***Can Virtual Theater Fulfill the Function of Live Theater in COVID–19 for
Tertiary Level Dance Program Stakeholders?***

Maria Lucina Anonas De Santos, De la Salle-College of Saint Benilde, Philippines
Magdalena De Leon, De La Salle-College of Saint Benilde, Philippines

Abstract

As the coronavirus pandemic affected tertiary level dance education worldwide, relevant stakeholders responded to the unprecedented change to online modality, by pursuing virtual theater as a solution to the absence of the live theater format. This study examined the perceptions of tertiary level dance program stakeholders on the efficacy of virtual theater as a substitute for the live theater experience. This study premised that there was a significant difference between the perception of the respondents when grouped according to administrators and professors versus students. A mixed method study design was used, including quantitative and qualitative content analysis involving 116 respondents of tertiary level dance programs in the country. The results revealed that although stakeholders perceived that virtual theater was incapable of fulfilling the functions of live theater in pre–pandemic times, therefore nullifying the possibility of virtual theater as a stand–in for live theater, virtual theater's continued existence beyond COVID–19 was resoundingly anticipated. There was generally no significant difference between the responses of stakeholders, albeit in some areas where responses were significant, by virtue of stakeholder position or status. Through the findings of this study, the researchers proposed operational initiatives to mitigate the problem of an uncertain future for the performing arts, a sector unhinged by physical distancing. Considering that COVID–19 effects may linger, and that the ongoing presence of virtual theater is inevitable, the researchers likewise broached strategies to reimagine a more resilient and sustainable virtual theater. Recommendations are made with guidelines for future research provided.

Keywords: Virtual Theater, Dance Pedagogy, Dance Education, Education Stakeholders

Introduction

As COVID–19 forced governments to implement stringent emergency measures, performing arts students were among the 1.3 billion learners across the globe affected by school closures, according to the United Nations Educational, Scientific, and Cultural Organization or UNESCO (2021). Just like other disciplines and educational institutions, the consequent and abrupt shift to online modality propelled performing arts programs to adapt and rethink in terms of learning and instruction (Kaufman et al., 2020; report, 2020).

At the onset of the pandemic in March 2020, the discussions among dance program administrators and professors in Metro Manila, centered on the threatened sustainability of theater and live art performances. More urgently, the dialogues deliberated on how the programs themselves could address the performance outcomes of their various movement courses without an actual platform to stage these in (Toczauer, 2021; Wozny, 2021). Local, Higher Educational Institutions (HEI) hurried to find an alternative, viable, and effective arena that can bridge theory and practice through a production based model. The common approach chosen was the launching of online streaming shows or virtual theater.

Virtual theater is, "a sprawling category, more experiential than formal, which ranges from high–quality performance recordings, to staticky live Zooms, and is unified as a genre only by its reliance on Wi-Fi—is still in its vulnerable infancy (Cunningham, 2020)." Given the foregoing, there now exists an additional qualification for theater; defining the distinction between live theater and virtual theater.

The emergence of virtual theater not only to address the needs of tertiary level dance programs and their students but to ensure the survival of the dance programs' themselves, relates to Milton Freeman's "Stakeholder Theory," a strategic management scheme of organizations in the late twentieth century. Freeman (1984), over the course of his work entitled, "Strategic Management: A Stakeholder Approach," generally accepted as a seminal launching of stakeholder theory concepts, defines a stakeholder as any individual or group of individuals that can influence or are influenced by the achievement of the organization's objectives. It is the organization's responsibility to create value for its stakeholders' interests. Freeman's Theory is evidently seen through the emergence of virtual theater not only to address the needs of tertiary level dance programs but to ensure the survival of the dance programs' themselves (Hong, 2019).

In this instance, with the pandemic as the contextual backdrop, stakeholders adapt efficient solutions with survival as a key objective (Langrafe et al, 2020). Mutual trust between stakeholders, with students as consenting and active participants, create a strategic value for virtual theater as a stand–in for live theater.

The study therefore, aims to determine whether virtual theater can truly be an efficacious substitute for live theater and the theater experience (Crouch, 2022; Kim et al, 2021; 2022) for tertiary level dance program stakeholders (administrators, professors, students, and staff). Furthermore, through the findings of this study, the researchers aim to propose effective, operational, initiatives and strategies that could mitigate the problem of an uncertain future for the performing arts, a sector unhinged by physical distancing (Kaufman et al., 2020; 2022). Considering that COVID effects may linger, the researchers likewise intend to broach strategies to reimagine a more resilient and sustainable virtual theater.

Statement of the Problem

With the pandemic as the contextual backdrop, this study premises that tertiary level, dance program stakeholders adapt an efficient solution with survival as a key objective. The researchers presuppose that tertiary level, dance program stakeholders (administrators, professors, students, and staff) create a strategic value for virtual theater as an efficacious stand–in for live theater.

This study therefore intends to explore the efficacy of virtual theater as a replacement for live theater. The researchers propose to fill the gap in the current literature by determining stakeholders' perceptions in viewing pre–recorded, digitized performances in virtual space. Furthermore, the researchers assume that such perception could lead to the sustainability of virtual theater and the possible establishment of virtual theater as a genre.

