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Emerging Venue Considerations for Event Management: The Case of Ireland

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Abstract: Event venues represent a focal point for infectious disease transmission among attendees and event stakeholders, creating lasting uncertainty within the industry post-COVID-19. There is now a need to investigate emerging venue considerations for the event industry as a result of the COVID-19 pandemic. Using Ireland as a case, a quantitative questionnaire was used on a sample of event managers. Event venue monitoring for COVID-19 is lacking, while risk mitigation procedures focus more on attendees already at the venue rather than avoiding infected persons entering the venue. Risk assessments now comprise COVID-19 risk; however, a lack of resources means regular health and safety has shown signs of weakening. Government and local authority resources and financial support are required. Pre-venue procedures of symptom screening and proof of vaccination, combined with venue procedures for disinfection of venue spaces, table service, and appropriate ventilation have proven to be effective COVID-19 risk mitigation procedures. Additionally, ICT (information and communications technology) could disseminate up-to-date health guidelines through customercentric digital environments representing enhanced information sharing to avoid uncertainty and support pro-social intentions of event attendees and compliance with event venue COVID-19 risk mitigation procedures.

Keywords: festivals and events; COVID-19; venue considerations; event risk mitigation

1. Introduction

The event industry is often considered uniquely susceptible to operational and economic shocks as a result of global disruptive events [1]. The COVID-19 pandemic has mandated a rethink of wider tourism operations as the mobilisation of human vectors of disease [2] act as a catalyst for spiralling infection rates. This has resulted in a range of restrictive measures targeted at mitigating the risk and spread of infectious disease However, such measures can have a profound impact on event operations due to restricted attendee mobility and social distancing. This has been noted [3] to have led to lasting uncertainty within the industry and the need for resilience through adaptable and transformative event environments. Yet, research to date has been limited in its focus on future considerations for event venues, and how emerging issues could affect the management of events extending onwards post-COVID-19. Furthermore, crisis management in the context of tourism and events is also an underexplored research agenda [4]. This is despite the need for a resilient industry that can adapt and operate in uncertain conditions going forward while at the same time help alleviate uncertainty surrounding attendee wellbeing, even though the research agenda for event venue considerations having addressed strategic planning provision in the context of crowd control for places of public assembly and major events [5], and event satisfaction through sponsor-related exclusive venue zones [6]. Exist ing research [7] has reviewed event COVID-19 risks from a behavioural perspective and



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possible mitigations through careful environmental redesign and reorganization. However, as the events industry moves into a post-pandemic phase, there remains the threat of infectious disease outbreaks [8]. There now exists a need for research to investigate event venue considerations from an event management perspective. This paper addresses a gap in the literature relating to event venue monitoring processes, risk assessments, risk mitigation measures, and the willingness of attendees to attend and engage with event spaces moving forward post-COVID-19.

2. Literature Review

The events industry represents an important source of economic activity in host destinations [9] and supports governments in meeting their socioeconomic goals [10,11] In Ireland alone, events support 35,000 direct jobs and contribute over EUR 3.5 billion to the economy annually [12]. However, researchers [13] have noted that events were the first industry to be shut down and the last to be resumed during situations such as the COVID-19 pandemic. Furthermore, the industry has borne the brunt of government $_{
m t}$ enforced COVID-19 restrictions aimed at minimising social contact between individuals [14]. This has required events to adapt to an operating environment overshadowed by a threat of infectious disease outbreaks. In turn, digital and virtual event platforms quickly positioned themselves as both an alternative to traditional in-person events, and as part of hybrid solutions that included both physical and digital elements [15,16]. Although these virtual events enabled the industry to survive in the midst of the COVID-19 pandemic as they ensured compliance with movement restrictions, several authors point to virtual events not having a certain richness and emotion due to the lack of face-to-face human interactions [17–19]. However, the industry has now returned to more conventional in-person event formats. This brings an inevitable higher risk level through attendees vectoring infectious disease through a global network of human mobility to attend events [20,21] Therefore, it is essential that event managers address emerging venue considerations as a result of the COVID-19 pandemic in Ireland.

