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Editorial: Managerial Responses Against COVID-19

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Editorial on the Research Topic

Managerial Responses Against COVID-19

Professionals working at various positions in the built environment have been making great efforts to tackle COVID-19 around the world since the start of 2020. The fast accumulation of new data, information and knowledge in this global combat is a clear demonstration of the urgent need for sophisticated leadership and dependable solutions to support rapid responses, speedy recovery and sustainable safety at interconnected project stages across workplaces and urban clusters in the built environment. Within the research and practices for the dependable built environment, a new exploratory journey to eliminate the spread and transmission of coronaviruses has started around the world. It is crucial to keep the momentum going by incorporating new efforts for optimal solutions to inform both research and practices towards sustained success in the provision of construction management services.

The aim of this Research Topic is to showcase new convergent research and best practice studies focusing on managerial solutions at a strategic, tactical and operational level to tackle the pervasive attack of COVID-19 across various places and work stages in the lifecycle of buildings and civil infrastructures. In this Research Topic, six papers have been accepted for publication in total. Their contributions are briefly introduced as follows.

Bou Hatoum et al. try to investigate the perceptions of construction workers in United States on how well health and safety measures are imposed on construction projects during the COVID-19 pandemic. The results show that almost half of the complaints are related to the construction of building category of works–specifically nonresidential building construction, and the other half are related to specialty trade contractors. Meanwhile, a list of 100 best practices are compiled to mitigate the workers' concerns. This provides insights into the safety and health trends on construction sites, lays the foundation for the future work of academicians and practitioners to address the concerns faced by construction workers, and serves as lessons learned for the industry in the case of any future pandemic.

Nassereddine et al. try to establish eleven propositions for a resilient, post-COVID-19 future, for practitioners working in the design and construction industry. A "decentralization of workforce and integration of data" model is proposed to manifest the established propositions to support a resilient AEC industry. This provides practitioners and researchers with a glimpse into the future of the AEC industry where resilience is essential to offset disruptions and enable the survival and growth of AEC organizations.

Sarvari et al. try to develop effective infection control and mitigation measures to prevent the transmission of COVID-19 pandemic in the built environment. Various methods for the prevention and control of infectious diseases transmission are evaluated through questionnaire survey, including training protocols, operation and maintenance, and design and construction. The results show that all of these methods have a positive effect on all types of buildings and an equal effect on low-risk

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buildings, while training protocols and design and construction measures have the greatest impact on high or very high-risk buildings. This can help in more rational decision making to control the outbreak of COVID-19 pandemic in all types of buildings.

Fang et al. try to offer a comprehensive analysis of the key success factors through a case study of the International Group for Lean Construction's first virtual conference. The results show that technology, social enablers, logical process design and control, and knowledge management are the key factors for the success of virtual conference. Meanwhile, a successful model for an international virtual academic conference is proposed. This contributes to sustainable development in engineering management, and architecture, engineering and construction practices within the context of COVID-19 pandemic.

Li et al. try to examine the built environment's role in Wuhan's recovery at the city block level through a natural experiment. The results show that three built environmental characteristics, i.e., number of nearby designated hospitals, green ratio, and housing price, have significant associations with Wuhan's recovery after the strict control measures are implemented during COVID-19 pandemic. This provides future smart and resilient urban development with the following implications: the accessibility of hospitals should be comprehensive in general, and the average housing price of a city block can reflect its post-disaster recoverability compared to that of the other blocks.

Rangaswamy et al. try to understand the impact of housing rising prices on the private housing affordability and its demand especially in the COVID-19 pandemic situation. The results show that soaring prices lower the affordability of buyers and delay the purchase of private property shortly, but its demand has a positive relationship with rising prices. This will significantly contribute to policymaking in prioritizing social mobility or investment return from the property market.

This Research Topic has attracted 51,736 views around the world as of 11 April 2022. The three editors of this Research Topic appreciate the recognition to and interests in this themed Research Topic at Frontiers in Built Environment. The editors would like to thank all authors who have made great efforts to participate with their valuable manuscripts as well as all invited academics for their strong supports in the peer review process. Special thanks are also given to other colleagues for their strong supports as handling editors in the peer-review process when the editors were not available.

AUTHOR CONTRIBUTIONS

HG is responsible for the review process of manuscripts submitted to this Research Topic and prepares this editorial; HS is responsible for the review process of manuscripts submitted to this Research Topic and helps to improve this editorial; XX is responsible for the review process of manuscripts submitted to this Research Topic and helps to improve this editorial.

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