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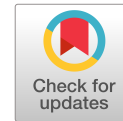
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Safetywashing: The Strategic Use of Safety in the Construction Industry

Johan Ninan¹ and Stewart Clegg²

Abstract: In this article, we discuss the concept of safetywashing defined as the strategic practice of promoting, marketing, and branding of safety practices without full disclosure of negative information to improve the image of the organization. The research seeks to answer two questions: first, what are safetywashing strategies? Second, what are the effects of safetywashing strategies? To study this, 106 news articles relating to construction safety in India, as well as 439 reader comments on them, were systematically collected and their contents analyzed to compile multiple case studies which had evidence of safetywashing. We analyze multiple instances from these case studies to build theoretical insight into these strategies and their effects, using an approach anchored in a social exchange theoretical framework. We highlight different safetywashing strategies employed in the construction sector, such as safety as a project objective, explaining safety initiatives, associating with pioneers, as well as investing in safety. These strategies lead to accepting of organizations, prioritizing safety, and diverting focus, all of which have different implications for safety practice in the construction industry. DOI: [10.1061/JMENEAM.ENG-5838](https://doi.org/10.1061/JMENEAM.ENG-5838). © 2024 American Society of Civil Engineers.

Author keywords: Safetywashing; Construction safety; Social exchange theory; News media.

Introduction

Safety is often highlighted as one of the most important features of construction projects during both the construction and operation phases (Törner and Pousette 2009). Safety is perceived most acutely in its lack of efficacy, when it fails to protect people, or when workers suffer injury, lose a limb, or even their life (Behm 2005; Shapira and Lyachin 2009). Managerially, lack of safe operations can mean the loss of workdays as well as damage to property and equipment. When safety measures fail or are found wanting, they can also lead to negative effects on employees in general, such as loss of morale and reduced productivity.

There are different facets to safety management in construction. Technologies such as building information modeling, 4D visualization, and wearable sensing devices have been used to improve construction safety performance (Awolusi et al. 2024; Chang et al. 2023; Datta et al. 2020). Additionally, campaigns based on pictures and simple messages communicated through posters, newsletters, videos, and slogans are used to improve safety performance (Oswald et al. 2018; Sherratt et al. 2013). These campaigns signal to construction workers the importance of safety in construction and can lead to improved safety performance. While such promotion of safe practices is largely conducted within the organization for the construction workers, the promotion of safe practices outside the organization is currently less researched. In this study, we focus on safetywashing, which includes marketing safety to stakeholders external to the organization in a way that is similar to organizational greenwashing. We define safetywashing as the

strategic practice of promoting, marketing, and branding of safety practices without full disclosure of negative information to improve the image of the organization.

The general promotion of safety practices can make the public at large aware of the safety challenges the construction sector faces, as well as the initiatives taken to improve safety. Such promotion enhances perceptions of the construction industry (Ninan et al. 2019). Promotion flows most frequently to the public at large through news media channels. There are social implications of the strategic use of safety discourses, particularly in the news media. Media discourses potentially shape perceptions of corporate decisions (Williamson 2018), depending on how receivers view the media message. However, the misleading safety communication practices within the context of construction projects, i.e., safetywashing, have not been explored even when such practices are considered as greenwashing (focus on sustainability), healthwashing (focus on health/nutrition), ethicswashing (focus on ethics/moral issues), and bluewashing (focus on water conservation) in different contexts. We will contribute to the safety literature by examining how news regarding construction safety is marketed in the news media, as safetywashing. Specifically, we ask (1) What are the safetywashing strategies? and (2) What are the effects of these safetywashing strategies?

The paper starts with a review of the existing literature on safety discourses before outlining the rationale for considering the Indian context, using news media articles as a data source, and the processes of retrieving and analyzing this data. The findings are then presented through an examination of the data collected as multiple cases. Subsequently, the outcomes of this research are discussed in relation to the research questions. Finally, the conclusions, theoretical and practical contributions, and scope for future directions are highlighted.

Literature Review

Safety Discourses

Safety discourses communicated through safety marketing programs strive to change people's safety attitudes and behavior in

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a way that has a positive impact on safety practices (Neal et al. 2000). Promoting safety is important for preventing accidents because individual perceptions, attitudes, and motivations frame one's behavioral patterns and safety performance (Tait and Walker 2000) as the skillful and strategic use of language is a key means of initiating and directing change (Suddaby and Greenwood 2005). Discourses communicating safety are devised to deliver safety-related specifications and messages precisely to target groups, often to the construction workforce (Lu et al. 2018). They foster employee identification with precautionary practices so that construction crews come to regard safety as a salient and valued group norm (Andersen et al. 2015).

Research on safety discourses in the construction industry has focused on mission statements, slogans, logos, newsletters, posters, e-mails, seminars, videos, and safety campaign workshops (Vecchio-Sadus and Griffiths 2004). Safety promotion through these media seeks to direct employees' safety attitudes and willingness into performing enhanced safety behavior (Nævestad et al. 2019) and results in a substantial decrease in lost time injury rates, a decrease in compensation claims and compensation insurance premiums, as well as improvement in the investigation and documentation of incidents. While the promotion of safe practices is largely conducted within the organization, safetywashing focuses on marketing safety as a strategic tool to stakeholders external to the organization, in a way that is similar to organizational greenwashing. By exploring the parallels between greenwashing and safetywashing, we aim to draw attention to a broader phenomenon of deceptive practices across different domains. This comparative perspective enhances the depth of our investigation by highlighting that safetywashing while being specific to safety discourses is not unique and can be similar to practices of greenwashing.