There are significant challenges ahead for events and the management of risks from an inevitable future pandemic [22]. The venues themselves represent a focal point for infectious disease transmission due to social congregation combined with high density and mobility of attendees [23]. For example, significant concern has been expressed in a previous study [24] around the amplification and wider diffusion of infection among individuals who are not socially bonded. This potential amplification of transmission places the event industry at the forefront of future COVID-19 restrictions. Thus, potentially generating high levels of uncertainty in the industry. It is this uncertainty, caused by potential outbreaks that are often difficult to predict, which creates a situation of restricted information, unknown future outcome, or more than one conceivable outcome [25]. Thus despite the easing of the restrictions relating to the COVID-19 pandemic, the events industry requires the integration of measures to build resilience and alleviate uncertainty in a post-COVID-19 environment [1]. From an organisational perspective, resilience is defined as an organisation's ability to manage vulnerabilities and adapt to change [26] (p. 1). From an event management perspective, resilience can be seen as the ability to identify, manage, and mitigate risk from COVID-19 so that the industry can operate under uncertain conditions. Research [1] suggests the adoption of a resilience model [27] as a crisis management tool to address disruptive events affecting tourism. This would include the four stages of collapse reorganisation, growth, and consolidation. While adopting a conceptual resilience model could help to understand complexities within the tourism industry during disruptive events and lead to greater accuracy for crisis management, such a move could also help reduce uncertainty during the post pandemic stage of reorganisation and recovery for events from an individual tourist, and also the collective industry and institutional perspectives.

Existing research [28] argues that ensuring high levels of safety for participants may be crucial for future attendances. This would be particularly important for those with higher levels of perceived health risks. Such an assessment of risk within event venue settings

could be an important process for helping to achieve a level of resilience for the sector For example, a recent major sporting event study [29] claims that robust and timely risk assessments based on reliable up-to-date data help enable the accurate assessment of both risk and the effects of preventive measures for an event. Furthermore, the World Health Organisation (WHO) set out Infection Prevention and Control (IPC) guidelines for mass gatherings where an integrated risk assessment forms an essential pre-event process [30] Such risk assessment outcomes can help inform the implementation of practical measures of social distancing, decontamination, ventilation, partitioning, face masks, handwashing, and headwear. For example, recent research [31] revealed a direct link between a reduction in newly infected attendees when similar mitigation measures are implemented at mass gathering events. Also, researchers [32] have delivered a toolkit for risk assessment and mitigation of mass gathering events that also acknowledges risk assessment outcomes to continuously and accurately modify existing risk mitigation measures based on the level of risk. Specifically, the level of infection risk is simulated from four conditions of direct exposure through droplet sprays; direct exposure from inhalation of inspirable particles hand-to-face contact exposure contaminating mucous surfaces; and inhalation of respirable particles via air [33]. Although this four-pathway approach can be effective in determining high risk variables in event settings, it may need refinements to ensure its practical use for events in Ireland. The WHO [34] have devised a risk assessment and mitigation checklist for mass gatherings that captures achievable variables such as attendee demographics and specific risk mitigation measures already in place. The utilisation of a risk assessment toolkit by event managers in Ireland may lead to a more resilient event industry, as each event can adapt measures to the level of risk and avoid event cancellations. Additionally, recent research [22] has argued the importance of event risk assessments for avoiding social and economic consequences of cancelled events. Such cancellations can not only result in serious psychological implications for attendees [35] but can also lead to defiant behaviour causing attendance at unauthorised events [36]. This could lead to knock-on implications for wider pandemic infection mitigation strategies where unauthorised events would operate outside the remit of official national and international health guidelines.

