examining a product recall involving automobiles did not find spillover effects. In other words, a negative stock market reaction towards other brands in the automobile industry did not occur as a result of the product recall (Barber & Darrough, 1996).

3.3. Spillover types, risk factors, and response strategies

Based on the source of the spillover effect, we identify seven types of crisis spillover (see Table 4): country of origin (COO), industry, partnerships, supply chain members, same organization, product category, and individuals to organizations. The risk factors and response strategies in relation to each type are discussed below.

We identify five articles (9%) addressing a crisis spillover to other brands in the same country, in other words, a COO spillover effect. For example, the moral failure of Toyota involving the sticking accelerator pedal and floor mat pedal entrapment crisis of 2010 raised consumers' concern to other Japanese brands as well (Maher & Singhapakdi, 2017). The COO is conceptualized as a summary construct involving country-related information (e.g. country image) gathered from brands of the same COO. When a foreign brand commits a misdeed, consumers may generalize this negative information to other brands with the same COO, resulting in a lower level of trust on those brands not in crisis (Magnusson et al., 2014; Shaaban et al., 2019). In the literature, several risk factors are argued to contribute to a COO spillover, such as similar brand name, same country-of-manufacture, and poor product country image (Pandya & Venkatesan, 2016; Shaaban et al., 2019). To mitigate the COO spillover risk, firms from less developed countries are advised to downplay their original institutional background and emphasize the institutional quality associated with developed country-of-manufacture in branding and promotion activities (Chen et al., 2020; Shaaban et al., 2019).

The second category comprises 19 articles (34%) focusing on the industry-level crisis spillover effects. The impact of a brand crisis on its competitors within the wider context of the industry has been evidenced by research into automobile (Liu & Varki, 2021), tourism (Ritchie, 2004), fast moving consumer good (Cleeren et al., 2013), insurance (Halan et al., 2014; Robson & Farquhar, 2021), and stigmatized industries (Durand & Vergne, 2015), demonstrating that brands do not exist in a vacuum. Bouzzine and Lueg (2020) argue that an industry peer spillover effect is evident for various incidents and scandals irrespective of the crisis type (environmental scandals, accounting scandals, etc.). A few risk factors have been revealed by previous literature to determine the likeliness of an industry-level crisis spillover occurring, including low corporate product reliability, poor consumer-corporate brand relationship, similar business model, strong interlinkage with the crisis brand, high geographical proximity, among others (Bouzzine & Lueg, 2020; Liu & Varki, 2021; Mehta et al., 2020; Robson & Farquhar, 2021). To mitigate the industry-level spillover risk, competing brands can seek to actively counter the negative inferences about their product quality, revitalize transparency, adopt preferential detachment strategies, and avoid being cast as similar to the brand under attack (Borah & Tellis, 2016; Liu & Varki, 2021; Poroli & Huang, 2018).

Four articles (7%) tackled the spillover of a crisis in the context of partnerships and they all report the transfer of negative impacts caused by the incidents of legitimacy violation of the perpetrating firms on the alliance partners (Galloway et al., 2021; Kahuni et al., 2009; Lee & Rim, 2016; Norheim-Hansen & Meschi, 2021). The scale of the spillover effect is dependent on the degree of similarity of brand images, as well as the

Table 4
An overview of the spillover types, risk factors, and response strategies.