Greenwashing involves the use of strategic discourses on sustainability to create a *perception* of the organization as sustainable. The emphasis is on marketing purposes that are not an accurate reflection of what is really done in relation to sustainability practices. Lyon and Maxwell (2011) define greenwashing as the *selective disclosure of positive information about a company's environmental or social performance, without full disclosure of negative information on these dimensions, so as to create an overly positive corporate image*. Different strategies for greenwashing are highlighted in the seven sins of greenwashing (TerraChoice 2009) such as hidden trade-offs, offering no proof, vagueness in claims, using false labels, irrelevant claims, offering lesser of two evils, and even deceitful fibbing. Greenwashing is designed to improve the image of an organization by creating a favorable impression of its green values. The objective is not to represent transformed practices so much as brand attitudes that will, hopefully, result in increased sales (Szabo and Webster 2021). Green advertising and promotion are widespread (Delmas and Burbano 2011) with a considerable amount being more akin to elements of greenwashing, rather than being an accurate representation of practice (Lyon and Montgomery 2015). Greenwashing, while detrimental to society, does engage with the discourse and terms of being green and promotes these through various media. Thus, the comparison between safetywashing and greenwashing can enhance the depth of our investigation by drawing on diverse deceptive practices across different domains. Since media plays a significant role in the practice of greenwashing in organizations (Li et al. 2023), we now review literature on construction safety in the media.

Safety in the Media

As noted earlier, the media of transmission of safety discourses include mission statements, slogans, posters, e-mails, seminars,

and video safety campaigns (Vecchio-Sadus and Griffiths 2004). Outside of the ways in which construction safety is represented in news media, most members of the public have no direct personal experience of safety awareness, except in cases of accidents that affect them. People's attitudes toward safety are mediated by their experiences of news media representations of construction safety.

Ninan (2021) provides an overview of interpretation of safety in the media and argues that what the world perceives as safety failure in the construction industry is much broader than safety of construction personnel. The reports of safety considerations in the media can affect the sense of safety of the readers, which in turn indirectly lead to safety improvements for the project, externalities, and construction workers (Ninan 2021). Similarly, Schneider and Check (2010) notes how media is an important tool toward building a better and safer construction industry. They suggest construction organizations and researchers assist journalists in generating deeper coverage of construction safety, as well as expand national dialogue, dissemination, and networking on construction safety to engage media to raise safety awareness. Oswald et al. (2018) highlights the role of media in the compensation culture of organizations. They note how loose talk of compensation culture in the media increases media sales and how there is often misinterpretations through exaggerated instances which in reality has nothing to do with safety. In addition, they note that a blame culture is frequently encouraged in the media to blame workers and avoid compensation claims. Similarly, Lord Young of Graffham (2010) records that compensation culture is often fueled by media narratives highlighting cases where individuals receive substantial compensation payouts for personal injury claims. Based on these media stories, there is a growing perception among business owners that they might face lawsuits for violating safety regulations. To understand safetywashing strategies and its effects, we turn to social exchange theory as it provides an explanation for outcomes that emerge from various interactions between individuals or organizations based on the core principle of reciprocity (Lioukas and Reuer 2015).

Social Exchange Theory

Social exchange theory serves as the theoretical foundation to elucidate the dynamics underlying the development of organizational trust with respect to safetywashing. Social exchange theory views social interactions as a give-and-take of both tangible and intangible rewards and costs (Homans 1961). Trust promotes organizational identification by various stakeholders and is designed to result in more positive behaviors and enhanced organizational legitimacy (Aryee et al. 2002). Trust and legitimacy are socially constructed through discourses and associated rhetoric (Suchman 1995; Suddaby and Greenwood 2005). We find social exchange theory relevant for the study of safetywashing as it considers the emergence of trust through various repeated exchanges (Bercovitz et al. 2006).

Zucker (1986), drawing from a study of historical data in the United States from 1840 to 1920, outlines three trust-production exchanges. These are *characteristic-based exchange*, *process-based exchange*, and *institutional-based exchange*. Characteristic-based exchange centers on establishing shared traits such as nationality, goals, ethnicity, or family background that serve as potential sources of trust (Morgan and Hunt 1994). Characteristic-based exchange focuses on creating a sense of sharedness operationalized through specific characteristics reducing the necessity for explicit rules and regulations in social interactions (Doney and Cannon 1997). Process-based exchange involves trust built through

past exchanges, affirming reputation and brand names (Morgan and Hunt 1994). This type of trust convinces stakeholders of an organization's value (Boltanski and Thévenot 2006), leading consumers to willingly provide personal data and repeatedly purchase the organization's goods or services (Luo 2002). Institution-based exchange is linked to formal societal structures and relies on attributes like certification, third-party guarantees, and credible exchange partners (Luo 2002). For instance, certifications such as medical licenses assure professional practice standards, instilling trust in the holder, similar to how audits and quality assurance validate trust (Power 1997).

Trust-production exchanges can occur intentionally, incidentally, or a combination of both (Chow et al. 2012). These exchanges have the potential to result in reciprocal trusting behaviors demonstrated by the trustees (Bigley and Pearce 1998). They have behavioral implications for those subject to them that can be used strategically to alter practices. We know from Fox's (1974) work that trust and power relations are interchangeable, with their use related to the degree of structural coercion that a situation affords. When a situation is low in trust then overt power relations tend to control behavior, but when trust is high then overt power is less necessary. Safetywashing can be seen as a form of subtle power influencing the probability that those that receive its message will be favorably influenced as to the worth of the organization that is transmitting the communication. This study examines how safetywashing strategies affect safety practice drawing on the trust-production mechanisms of social exchange theory.