As tourism stakeholders adjust to an uncertain operating environment because of a transformational event [37], new protocols and sanitary standards must be defined [8] These will need special designation for the constant pandemic threat that now exists from potential mutations of the novel coronavirus (e.g., Delta and Kappa variants) [38] as society moves to the post-pandemic stage accompanied by an urge to return to business as usual [2]. The WHO have updated key planning recommendations for mass gatherings in the context of COVID-19 [39]. The inclusion of venue capacity adjustments, availability of handwashing facilities, cleaning and disinfection of venue, attendee flow and density management, and adequate ventilation [39] can play a vital role in effective risk mitigation for events [40–42]. Likewise, the use of facemasks has been discussed to mitigate airborne transmission of infection [43]. However, continuous attendee compliance with such mitigations. tion measures may be dependent on their sense of obligation to adopt pro-social behaviours along with descriptive and injunctive social norms [44]. Therefore, increasing attendee intentions to undertake prescribed mitigation measures could be enhanced through clear and effective communication. This is underlined by researchers [45] who determined that providing transparent information about the hygiene strategy are crucially important factors for event attendees. In a wider tourism industry context, the provision of accurate and consistent information communicated to tourists through appropriate channels are crucial for tourist compliance with appropriate biosecurity measures [46]. Therefore, event managers should underline attendee communication as a perquisite for the success of risk mitigation measures.

3. Materials and Methods

3.1. Research Approach

The overarching aim of this research was to investigate emerging venue considerations for the event industry as a result of the COVID-19 pandemic in Ireland. A review of the international literature informed the design of an online structured quantitative questionnaire using Qualtrics. The view of the quantitative approach follows the belief that knowledge is logically bounded by general laws and is observable on single measurable, and provable truth [47,48]. Furthermore, quantitative purists claim that social science inquiry should be objective, consisting of time- and context-free generalisations that are desirable and possible, with real causes of social scientific outcomes being determined reliably and validly [49]. This positivist epistemology mentality facilitated an objective view of the problem through an analysis of statistical data relating to venue considerations for the event industry in Ireland because of the COVID-19 pandemic.

3.2. Questionnaire Design

The questionnaire was designed to extract key statistical data from event managers in Ireland relating to venue considerations that emerged from the literature review (above) and is found in Table 1 below.

 Table 1. Event venue considerations.

Event Venue Considerations

- -When planning events, do you now monitor areas at your event that may be a cause for concern with respect to COVID-19?
- -COVID-19 considerations featuring heavily within event risk assessment.
- -Procedures to mitigate the transmission of COVID-19 at the event venue/site.
- -Procedures to mitigate the risk of infected people from entering the event venue/site.
- -Procedures in place to minimize transmission of COVID-19 from person to person within event venues/sites:
- Table service for drinks and beverages;
- Offer contactless payment;
- Issuing guidance to event attendees on health measures;
- Implement procedures for cleaning and disinfecting event venues/spaces;
- Procedures in place to facilitate a COVID-19 event debrief.
- -Willingness to attend small scale events (less than 500 people) in light of COVID-19 in the future.
- -Willingness to attend medium-scale events (more than 500 people, but less than 5000 people) in light of COVID-19 in the future.
- -Willingness to attend large scale events (more than 5000 people) in light of COVID-19 in the future.
- -Key considerations for event attendees to attend and engage with event spaces moving forward in a post COVID-19 era.
- -Willingness of clients to engage with event management services as a result of COVID-19.

These considerations contained in Table 1 were incorporated into the questionnaire, which was then distributed to the respondents via email. Each question was followed by space that allowed respondents to elaborate further on their response to each question or expand on any additional issues they would like to raise in relation to emerging venue considerations as a result of the COVID-19 pandemic.

3.3. Sampling

A purposive sampling approach was followed by the authors. This allowed for the use of judgement based on specific criteria to select respondents [50]. The authors defined the target population based on the aim and scope of the research. This resulted in the sampling frame comprising 90 event management companies operating in the Republic of Ireland prior to the onset of the pandemic and the introduction of lockdown restrictions. Senior managers within each event management company were identified and emailed

the Qualtrics link to the questionnaire along with an overview of the research study in line with approved ethical procedures. The data were collected between June and August 2021, with follow-up emails sent in early July 2021.

Through a use of a range of both open and multiple-choice questions, this research obtained a response rate of 19% (n = 17), which can be attributed to the notable operational pressures from the COVID-19 pandemic, which event managers expressed at the time of data collection. Nevertheless, this study focuses on the case of Ireland and therefore the relative sample size is considered sufficient as a representative sample of the Irish event industry.