Spillover types	Risk factors	Response strategies	Examples
Country-of origin (COO) (n = 5, 9%)	Same brand origin, similar brand name, same country-of-manufacture, poor product country image, low level of development of the transgressing brand's home country	(1) Companies from less developed countries should downplay their COO and emphasize their association with developed countries in branding and promotion activities if possible. (2) Brands from the non-transgressor's COO should not make the transgressor's betrayal salient. (3) Policy makers interested in maintaining or enhancing a country's image should remain aware of attitudes toward its iconic brands because the actions and attitudes toward those brands affect country image. This is particularly important in less-developed markets.	Magnusson et al. (2014),Maher and Singhapakdi (2017),Pandya and Venkatesan (2016),Shaaban et al. (2019)
Industry (n = 19, 34%)	Low corporate product reliability, poor consumer-corporate brand relationship, similar business model, strong interlinkage with the crisis brand, high geographical proximity, high exposure to intermediaries' interpretations, high size and product similarity, high governance-related tie-strength, low IT capacity to prevent and marketing capacity to respond, common ownership, common production processes, same external auditor	(1) Competitors may seek to actively counter the negative inferences about their product quality by promoting their product quality. (2) Competitors can target at forging unity, revitalizing transparency, optimizing staff skills & status, and providing tangible evidence. (3) When adopting preferential detachment strategies, organizations should refer to previous, well-handled internal issues to strengthen people's trust. (4) Avoid being casted as similar to the attacked players in contested industries, and seeksimilarity with cherished actors in uncontested sectors.	Bouzzine and Lueg (2020),Liu and Varki (2021),Mehta et al. (2020),Robson and Farquhar (2021)
Alliance partnerships (n = 4, 7%)	High strategic importance and termination costs of the alliance, high degree of similarity of brand images	(1) Consider direct actions such as distancing oneself from the perpetrating firm. (2) Company–cause congruence being a strategic decision in CSR may buffer negative impacts in a crisis. (3) A successful partnership depends on the images of the two brands growing closer to one another.	Galloway et al. (2021),Kahuni et al. (2009),Lee and Rim (2016),Norheim-Hansen and Meschi (2021)
Associated brands (n = 7, 13%)	High brand similarity, similar cash flow structures, weak consumers' emotional attachment to the brand, low transparency, high crisis severity, questionable accounting practices, ineffective board monitoring, weak corporate governance structures	(1) A firm should not only strive to offer outstanding product value to its customers, but also have an eye on how other related corporate activities such as their service and manufacturing are evaluated.	Arne et al. (2017),Janakiraman et al. (2009),Martin et al. (2017),Ozturk et al. (2019)
Same organization (n = 5, 9%)	Relevant schema, strong schematic fit, high brand association and brand directionality, high consumers' familiarity	(1) Brand architectures could be designed to limit the potential spillover from subbrands considered as risk by having weaker associations with the parent brand. (2) A firm should set up processes and systems to avoid potential brand events.	Ahluwalia et al. (2001),Mackalski and Belisle (2015),Caldieraro et al. (2015)
Product category (n = 9, 16%)	Same brand category and market position, low product quality, high level of diagnosticity of electronic WOM content, economies of scope across the product categories	(1) The use of either a bolstering or differentiation strategy could support a competing brand to dissociate from the brand in crisis. (2) Brand managers should leverage traditional marketing mix elements besides advertising, such as point-of-sale activities and product news,	Roehm and Tybout (2006),Sanchez et al. (2020),Zhang and Lim (2021)

(*continued on next page*)

Table 4 (*continued*)

Spillover types	Risk factors	Response strategies	Examples
		as effective and powerful tools for generating e-WOM content. (3) Deal with others' crises. Don't ignore them. (4) When the not-concentrated ads prime thinking about relationships and scandal spillover presumably occurred, issuing a denial is beneficial because it promotes correction.	
Individuals to organizations (n = 7, 13%)	High attribution of blame, strong negative emotions, rich consumer knowledge, high news/ search intensity regarding the scandal	(1) Scapegoating is more effective than apology because it manages to reduce attribution of blame to the company.	Antonetti and Valor (2021),Knittel and Stango (2014),Sato et al. (2019),von Sikorski and Herbst (2020)

strategic importance and termination costs of the alliance (Kahuni et al., 2009; Norheim-Hansen & Meschi, 2021). Distancing from the perpetrating firm is one of the direct actions that the alliance partners may consider taking when being associated as guilty, but a partner's response can also aim at influencing media framing of the issue (Norheim-Hansen & Meschi, 2021).

Different from the industry-level spillover effects, the associated brands category involves seven articles (13%) examining crisis spillovers beyond the industry boundary, such as the transfer of negative perception of the manufacturer (e.g. Foxconn) to the product brand (e.g. Apple), or from the brands in the product subsystem to other brands in the service subsystem and vice versa. A variety of risk factors in relation to this type of spillover effects are mentioned in literature, comprising high brand similarity, similar cash flow structures, weak consumers' emotional attachment to the brand, low transparency, high crisis severity, questionable accounting practices, ineffective board monitoring, and weak corporate governance structures (Arne et al., 2017; Janakiraman et al., 2009; Martin et al., 2017; Ozturk et al., 2019). However, we could not find any discussion about potential response strategies with respect to this spillover type. Only a prevention measure was asserted in Arne et al. (2017) that a firm should not only strive to offer outstanding product value to its customers, but also have an eye on how other related corporate activities such as their service and manufacturing are evaluated.