Research Setting and Method

To address our research objective, we chose to study media representations of construction safety in India. India's construction output has been rapidly expanding, positioning it among the fastest-growing countries in this sector (Sawhney et al. 2014). This growth has led to substantial coverage of construction activities in the news media, offering a platform through which one can trace the representation of discourses related to construction safety. News articles are a valuable resource to study concepts such as safetywashing as it has valuable insights on various practices and cases in the construction industry (Baek et al. 2023). India is also one of the largest English-speaking countries, resulting in many news articles in English which can be easily retrieved and analyzed. Examining construction safety in India offers numerous media instances that provide rich material for analyzing and interpreting strategic uses of safety-related discourses.

The collection of news articles concerning construction safety in India was conducted through a keyword search, "India construction project safety," utilizing the *Google news* repository. Google news serves as a prominent web-based aggregator of news and is commonly utilized for research endeavors (Bandari et al. 2012). Leveraging this aggregator allowed the study of construction safety-related news from various daily English-language newspapers. This pan news media approach was adopted to mitigate the bias that might arise from studying only a single news agency, considering that different newspapers tend to highlight varying aspects of the phenomena they cover (Morehouse and Sonnett 2010). During the data collection progress, we used private browsing modes, disabled location-based settings, and cleared browser cookies following the suggestion of Fischer et al. (2020) to avoid search personalization. We also conducted a manual review of news articles with various terms and combination in the search period and did not observe many variations. By using digital access to online news articles, we respond to calls from management journals

such as the Academy of Management Journal (AMJ) to open up the research methods repertoire (Langley et al. 2023) and employ methodologies relevant to the 21st century. This was done to shed light on and understand modern construction practice (Sergeeva et al. 2022).

For this research project, we focused on analyzing all news articles in English pertaining to construction safety published between January 1, 2018 and December 31, 2018. We achieved theoretical saturation from these datasets as we collected and analyzed data in parallel (Saunders et al. 2018). Additionally, there is no reason to believe that this year was unusual or that it does not adequately represent construction practices and hence can be representative of the discourses throughout, as noted by Kaminsky (2021). A total of 106 were selected and retrieved from various newspapers, such as the Economic Times (15 news articles), Times of India (11 news articles), and Business Standard (6 news articles), among others. Details of the data retrieved, such as the number of articles discussing each project category of projects and their comments, are summarized in Table 1. We also retrieved 439 comments on these news articles to understand the effect of safetywashing strategies. It is acknowledged that not all articles had comments from readers; however, whenever they were present, we used them as data on the effects of safetywashing.

The research used an interpretive methodology employing social exchange theory, as a guide to data collection and analysis (Walsham 1995). We applied qualitative analysis to the data to provide powerful insights into perceptions of safety (Oswald 2019). Using readers' comments provides access to naturally occurring data that has not been produced by any interview questioning; thus, the data is a better reflection of perspectives than contrived questioning (Silverman 2021) although the demographics are more random than a stratified sample would provide. Qualitative research methodologies enable us to interpret expressions of people's lived experiences (Pink et al. 2010). They reveal new phenomena as well as capture depth and richness (Ariño et al. 2016). For research question (RQ)1, we use the content of the 106 news articles, and for RQ2, we use 439 user comments corresponding to these news articles, and for both, we use thematic qualitative analysis as shown in Fig. 1.

Thematic qualitative analysis approaches extract themes or underlying patterns through careful reading, coding, and categorization in the process identifying recurrent themes that represent the essence of the data. The research process involved open coding of the gathered data from news articles to develop theoretical constructs and, subsequently, construct theory. This was achieved through manual coding, employing interpretive analysis and comprehension methods as outlined by Kozinets et al. (2014). The analysis studies were performed with reference to the three trust-production exchanges by Zucker (1986)—characteristic-based exchange, process-based exchange, and institutional-based exchange. For example, we coded safety as being a characteristic of the project when safety was used as a project objective and anchored

Table 1. Summary of data retrieved

Sl. no	Project category	Number of news articles	Number of comments on the news articles
1	Metro rails	22	42
2	Highways and tunnels	20	140
3	Railways and hyperloops	24	67
4	Energy projects	14	63
5	Others	26	127
	Total	106	439

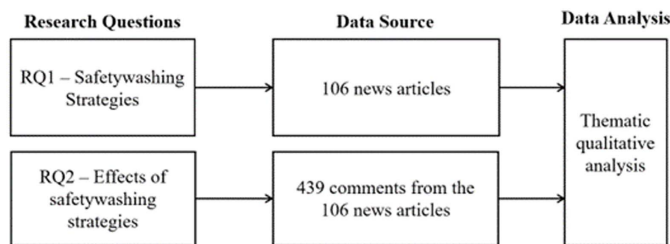


Fig. 1. Research methodology to explore safetywashing strategies and effects.

it on the characteristic-based trust building mechanism in Zucker (1986). This step aligns with Eisenhardt's (1989) recommendation to link analysis to existing theory, thereby bolstering internal validity, generalizability, and the overall advancement of theory building stemming from case research. We triangulated the data by using multiple data sources to support our arguments to cross-verify information (Denzin 1978) such as use of industry reports, news articles outside the study period, and academic papers. We coded the data separately and undertook peer review to compare the coding process and themes identified following the suggestion of Miles et al. (2014). Finally, we collected data until theoretical saturation where no new information emerged ensuring a comprehensive exploration (Saunders et al. 2018) of safetywashing strategies and effects. The findings are presented in a tabular form to enable theory building, and the constructs generated are anchored in existing literature (Eisenhardt 1989) for external validity.