3.4. Statistical Analysis

Descriptive statistical analysis was deemed most appropriate for this study, as it uses graphical and numerical summaries to illustrate the data effectively so that interpretation and discussion of the results in the context of the international literature can take place [51]. Data collected from the questionnaire were coded and input into a specifically designed spreadsheet using the statistical data analysis software SPSS. This process involved inputting each question from the questionnaire into the SPSS spreadsheet with specific values relating to each response provided by event managers (e.g., 1 = yes, 2 = no, 3 = maybe). Once the spreadsheets were completed and the data entered from the responses, descriptive statistical analysis was conducted.

4. Results

Event managers face significant operational challenges in pivoting the events industry to survive current and future potential shocks [52]. Specifically, as not only can event venue satisfaction effect attitudinal and behavioural outcome from a sponsorship perspective [6], venue considerations have emerged through the need for appropriate infectious disease risk mitigation measures [53] to avoid logistical and operational challenges for event managers in building industry resilience.

4.1. COVID-19 Monitoring and Risk Assessment for Event Venues

The results indicate there is a substantial level (76%) of event managers monitoring areas of the event with respect to COVID-19 when planning for events (Figure 1). This could represent a significant level of concern among event managers about the potential implications of an outbreak of COVID-19 from a mass gathering event [54] and the financial and operational repercussions to their event management company.

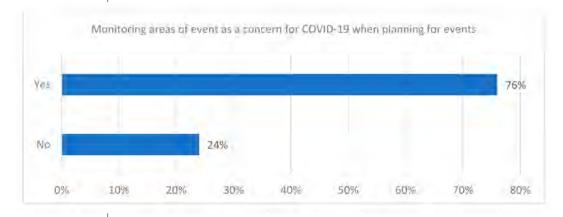


Figure 1. Event managers monitoring areas of events that may be a cause for concern with respect to COVID-19 when planning for events (n = 17).

In comparison, the relatively low level of monitoring areas of events that may be a cause for concern with respect to COVID-19 when planning for events (24%) may well

represent a lack of resources available for event managers to allocate for such monitoring process. This is despite the monitoring as a public health measure to allow for the introduction of targeted mitigation measures on time and the prospect of prior preparation for event managers [55].

Risk assessments represent a crucial process that enables the event managers to gauge whether they have taken adequate precautions to prevent harm to all event stakeholders [17]. Event managers have indicated that they now heavily consider COVID-19 within event risk assessments (88%) (Figure 2). This majority percentage represents a clear acknowledgement of the need to assess the risk of COVID-19 at each event due to different infections disease risk characteristics such as venue size, capacity, and ventilation [56]. A respondent elaborated further, regarding the measures that have been implemented in respect to risk assessment outcomes:

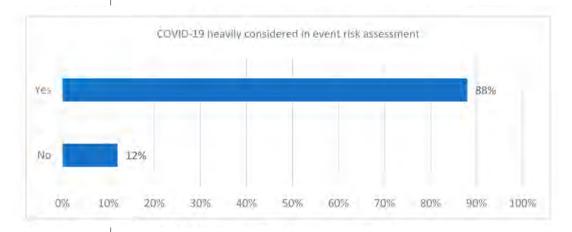


Figure 2. Consideration of COVID-19 in event risk assessment (n = 17).

"We are obliged to add a covid compliance manager to the teams on events which is an extra consideration regarding budgets. Regular health and safety management is not being adhered to as much, now that COVID-19 has to be considered and managed. We implement measures of hand washing, social distancing, contact tracing, record keeping" (Respondent 13)

The additional considerations that event managers must take in light of COVID-19 are clearly putting a strain on their resources, which could have serious implications for regular event health and safety considerations such as fire safety and crowd control.

Although a minority of respondents (12%) indicated COVID-19 is not heavily considered in event risk assessments, some events may have different risk characteristics, for instance, virtual or outdoor events. Additionally, some lesser but adequate COVID-19 risks may be considered in this 12% of respondents relative to the nature of their events. Nevertheless, assessing the risks associated with COVID-19 in venues could allow event managers to implement targeted risk mitigation measures.