Five articles (9%) studied the spillover effect within the crisis organization, for example, from new subbrands to the parent brand, from one attribute to another attribute, or from existing business to newly extended business. One may argue whether this cluster fits in the scope of crisis spillover research given that no other firm is involved in the transfer of negative perception. In our view, a spillover effect is provoked when the cause of a crisis is attributed to a category beyond the crisis brand. In that sense, an organization can be regarded as the category to which the brands owned by it are judged in association with the crisis. Thus, we posit the spillover effect in the same organization as a separate type of crisis spillover. Risk factors identified in this category involve strong schematic fit, high brand association and brand directionality, and high consumers' familiarity (Ahluwalia et al., 2001; Mackalski & Belisle, 2015; Caldieraro et al., 2015). To minimize the impact of crisis spillover within an organization, firms are advised to build weak associations between brands, for example, detaching subbrands from the parent brand (Mackalski & Belisle, 2015; Caldieraro et al., 2015).

The product category involves nine articles (16%) investigating how a brand crisis can change consumer perceptions of competing brands belonging to the same product category. For example, a firm's misdeed (e.g. Pepsi) can cue thoughts about similar products related to the focal product, which in turn open up the possibility of thinking about other competing products (e.g. Coca Cola; Sanchez et al., 2020). The risk factors associated with this spillover type include the same market position, low product quality, high level of diagnosticity of electronic word of mouth (WOM) content, and economies of scope across the product categories (Roehm & Tybout, 2006; Sanchez et al., 2020; Zhang & Lim, 2021). Three crisis communication strategies are argued by scholars to mitigate the risk of crisis spillover in this context: Zhang and Lim (2021) find that the use of either a bolstering or differentiation strategy could support a competing brand to dissociate from the brand in crisis. Roehm and Tybout (2006) state that when the not-concentrated ads prime thinking about relationships and crisis spillover presumably occurred, issuing a denial is beneficial because it promotes correction.

The last crisis spillover category – individuals to organizations – involves seven articles (13%) examining the transfer of blame from athletes to endorsed brands, from celebrities to sponsor brands, or from politicians to political parties. The rationale behind the spillover effect was that the individuals can be included in the representation of the organizations that they collaborate with or belong to (von Sikorski & Herbst, 2020). The risk factors in association with this category include high attribution of blame, strong negative emotions, rich consumer knowledge, and high news intensity regarding the scandal (Antonetti & Valor, 2021; Knittel & Stango, 2014; Sato et al., 2019; von Sikorski & Herbst, 2020). With respect to the response strategy, Antonetti and Valor (2021) find that a scapegoating strategy is more effective than issuing an apology because it manages to reduce attribution of blame to the organization.

4. Future research directions

This review of the literature has identified a number of under-researched areas related to spillover crises. The areas include spillover types, types of crises, stakeholders, methodology, disciplines, country samples, and how responses to spillover effect are related to different types of spillover effects (see Table 5). Starting with the spillover types, this review revealed that the majority of spillover studies focus on a common industry, in the sense that the impact of a brand crisis affects its competitors within the wider context of the industry. While the industry-level spillover is most commonly addressed in previous literature, future research should take other spillover types into consideration. For example, organizational type (e.g. similar vs. dissimilar with the company in crisis) may also play a role in determining to what extent a brand can be affected by an spillover effect (Laufer & Wang, 2018).

Regarding types of crises, the type most frequently examined in spillover crisis research is product harm crises. Future research should explore other types of crises such as data breaches. Data breaches have been recognized by researchers and practitioners alike as one of the most recurrent and damaging cyber incidents for organizations and stakeholders worldwide (Kuipers & Schonheit, 2021). While information and communication systems became more reliant on digital technology and data during the Covid-19 pandemic, not only private organizations, but also public organizations storing sensitive client data are facing an increasing risk of data breaches. Organizations suffering a data breach will encounter considerable direct costs involving forensic investigations, legal proceedings, regulatory fines, as well as indirect costs including reputational damages and loss of stakeholder trust (Kim et al., 2017; Kuipers & Schonheit, 2021; Syed, 2019; Wang & Park, 2017). If a customer suffers from a data breach with one organization, she may be more reluctant to provide her personal information to another organization due to the fear that the data breach would spread. Different from other types of corporate crises, data breaches reflect ambiguous situations in which the causes of the crisis and whether the organization in crisis is a victim or offender are not always obvious to identify (Bentley & Ma, 2020). Hence, Park (2017) calls for more research to study crisis responses in these ambiguous situations. Understanding how a data breach can spread from one organization to another will provide important insights regarding suitable crisis response strategies.