Findings

The data we collected on safety in Indian construction industry were spread across multiple cases. We now discuss each of these cases in detail.

Metro Rails

The Mumbai metro rail is a rapid transit system serving the city of Mumbai in India. During its construction when activists and citizens' representatives raised concerns over the safety of heritage buildings near the construction site, the project highlighted the use of over 20 types of internationally tried and tested monitoring tools to safeguard these buildings. The project also set up a safety exhibit for metro rail employees, construction workers, and visitors with prototypes and explanations of safety practices employed in the construction and operation of the metro rail. A quotation from a news article reads,

"In order to train its workers and that of other infrastructure agencies, mahametro has set up a safety park on its plantation little wood's premises on Hingna road . . ." (Quoted from the news article 'MahaMetro sets up safety park on Hingna Road' dated 5 November 2018)

Lucknow metro rail is a rapid transit system serving the city of Lucknow in the state of Uttar Pradesh in India. The project won an international award for its safety practices and proclaimed its continuous commitment to achieving the highest standards of safety:

"Lucknow metro's underground project has bagged the prestigious international royal society for the prevention of accidents (RoSPA) health and safety awards, 2018 . . . This award

highlights LMRC's continuous commitment in achieving highest standards of health and safety in the project execution for the Lucknow Metro Rail Project." (Quoted from the news article 'Lucknow Metro's underground project gets RoSPA awards' dated 11 April 2018)

In response to the news on the award in the case of Lucknow metro rail, one reader commented below the news article that the award will put Lucknow on the world map for its efficient construction.

"The awards to Lucknow metro in the recent past will certainly put Lucknow on world's map for its efficient construction and sustainability practices" (Quoted from the comments of the news article 'Lucknow Metro's underground project gets RoSPA awards' dated 11 April 2018)

However, there were also responses to the news on the award regarding safety hassles and inconveniences in the Lucknow metro rail project such as the inconvenience and safety issues created due to the frequent diversions in the project.

Highways and Tunnels

The Delhi-Meerut Expressway spans 96 km and serves as a controlled-access expressway, establishing a connection between Delhi and Meerut. Safety features of the project, such as a video incident detection system, were highlighted during its inauguration as noted below.

"It is equipped with smart and intelligent highway traffic management system (HTMS) and video incident detection system (VIDS) and will set a benchmark in highway construction by being environment-friendly with world-class safety features and smart/interactive infrastructure" (Quoted from the news article 'All you need to know about Delhi-Meerut Expressway, Eastern Peripheral Expressway' dated 27 May 2018)

With the prominence given to safety, the comments of the newspaper highlighted how the people of Meerut will benefit from this project:

"Congratulations to the people of Meerut for getting the valuable expressway which will now benefit them" (Quoted from the news article 'PM Narendra Modi inaugurates Delhi-Meerut Expressway' dated 27 May 2018)

The Zojila tunnel is a tunnel on the Srinagar-Kargil-Leh national highway in India. The tunnel ensures year-round road connectivity between Srinagar and Kargil which earlier was blocked for about seven months a year due to heavy snowfall on the Zojila Pass, which is situated at an altitude of 3,528 m. Announcing the project, the Road Transport and Highways Minister of India highlighted that the project would enhance the safety of passengers and reduce the travel time from 3.5 h to 15 min. In a subsequent statement, the central government explained the different safety arrangements in the project such as axial fans, ventilation systems, CCTV monitoring systems, variable messaging boards, emergency telephone systems, etc. One of the readers of the article echoed the importance of safety and complemented the government on the initiative:

"Nice initiative. We hope project will do good for people of Leh and provide safe and cheap all-time connectivity to them. Employment will also increase from this initiative" (Quoted from the comments of a news article 'Cabinet approves Zojila Pass tunnel project' dated 5th January 2018)

Railways and Hyperloops

Indian Railways operate the railway system throughout the country. Large sums of money, for example more than INR 500 bn for enhancements in the Mumbai network, are invested to improve their safety standards and transform them into a world-class facility. In addition to financial investments in safety, the government is also planning collaborations with Japan to train technical personnel from India on safety practices, as indicated below,

“The Japanese team would work closely with DFCCIL [Dedicated Freight Corridor Corporation of India] and Northern Railway’s safety, civil engineering and rolling stock teams ... Thereafter, 60 technical personnel from India would receive first-hand training in Japan” (Quoted from the news article ‘Railways formalises its agreement with Japan in rail safety’ dated 14 August 2018)

In response to the news article on collaboration with Japan to improve safety practices in the railways, a reader responded,

“Yes, such arrangements with the world’s best brains be asked for advise on such projects and implemented sooner in case of DFCCIL and other schemes which would help ease the railways achieve better speed and time for the goods to reach the customers time and again and also be a good alternate for the road transport” (Quoted from the comments of a news article ‘Railways formalises its agreement with Japan in rail safety’ dated 14 August 2018)

India is also planning hyperloops to increase the speed of its rail network. The newspaper reported that internationally reputed organizations, such as NASA, questioned the safety aspects of the technology.

“NASA, in its Hyperloop Commercial Feasibility Report highlighted the key safety questions involving this technology” (Quoted from the news article ‘Hyperloop in India under Public-Private Partnership: What is the Govt getting into now?’ dated 24 February 2018)

Newspapers also noted that the plan to commission a fully functional hyperloop by 2024 is hard to believe, as new forms of legislation to deal with safety will be required for the project.

Energy Projects

The Jaitapur nuclear power plant is a proposed power plant in Maharashtra which would be the largest nuclear power generating station in the world with a net generation capacity of 9,900 MW. The power plant is constructed with collaboration with France. The locals of the region and some organizations are raising concerns regarding the safety of the large nuclear facility as noted below.