4.2. Event Venue Risk Mitigation Procedures for COVID-19

The level of event managers implementing procedures to mitigate people infected with COVID-19 entering event venues was found to be concerningly low (64%) (Figure 3). This is despite the importance of avoiding infectious disease outbreaks occurring in the first place and putting risk to human health, as well as reputational damage to all event stakeholders.

A low level of procedures to prevent people infected with COVID-19 from entering event venues (36%) outlines a potential shortfall of proactive event venue risk mitigation in place. The implementation of ticket sales limits capacity based on venue maximum capacity, checking proof of vaccination matching government-issued photo identification before entry, and requiring attendees to sign a declaration that they were not currently experiencing symptoms of COVID-19 have minimized event risk elsewhere [57].

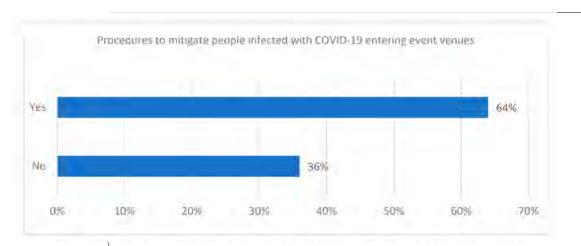


Figure 3. Procedures to mitigate people infected with COVID-19 entering event venues (n = 14).

There was a slight increase in respondents implementing procedures to mitigate the transmission of COVID-19 at event venues (75%) (Figure 4). This highlights an emphasis at an event management level to focus COVID-19 risk mitigation efforts within the venue itself, rather than before attendees enter. Respondents elaborated further to emphasize the importance of the venue size and capacity in the level of procedures they implement at the event venue:

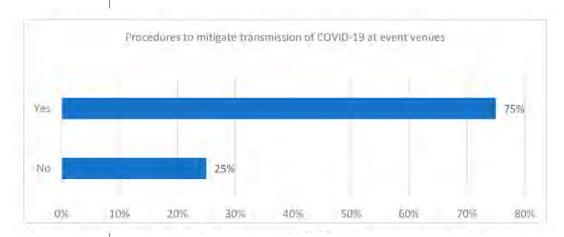


Figure 4. Procedures to mitigate the transmission of COVID-19 at event venues (n = 16).

"This comes down to venue size vs. the number or attendees. We also need to ensure the correct number of tables are available for each event" (Respondent 11)

While this high percentage (75%) is commended, it could represent more of a reactive approach to mitigating the risk of COVID-19, as attendees potentially infected with the disease would already be inside the venue.

It is crucial that COVID-19 risk mitigation measures at event venues are complimented by adequate procedures to mitigate people infected with COVID-19 entering the venue in the first place. This is particularly important where the extent of attendee interactions with others around them can vary considerably within an event due to venue characteristics [7]. However, the notable percentage (25%) of respondents who indicated they do not implement procedures to mitigate the transmission of COVID-19 at event venues is concerning. Event managers may require support from a planning, resource, and finance perspective to ensure appropriate measures are implemented.

Table service available for drinks and beverages obtained a 50% positivity rate from respondents (Figure 5), representing efforts from half of respondents toward minimizing attendee movements within a venue. Despite table service offering an effective opportunity

to minimize potential spread of infection among attendees, the relative high percentage not offering this service (50%) could be a result of the increases in staff resources to facilitate such a service. A marginally higher percentage (57%) of respondents indicated that they offer contactless payment. The circulation of cash can represent a vehicle that can transmit viruses [58] and therefore, the significant percentage (43%) not offering this form of payment is a missed opportunity for event managers.

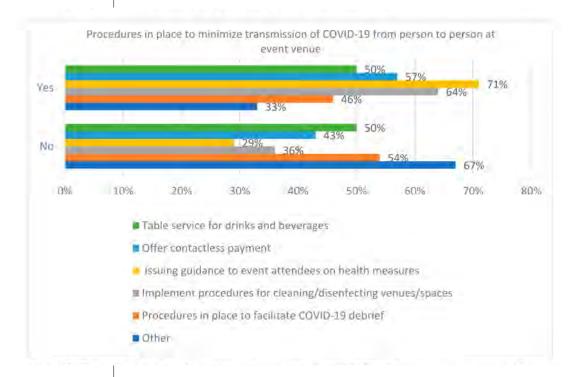


Figure 5. Procedures in place to minimize transmission of COVID-19 from person to person at event venue (n = 14).