Table 5
Areas for Future Research.

Area	Research gap
Spillover types	The majority of spillover studies focus on a common industry. Future research should examine other shared categories such as organizational type.
Types of Crises	The crisis type most frequently examined in spillover crisis research is product harm crises. Future research should examine other types of crises such as data crises.
Stakeholder Type	Consumer and investor reactions to spillover crises are the most common stakeholders examined in spillover studies. Future research should focus more on other types of stakeholders such as employees.
Methodology	Qualitative research and longitudinal studies are rarely used in spillover crisis research. On the other hand, experiments and event studies are more frequently used in the literature.
Organizations vs. Individuals	Most spillover crisis studies focus on the spillover effect from one organization to another. On the other hand, fewer studies examine the spillover effect from one individual to another (e.g., politician, athlete or celebrity).
Countries	Most spillover studies have been conducted in Western countries (e.g., USA, Europe). Much less research has been conducted in other areas of the world.
Spillover effect vs. responses to spillover effect	Most spillover studies have focused on risk factors to a spillover effect. Fewer studies have examined effective responses to a spillover effect.

Next, two stakeholder groups – consumers and investors – are examined the most with respect to their reactions in spillover studies. Future research should focus more on other types of stakeholders such as employees. For example, since employees have been empowered by social media in the last decade, they may become influential advocates or adversaries of their organization during a crisis (Frandsen & Johansen, 2011; Korn & Einwiller, 2013). Overlooking a spillover effect either triggered by employees or amplified due to their involvement can result in potential risks on protecting organizational reputation.

With respect to research methodology, qualitative research and longitudinal studies are rarely used in spillover crisis research. On the other hand, experiments and event studies are more frequently used in the literature. This calls for future research to explore different research methodologies to advance our knowledge on stakeholder attitudes and contextual factors related to spillover effects, and to evaluate the robustness of the spillover effects identified in previous literature.

Further, most spillover crisis studies focus on the spillover effect from one organization to another. On the other hand, fewer studies examine the spillover effect from one individual to another. Given that the extent to which one individual's (e.g., politician, athlete or celebrity) violation of social norms can influence citizens' trust of other individuals such as politicians and even organizations such as political parties (Chanley et al., 2000; Maier, 2011), the individual aspect of spillover crises is worth examining by future research.

Additionally, it is evident that most spillover studies have been conducted in Western countries including the USA and European countries. Much less research has been conducted in other areas of the world. As argued by Wang and Laufer (2020), scholars often use Western-based frameworks to examine issues in crisis management in other cultures. However, relying on these frameworks may not be useful since in many cases they do not consider contextual factors such as culture. Thus, future research should investigate spillover effects in various cultural contexts and compare how the mechanisms underlying a crisis spillover may differ.

Last but not least, most spillover studies have focused on risk factors to a spillover effect. Fewer studies have examined effective responses to a spillover effect. Among the 56 articles that we reviewed, only 33 articles (59%) discussed responses to a crisis spillover effect specifically, whereas the rest did not tackle this in their articles at all. From a crisis communication point of view, it is not only important to understand what drives the spread of a crisis to other organizations, but also how those organizations should react to it. Thus, future research should draw on what response strategies to a spillover effect can work effectively and how to better prepare the organizations for their crisis communication with respect to spillover crises.

In summary, it is clear from the review that there is a lot we still do not know related to spillover crises. Our suggestions for future research based on the literature review will help guide researchers explore areas that will provide us with a better understanding of the spillover effect phenomena, and also how organizations can effectively respond to spillover crises. In the meantime, it is important to acknowledge that this literature review is limited to articles using the terms "crisis spillover", "spillover", "spill over", "crisis contagion", and "contagion". Other studies not using these terms may be relevant, but have been left out of our review. This is an important limitation of our study. However, it is worth noting that this is a common limitation of literature reviews which focus on relevant keywords to identify studies for inclusion. Thus, scholars who wish to further explore the topic of crisis spillover effects should not limit themselves to the keywords used in this study, and may consider going beyond the sample of 56 articles covered in our research.

Declaration of Competing Interest

None.

Data availability

No data was used for the research described in the article.

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