“Locals of Jaitapur and some organizations have been opposing the project in the area citing safety and environmental concerns” (Quoted from the news article ‘Construction of Jaitapur nuclear plant expected to begin by year-end: French ambassador’ dated 20 March 2018)

In response to the safety concerns, the French Ambassador to India claimed that two French nuclear safety officers will be closely monitoring the project.

“Seeking to allay safety concerns, he said two French officers who are in charge of the nuclear safety are closely monitoring the project” (Quoted from the news article ‘Construction of

Jaitapur nuclear plant expected to begin by year-end: French ambassador’ dated 20 March 2018)

Others

Multiple construction products available in the Indian market highlight their safety features in news media articles. For example, the Managing Director of a construction product organization wrote an opinion piece on the role of technology in construction safety, highlighting the role of automated and remotely controlled construction equipment to create safer roads. Another product organization won a safety award and reiterated its commitment to world-class safety practices as below,

“Reiterating its commitment to world-class safety practices and on-site project execution, *** (name of product organization) Building Products division, has received the 10th CIDC Vishwakarma Award 2018 for Safety, Health and Environment, for the second time in a row” (Quoted from the news article ‘*** (name of product organization) bags CIDC Vishwakarma Award for Safety, Health and Environment, second time in a row’ dated 26 March 2018)

In another instance, Russian nuclear reactors were planned to be used in the Kudankulam Nuclear Power Plant. The CEO of the Russian company highlighted that the project would be the safest nuclear power plant in the world as it has safety systems that provide maximum resilience against external and internal impacts. Acknowledging the safety feature of the Russian nuclear reactors, one of the readers of the news article commented that India should manufacture these reactors locally with the Russian venture and every state in India should have one of these reactors. Governments too launched innovative construction products and transport to improve the safety for the commuters. These included new kinds of vehicles like hybrid aeroboats and ropeways using globally accepted standards for passenger safety and reliability. While some readers received this news positively, there were others asking the government to concentrate on improving the performance of existing infrastructure before investing in new projects.

“Please upgrade present rural and urban transport systems and work towards reducing vehicular pollution first!” (Quoted from the comments of the news article ‘Ropeways, Cable cars Future of Indian Transport: Nitin Gadkari’ dated 6 November 2018)

In addition, monuments also brought in safety discussions, such as in the case of the Shivaji statue. The statue was initially planned for 192 m; however, it was increased to 212 m as the government wanted to make the statue the tallest in the world, competing against an upcoming statue at Spring Temple Buddha in China. The protesters questioned the safety aspects of the project, particularly when the length of the sword of the statue was extended to increase the height of the statue. In response, the readers of the news article echoed the concerns of safety and commented that the height of the statue should not have been an issue, as Shivaji was a small man with great courage:

“Had the great Shivaji been alive today he would have been aghast at his proposed statue being of giant size as he was a small man with great courage. That is what the statue should have captured not by making it monstrous in size” (Quoted from the comments of the news article ‘Plan for Shivaji Statue off Mumbai’s Coast Has Major Technical and Safety Issues’ dated July 16, 2018)

Table 2. Summary of safetywashing strategies and their effects

Sl. no	Case	Safetywashing strategies (from news articles)	Effects of safetywashing strategies (from comments of news articles)
1	Mumbai metro rail	News on adoption of internationally tried and tested tools in the project to ensure safety of buildings (associating with pioneers) News on setting up safety park in the project showing its show commitment to safety (investing in safety)	
2	Lucknow metro rail	News on project receiving international health and safety award (associating with pioneers)	Readers questioning project on diverting focus to awards from actual safety hassles and inconveniences faced by commuters (diverting focus) Readers saying that the award to the project has increased international reputation of the city (accepting organizations)
3	Delhi-Meerut Expressway	News on project being equipped with world-class safety features such as HTMS and VIDS (explaining safety initiatives)	Readers saying that the safe expressway will benefit people of Meerut (prioritizing safety)
4	Zojila tunnel	News explaining all the modern technical safety arrangements in the project (safety as a project objective)	Readers complementing the nice initiative to provide safe connectivity for people of the region (prioritizing safety)
5	Indian railways	News describing the aim to make Indian railways world-class (safety as a project objective) News reporting the spending of INR 500 bn for safety enhancements (investing in safety) News reporting the training of 60 technical personnel from India in Japan (associating with pioneers)	Readers suggest such arrangements with world's best brains will help Indian railways (accepting organizations)
6	Hyperloops	News reporting the hyperloop plan by 2024 is hard to believe as it would require new legislations on safety (explaining safety initiatives) News quoting NASA's safety concerns regarding hyperloop (associating with pioneers)	
7	Jaitapur nuclear power plant	News reporting protesters opposing the project citing safety concerns (safety as a project objective) News describing how two French nuclear safety officers are closely monitoring the project (associating with pioneers)	
8	Construction products	News on the product company receiving the CIDC Vishwakarma Award 2018 for Safety, Health and Environment for the second time in a row (associating with pioneers) News reporting India's possession of the safest nuclear power plant in the world since Russian VVER reactors are safest in the world (safety as a project objective) News regarding Government exploring the implementation of new kinds of vehicles and ropeways using globally accepted safety standards (associating with pioneers)	Readers recommend every state in India to manufacture these reactors with Russian venture (accepting organizations) Readers advocate for upgrading present transport systems and work toward reducing vehicular pollution first rather than implementing new vehicles (diverting focus)
9	Shivaji statue	News on how the government is making the structure unsafe by reducing the height of the statue and increase the height of sword (explaining safety initiatives)	Readers call for the government to not be obsessed about height of statue as Shivaji was a small man with great courage, rather focus on safety (prioritizing safety)
10	Ropeway at Vaishno Devi	News reporting the components of the ropeway being imported from Switzerland and thereby equipped with all safety norms (associating with pioneers)	Reader inquires how to book the service (accepting organizations)

In another case, the ropeway in the Vaishno Devi temple also brought safety discussions into their reports and presentations. The Governor of the state inaugurating the ropeway claimed that the components for the ropeway were imported from Switzerland and equipped with all safety norms. The readers of the news article expressed their interest in using the safe service. The safetywashing strategies and their effects from all the cases discussed above are consolidated in Table 2 for quick reference.