It was positive to find the majority of respondents issue guidance to event attendees on health measures (71%). This high percentage could be the result of the timing of data collection, as the COVID-19 pandemic was still rapidly evolving along with the relevant health measures in place at the time. This guidance could be crucial at a critical time to ensure event venue compliance, minimize infection rate, and to secure the short-term future of hosting events at a particular venue. However, there was yet a relatively high percentage (29%) of respondents that indicated they do not issue guidance despite this representing a low-cost procedure that could provide important benefits for the safe and more certain hosting of the event through higher attendee and staff awareness and compliance of appropriate health measures.

Most respondents (64%) (Figure 5) indicated that they implement procedures for cleaning/disinfecting venues/sites. However, despite the importance of sanitary standards to mitigate the spread of harmful pathogens [44], a significant percentage (36%) of respondents revealed that they do not have procedures for cleaning/disinfecting venues/sites in place. This could leave the event vulnerable to outbreaks of COVID-19, with serious implications to human health. Furthermore, a considerable percentage (54%) of respondents revealed that they do not have procedures in place to facilitate COVID-19 debrief. This is despite the importance of capturing and assessing what went wrong, and what could have been done better in the context of appropriate procedures in place to minimize transmission of COVID-19 from person to person at event venues. Although several event managers (33%) responded "other", they have not elaborated on what specific procedure these are.

Event managers have indicated that there would be a much higher willingness to attend smaller events with less than 500 attendees (86%), compared to events of between

500–5000 attendees (50%), and events with more than 5000 attendees (36%) (Figure 6). This finding represents a perceived concern among event managers for events with larger attendances.

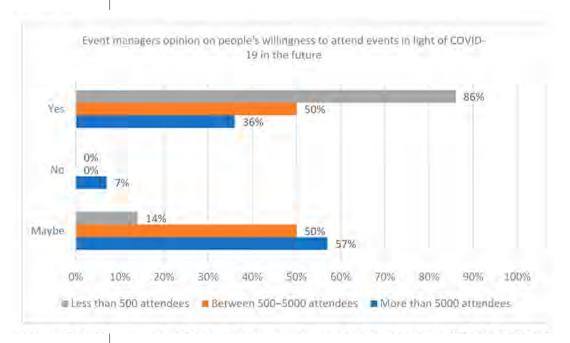


Figure 6. Event managers' opinions on people's willingness to attend events in light of COVID-19 in the future (n = 14).

An interpretation of event managers' responses to this question could very well relate to the apparent higher risk of COVID-19 infection from larger crowds of attendees. This would also re-emphasize the importance of appropriate ventilation and disinfection among other risk mitigation procedures. A relatively high percentage of responses to 'maybe' for both events between 500–5000 attendees (50%), and events with more than 5000 attendees (57%) may indicate a level of uncertainty among event managers in line with uncertain event operating conditions due to the rapidly changing conditions of the COVID-19 pandemic. Building resilience within the industry using proactive COVID-19 risk mitigation procedures both before people enter the venue, but also to prevent personto-person transmission within the venue could significantly reduce uncertainty among event managers, attendees, and clients.

The COVID-19 pandemic has led to concerns around business bookings among event managers who indicated a notable percentage (36%) (Figure 7) of clients are not willing to engage with event management services because of COVID-19. This finding could reflect the potential risk of negative publicity among clients and damage to their brand where outbreaks at related events could be publicized by local and national media. Furthermore, one respondent highlighted the extra precautions corporations require to be taken as an extra safeguard from COVID-19:

"For corporations staff safety, the general public are more likely to take risks. Corporations want negative tests and vaccinated people working and attending" (Respondent 7)

This finding highlights an acknowledgement of client concerns among event managers. A significant percent (36%) of clients not engaging with event management services is a substantial loss of business and highlights the importance of putting appropriate risk mitigation procedures in place to ensure compliance with relevant health measures and alleviate uncertainty among clients.

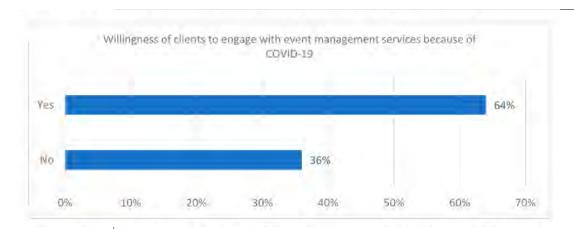


Figure 7. Willingness of clients to engage with event management services because of COVID-19 (n = 14).

The vast majority of respondents (89%) (Figure 8) indicated that the willingness to engage with event management services is impacted by venue capacities and space requirements due to COVID-19. This finding suggests a correlation between the data in Figure 6 where concerns among event managers for attendances are prevalent for larger event attendances.

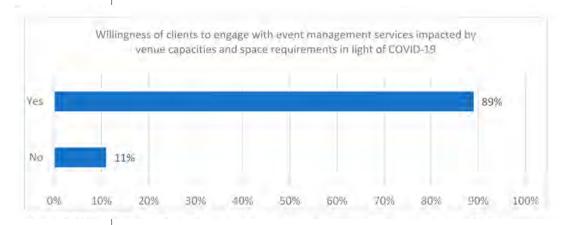


Figure 8. Willingness of clients to engage with event management services impacted by venue capacities and space requirements in light of COVID-19 (N = 9).

This finding places higher emphasis on the importance of mitigating the risk of COVID-19 through implementing appropriate infection mitigation procedures along with venue attendance restrictions relative to venue capacity.

5. Discussion

It is evident that a relatively large number of event managers in Ireland are not monitoring areas of the event venue. This is despite monitoring representing a vital component to inform reactive and preventative procedures to mitigate COVID-19 infection within event venues [56]. This shortfall could potentially leave venues vulnerable to the potential of future COVID-19 outbreaks, while continuous monitoring could inform the design and severity of preventative and risk reduction measures. Table 2 allows for a better understanding of the generalization of the survey results.

Event Venue Considerations for Event Management Procedures to Mitigate the Risk of Infected People from out Less Than 5000 People) in Light of COVID-19 in the Event Managers Opinion on People's Willingness to nent Services Impacted by Venue Capacities and Space Event Managers Opinion on People's Willingness to Attend Large scale Events (More Than 5000 People) in Procedures to Mitigate the Transmission of COVID-19 Event Managers Opinion on People's Willingness to Monitoring Areas at Your Event That May Be a Cause Attend Medium Scale Events (More Than 500 People, Offer Contactless Payment to Minimize Transmission of COVID-19 from Person to Person within Event Ven mplement Procedures for Cleaning and Disinfecting Attend Small Scale Events (Less Than 500 people) in Willingness of Clients to Engage with Event Manage-Willingness of Clients to Engage with Event Manage-COVID-19 Considerations Featuring Heavily within **Fable Service for Drinks and Beverages to Minimize** Procedures In Place To Facilitate A COVID-19 Event Measures to Minimize Transmission of COVID-19 Event Venues/Spaces to Minimize Transmission of Transmission of COVID-19 from Person to Person from Person to Person within Event Venues/Sites Issuing Guidance to event Attendees on Health for Concern with Respect to COVID-19 ment Services Because of COVID-19 Requirements in Light of COVID-19 COVID-19 from Person to Person Light of COVID-19 in the Future Light of COVID-19 in the Future Entering the Event Venue/Site within Event Venues/Sites **Event Risk Assessment** at the Event Venue/Site ues/Sites No. of Completed Surveys 17 16 15 14 13 No. of Considerations met 12 11 10 9 8 6 5 4 3 2

Table 2. Overall event venue consideration survey results.

= level of event venue considerations met in Ireland. X = no. considerations met.