Discussion

Safetywashing Strategies

The media representations on safety can be categorized into different safetywashing strategies. These are safety as a project objective, explaining safety initiatives, associating with pioneers, and investing in safety. Each of these are discussed below, anchored in the social exchange theory (Zucker 1986).

1. Safety as a project objective: It was seen from the empirical data that safety was portrayed as an objective/characteristic of the project. In the case of the Zojila tunnel, the organization claimed that it had all the modern technical safety arrangements in the project. Similarly, the Mumbai metro rail was called a world-class facility that would provide commuters with safe travel. In another instance, the Russian CEO claimed that India possesses the safest nuclear power plant in the world as India uses the organization's nuclear reactor. The use of labels such as *modern safety arrangements*, *world-class safe facility*, and *safest nuclear power plant in the world* can create a positive identity for the project anchored on the perception of safety as something good (Ninan and Sergeeva 2021). Identifying with the use of a label need not always be positive. The use of negative labels, such as safety concerns, was used by locals to oppose the construction of the Jaitapur nuclear power plant. No proofs were offered to support the claims of modern or safest nuclear power plant in the world, which is one of the seven sins of greenwashing (TerraChoice 2009). Here, safety is promoted as a characteristic of the product, project, or government that can act as a driving force in creating trust (Morgan and Hunt 1994). Thus, the safetywashing strategy of "safety as a project objective" can be considered as a characteristic-based trust-production exchange in social exchange theory terms (Zucker 1986).
2. Explaining safety initiatives: Some of the safety features in projects were explained with more details. For example, the Delhi-Meerut Expressway explained how it has safety features such as the smart and intelligent highway traffic management system (HTMS) and the video incident detection system (VIDS). Likewise, the CEO of the Russian company emphasized the comprehensive safety measures integrated into their nuclear reactors comprising of both active and passive safety features, ensuring maximum resilience against various external and internal impacts, such as tornadoes, hurricanes, earthquakes, and even the unlikely event of an aircraft crash. Such explanations of safety features communicated a perception of the project as safe. Even explanations of the inefficiency of safety practices were used by protesters to communicate safety concerns and discredit the initiative or its organization. For example, in the case of the hyperloop concept, the protesters opposed the project by stating that the hyperloop project would require whole new forms of legislation to deal with safety, thereby discrediting the government's ambitious plan to deliver the project by 2024. In another instance, the disproportionate length of the sword in the case of the Shivaji statue and the resulting safety concerns over a public plaza were highlighted to claim that the project was not safe. Explaining safety initiatives as a strategy can be considered as safetywashing since it includes hidden trade-offs with a focus on an unreasonably narrow set of attributes without attention to other important issues (TerraChoice 2009). The objective of the "explaining safety initiatives" strategy was to convince stakeholders that the processes followed do in fact improve safety, thereby increasing trustworthiness from a safety point of view (Luo 2002). The strategy can be considered as part of the process-based trust-production mechanism in social exchange theory terms (Zucker 1986).
3. Associating with pioneers: Another safetywashing strategy was associating the project with pioneers to transfer their trust to the project. For instance, in the case of the Mumbai metro rail project, the project claimed it used internationally tried and tested monitoring tools to address safety concerns related to the buildings near the metro rail stations and tracks. In another instance, 60 technical personnel from Indian Railways were to

receive safety training in Japan. Similarly, the ropeway at Vaishno Devi claimed it uses electro-mechanical components imported from Switzerland stating it as a country renowned for safety and quality. Associating with such international pioneers using certified products can improve the perception of safety (Maitiniyazi and Canavari 2021). Another association with pioneers is by winning an award. For instance, Lucknow metro highlighted winning a safety award from a British charity organization, thereby being able to claim its safety practices were award winning. Similarly, a building product organization won an award for safety and used this to reiterate their commitment to safety practices. Proclaiming awards and certifications can improve the perception of the organization, project, or product (Ninan et al. 2019). Associating with automated and remotely controlled features, as seen in the instance of construction equipment, is another safetywashing strategy. Associating with automated system improves the perception of safety as human errors can be avoided. The associating with pioneers strategy can also be used to discredit a project, as seen in the case with the NASA feasibility report highlighting safety concerns of the hyperloop project. Strategic associations are used to demonstrate quality standards (Kim 2009) by associating with pioneers to build trust by depending on attributes and associations, such as certifications and partnerships (Luo 2002). Trust transference through associations with existing reputed organization are instrumental in building trust (Lim et al. 2006). Doing this can be considered an institution-based trust-production exchange in social exchange theory terms (Zucker 1986).

4. Investing in safety: In the case of Indian Railways, Rs 730 bn was to be spent on safety-related activities. However, the amount equates to only 0.4% of the total budget of the railways and is significantly less in contrast to an average US transport organization spending about 20% of its budget on safety measures (Manur 2018). The numbers do not stack up comparatively. Thus, we consider the "investing in safety" strategy as safetywashing because of its lack of specificity and general vagueness, such that the claim is poorly defined and its real meaning likely to be misunderstood (TerraChoice 2009). Likewise, the construction of a safety park with prototypes to show Mumbai metro rail's commitment to safety or having two French nuclear safety officers deployed to closely monitor the Jaitapur nuclear project seems more a safety image building exercise than a central safety strategy in practice. Anchored in social exchange theory terms, investing in safety also highlights the processes followed to convince stakeholders of trustworthiness and thereby create a safety image (Zucker 1986).

These different safetywashing strategies were anchored on the trust-production mechanisms of social exchange theory (Zucker 1986). We also highlight parallels with the seven sins of greenwashing (TerraChoice 2009) such as where no proofs are offered, trade-offs are hidden, and with the use of vagueness.

Safetywashing Effects

The public perceptions on safetywashing strategies were recorded from the comments to the news media article and anchored in literature as shown in Fig. 2. These instances of receiver-based communication include reception in terms of accepting organizations, prioritizing safety, and diverting focus, which are discussed below.

1. Accepting organizations: The safety award given to the Lucknow metro helped brand the city, as a reader responded that the award will certainly put Lucknow on the world map. Similarly, a reader commented that the Zojila tunnel is a good initiative

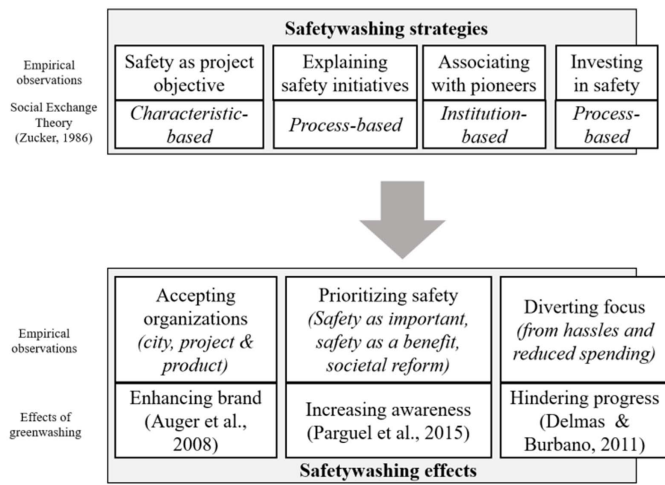


Fig. 2. Safetywashing strategies and effects in construction projects.

- as the project would provide safe travel for people from Leh. The statement by the CEO of the Russian company that India now possesses the safest nuclear power plant in the world resulted in a reader commenting that every state in India should have one of these Russian ventures. Thus, in terms of this data the implications of safetywashing were improved perceptions of the city, project, and product leading to their acceptance by the public. The literature on greenwashing highlights that greenwashing occurs at both the product and corporate level (Lyon and Montgomery 2015) and sustainable features might impact consumer perceptions of brands (Auger et al. 2008). From our empirical data, we highlight that safetywashing in construction extends from product and project level to even the city and country level. It was also seen that different organizations in the construction sector, such as government agencies, construction companies, and product organizations, engaged in safetywashing practices.
2. **Prioritizing safety:** The focus on safety in public discourse on media can improve societal perceptions of safety. As seen from the comments of news readers in the case of the Zojila tunnel, using safety as a project objective can lead to the community perceiving safety as important for the people of the region. Similarly, the explanations of safety features in the Delhi-Meerut Expressway resulted in a reader highlighting that the people of Meerut will benefit from them. Proclaiming safety awards can show pride associated with safety practices that can result in the readers prioritizing safety. An emergent safety consciousness arising from media communications can facilitate societal reform to focus on safety, similar to the case of risk consciousness (Wilkinson 2002). This is similar to findings in greenwashing where evoking nature in brands can also lead to increasing awareness of sustainability within the community (Parguel et al. 2015). In addition, prioritizing safety can also lead to job satisfaction within the construction industry as noted by Li et al. (2022).
 3. **Diverting focus:** Safetywashing was also used by organizations to divert attention from other critical aspects. For example, in Lucknow metro rail there were safety hassles and inconveniences in the project and the promotion of the project receiving the safety award in the media diverted focus from the ground issues. Similarly, when there was a need for improving performance of existing infrastructure, the government launched innovative construction transportation products to improve the safety for

the commuters, thereby diverting the focus. Additionally, the Indian Railways spent only 0.4% (INR 730 bn) of the total budget on safety-related activities in contrast to an average US transport organization spending about 20% of its budget on safety measures, however promoted it by claiming INR 730 bn was spent on improving safety, diverting the focus from percentage of budget. Delmas and Burbano (2011) note that diverting focus through greenwashing can hinder real innovation and progress toward sustainability within industries. In contrast to similar greenwashing effects, diverting focus through safetywashing diverted focus not just in safety but also in cost, time and quality. Supporting this, Herbert (2019) notes how safety campaigns in General Motors were focused on issues of driver behavior, such as learning to properly restrain a child or not drinking and driving, diverting the focus from the importance of car design for passenger safety. Our research shows how safetywashing aims to divert focus from other aspects such as in cost, time, and quality beyond safety practices.

Implications for Safety Research and Practice

From this study of safetywashing strategies and effects in the Indian context, multiple points of implications for safety practice are possible as discussed below.