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Advances in data collection, analysis, and communication technology have improved the ways in which events are planned and managed [59] and can streamline monitoring effectiveness and dissemination of its outcomes to relevant event stakeholders. The earliest identification of risk associated with COVID-19 could be determined through its integration into event risk assessments. The high level of integration of COVID-19 assessment into overall event risk assessment indicates event managers are considering infectious disease within their event venue selection and design. However, it is evident here that this is not fully translating into meaningful COVID-19 risk mitigation procedures at the pre-venue stage, or within the venue to mitigate person to person transmission among Ireland's event management companies.

Pre-venue procedures to prevent infected people entering the venue were found to be lacking. This is despite the potential of attendee symptom screening and proof of vaccination as measures to prevent COVID-19 outbreaks from occurring in the first place [56]. Risk mitigation procedures of vaccination, mask-wearing where necessary, and disinfection of surfaces, guided by monitoring data and up-to-date risk assessment outcomes could play a vital role in implementing proactive evidence-informed risk mitigation procedures [60] These could play a vital role in avoiding COVID-19 transmission factors of direct exposure. direct inhalation, contact, and air inhalation [60]. This would represent a multi-layered approach that has proven successful in a similar study based in Seattle that supports pre-

vention strategies including symptom screening, masking, ventilation, and vaccination for both patrons and staff before spending time in indoor venues [56].

The provision of table service for drink and beverages and offering contactless payment can be considered effective yet simple measures for event managers in mitigating COVID-19 infection through reducing attendee movements. This is considered an extremely powerful intervention, particularly in events where mixing of attendees occurs, and represents a process of "bubbling" [61]. However, these procedures were found to be lacking in Ireland, which leaves the future of events vulnerable to outbreaks of COVID-19. However, increased staffing and costs associated with implementing such procedures may require financial and resource support for event organizers. Such measures would represent a move towards the recovery of the industry to the pre-pandemic position and will require external support from relevant government agencies and local authorities [55].

Providing attendees with certainty and clarity of regulations through continuously updated guidance on health measures is a key factor in reducing disorganization within event venues [55]. Although event managers in Ireland have been identified as somewhat compliant with this as a procedure to minimize transmission of COVID-19 from person to person at event venue, the utilization of ICT could streamline this process. Modern digital technologies implemented through smart and wearable devices such as smart watches and phones could be utilized for disseminating continuously updated pandemic information through digital broadcasting using cloud technology at events [46]. This could alleviate the potential for defiant behaviour among attendees through greater clarity and understanding of official guidelines [36]. The implementation of procedures for disinfection/sanitation of venue/spaces to minimize transmission of COVID-19 from person to person was relatively low considering its proven effectiveness [39,60]. This procedure could be further supported through the mandatory provision of sanitizing products for example, mini disinfection mist and medical disinfection wipes at strategic festival venue locations such as bathrooms, ticket offices, information desks, and tourist lounges [46]. Post-event evaluation is an important process for evaluating the event impact and level of success as a way of improving the management process [17]. Thus, integrating COVID-19 into post-event evaluation processes and running a subsequent COVID-19 debrief could inform COVID-19 risk management and risk mitigation procedures at future events for a more accurate risk mitigation approach.

A level of perceived uncertainty exists among event managers regarding both attendee participation at events and client's engagement with event management services. This could have repercussions from a health, safety, and operational perspective and on future event planning approaches. The application of robust COVID-19 risk mitigation procedures before people enter and within event venues can create a more favourable experiential and safe operating environment. This could be achieved through innovation, and adaptable and transformative event environments that could lead to a resilient event industry. Safe, in-person attendance should not be replaced by live-streaming unless all other avenues of safety have been exhausted [17–19]. Event managers should instead foster innovative value-driven and customer-centric environments where digital technologies are utilised to enhance experiential platforms and event venue spaces for event attendees [3]. This may well alleviate uncertainty for all event stakeholders by building greater levels of event industry resilience through a customer-centric and evidence informed COVID-19 risk mitigation approach.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in this study,

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to respondent anonymity concerns.

Conflicts of Interest: The authors declare no conflict of interest.

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