1. It is seen from the empirical data that the practice of safetywashing occurs through four safetywashing strategies. These are safety as a project objective anchored on characteristic-based exchange, explaining safety initiatives anchored on process-based exchange, associating with pioneers anchored on institution-based exchange, and investing in safety anchored on process-based exchange. Organizations have to be vocal about their safety practices, employing the different safetywashing strategies which can result in marketing of the organization and prioritizing safety, both of which can lead to improved safety performance.
2. Organizations can use safety to market their initiatives similar to the practice of greenwashing. For example, the practice of safetywashing in the case of the ropeway at Vaishno Devi led a reader to inquire how to book the service implying a desire to use the service during the operation phase. We thus conclude that promoting the safety advantages of a project can lead to increased asset usage and sales during the operation phase. Safetywashing involves strategically utilizing safety discourses to craft a positive image of an organization or product (Fairclough 1992). This practice aims to shape and enhance the perception of the organization or product through the strategic deployment of safety-related narratives.
3. Along with providing positive information to create an overly positive image, safetywashing involved hiding negative information. For example, the Indian Railways hid the negative information of spending only 0.4% (Rs 730 bn) of the total budget on safety-related activities in contrast to an average US transport organization spending about 20% of its budget on safety measures. This hiding negative information is similar to how the loss of income due to tax abatements by General Motors leading to a poorly funded school district was strategically hidden from the community members (Herbert 2019).
4. Safetywashing can also be used to discredit a city, project, or product. For example, we saw the local community opposing the construction of the Jaitapur nuclear power plant citing safety concerns. The use of safety to discredit an initiative can result in promoters improving their safety performance and highlighting the safety features of the project which together can result in an improved safety performance for the industry. Our observations extend the literature on the practice of greenwashing, which has

previously only been used for improving the perception of an organization (Lyon and Maxwell 2011).

5. Safetywashing in construction can also lead to a prioritization of safety by the community and thereby a societal reform. The promotion of safety by cities, projects, and products in the media can improve societal perceptions regarding the importance of safety. Such discourses can extend beyond the construction sector and can have implications on safety in people's daily life. Literature notes that the practice of green talk in greenwashing can result in some sustainable actions as well as an improved perception of sustainability in society (Bowen 2014). Similarly, safetywashing in construction can be beneficial to companies and at the same time can improve societal perceptions of the importance of safety awareness through media.
6. Safetywashing can be detrimental to the construction industry as it could divert focus from other critical aspects such as construction hassles and reduced spending to a more generic perception of improved safety. The safetywashing practice can lead to decreased overall performance of the industry as organizations can easily gain acceptance from the public by propagating messages on improved safety. However, the performance of the construction industry can only be improved with a focus on the management of time, cost, quality, and sustainability along with safety (Atkinson 1999).
7. This article argues that even though the motivation for promoting safety practices in the news media is safetywashing, it can to an extent result in improved safety practices. Even if motivated by safetywashing, investments in safety within the construction industry can yield benefits which can generate awareness and contribute to the reduction of accidents (Teo and Feng 2010). Thus, construction safety representations in news media can improve the community's perception of safety as well as enhance the image of the organizations involved through marketing and branding implications. The findings of this research bear comparison with those from greenwashing, when it is noted that greenwashing may not always be entirely bad for society (Bowen 2014). Thus, we extend the call for employing a multi-functional integration system that maximizes and diversifies the use of safety resources (Wang et al. 2022), by also including safetywashing practices in the construction industry. Future research can explore how safety discourses in the media can improve the safety performance of the society through a longitudinal study.

Conclusion

Along with the existing implications of safety discourses, i.e., to improve safety culture within an organization and thereby improve safety performance, this article argues that there are other implications of strategic discourses on safety, notably safetywashing. This research looked at examples of the concept of safetywashing in construction and explored different strategic uses of safety and public perceptions associated with them, using the case of the Indian construction industry. The research highlights different safetywashing strategies employed in the construction sector such as safety as a project objective, explaining safety initiatives, associating with pioneers, and investing in safety. The effects of these safetywashing strategies include accepting organizations, prioritizing safety, and diverting focus.

This research has multiple contributions. Safetywashing can promote perceptions of its importance in the community at large, which is a task as important as creating a sustainability consciousness. Second, with safetywashing, we focus on how safety is marketed

outside the organization, thereby extending studies of safety marketing in construction which have largely focused on marketing safety within the organization to improve safety performance. Third, we saw that the safetywashing strategy was used for improving the perception as well as discrediting the perception of an organization or project. This extends the literature on greenwashing which is only used for improving the perception of an organization. Fourth, the effect of diverting focus included diversion not just on safety parameters but also for cost, time, and quality parameters. Finally, we argue that construction safety representations in news media can improve the community's perception of safety.

The research has some limitations. First, the data was collected from the Indian context and while this has implications to other contexts, the strategies and effects may vary because national cultural traits can influence the safety perception (Reader et al. 2015). We call on more research to explore the practice of safetywashing in other contexts. Second, in this research we focused only on safetywashing in the news media. With the advent of different forms of social media, the practice of greenwashing has spread to other digital media as well, which future research can consider. We acknowledge the ongoing evolution of Google's search algorithms and the resulting variation of search result as a limitation for the data collected during the study period. However, these did not affect our research findings as we collected data till theoretical saturation such that no new concepts were discovered with additional news articles. Future research on safetywashing could explore the concept not only in the construction industry but also other industries. Further research is essential to identify and categorize the various forms of safetywashing. It is crucial to develop theories and models that elucidate their mechanisms, drawing upon existing social science research. Additionally, there is a need to gauge their impacts on marketing organizations, particularly concerning the prioritization of safety within these contexts.

Data Availability Statement

Some or all data, models, or code that support the findings of this study are available from the corresponding author upon reasonable request.

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