Specifically, this study attempts to answer the following questions:
1. What is the level of perception of the respondents to the efficacy of virtual theater?
2. Is there a significant difference between the perception of the respondents to the efficacy of virtual theater when grouped according to administrators, professors, staff, and students?

H_a: There is a significant difference between the perception of the respondents to the efficacy of virtual theater when grouped according to administrators, professors, staff, and students.

The alternative hypothesis (H_a) will be tested using a 0.05 level of significance.

Methodology

This is a mixed methods qualitative research using the survey methodology to collate and analyze data on the perceptions of tertiary level, dance program stakeholders (administrators, professors, students, and staff) on the efficacy of virtual shows, towards replacing pre–COVID live theater as a vehicle for tertiary level dance students' performance outcomes.

A Focused Group Discussion (FGD) was organized among members of the tertiary level dance program community, who would best provide the necessary details and points of inquiry for the survey. This method of selection is called purposive sampling. Data collated and analyzed from the FGD as well as information from the study's literature review generated the items for the online questionnaire survey. Data obtained from the online questionnaire survey was analyzed using a thematic analysis within the framework of Freeman's Stakeholder Theory and the study's conceptual theory.

The researchers acquired data from one hundred sixteen (116) tertiary level dance program stakeholders (administrators, professors, students, and staff) in Metro Manila. In terms of the sample size for survey respondents, qualitative researchers assert that there is no saturation point about the question of "how many" (Vasileiou et al., 2018) since the depth of the qualitative data is considered relevantly more important than the actual number (Burmeister & Aitken, 2012).

The study employed qualitative approaches to gather both primary and secondary data and information with the objective of determining the satisfaction and evaluation of tertiary level,

dance program stakeholders on virtual shows, as a feasible platform to replace actual and physical theater.

An interview guide with semi–structured or a pre–determined set of open questions based on related items extracted from the literature review, prompted the Focused Group Discussion (FGD). The data gathered from the FGD's participants' perceptions and contextual accounts, were used to create the items for the online questionnaire survey that was sent to tertiary level dance program stakeholders (administrators, professors, students, and staff), to answer this study's questions.

Considering that at the time of the study, the country was still in COVID–19 Alert Level 1, the conduct of an online questionnaire survey proved a sensible data gathering method because it was completed anonymously, it was inexpensive, easy to administer, and yielded a fair amount of data.

The online questionnaire survey collected respondents' socio–demographic characteristics, such as gender, age, and stakeholder category. The second part of the online questionnaire survey involved the respondents' subjective perceptions regarding live theater and virtual theater. They were asked to evaluate the items developed in the previous phase (Focused Group Discussion). The third part included an open–ended question, which zeroed in on additional sentiments or reactions to the aforementioned items in the online questionnaire survey.

Content validity or "the degree to which items in an instrument reflect the content universe to which the instrument will be generalized" (Straub, Boudreau et al. 2004), was carried out by a research coordinator, who triangulated and/or cross verified, both the interview guide for the Focused Group Discussion (FGD) and the online questionnaire survey.

To guarantee that results are stable, precise, and repeatable, statistical reliability was ensured by first running a reliability test on a random thirty (30) respondents, using Cronbach's Alpha. This was accomplished to assure consistency across all parts of the measuring instrument (Kalla, 2011; Straub et al, 2004).

Following is the table of Cronbach's Alpha (α) interpretation.

Table 1: Cronbach's Alpha Interpretation

Cronbach's Alpha (α)	Internal Consistency/Reliability
$\alpha \geq 0.9$	Excellent
$0.8 \leqslant \alpha < 0.9$	Good
$0.7 \leqslant \alpha < 0.8$	Acceptable
$0.6 \leqslant \alpha < 0.7$	Questionable
$0.5 \leqslant \alpha < 0.6$	Poor
$\alpha < 0.6$	Unacceptable

Note. Adapted from Glien, J. A., & Glien, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-Type scales. Presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH, October 8-10, 2003.

The qualitative data was subjected to a thematic analysis, whereby repeated themes were identified (Braun and Clarke 2006). Persistent patterns were established, reviewed, defined, and finally named, that showed a relationship to the satisfaction and evaluation of tertiary level dance program stakeholders on virtual shows, as a platform to replace actual and physical theater. The said themes were used as a guide in creating items for the consequent online questionnaire survey.

To determine if observed results are in line with expected results, and to rule out that observations are due to chance, the Chi–square test was used to test the alternative hypothesis of whether there is a significant difference between the perception of the respondents to the efficacy of virtual theater when grouped according to administrators and professors, versus students.

The researchers sent the online questionnaire survey by email, SMS, and FB Messenger, to tertiary level, dance program administrators, together with a letter of request to participate in the study as well as an entreaty to disseminate the link to the said survey to their stakeholders. Descriptive statistics was used to analyze responses to the satisfaction scales. Stakeholders' responses to the open–ended question were scrutinized using the thematic analysis method.

Results and Discussion

The results indicate that tertiary level dance program stakeholders (administrators, professors, students, and staff) played a key role in handling the coronavirus pandemic situation in the delivery of the teaching–learning process. While the demand for cultural and creative content intensified throughout the pandemic, with digital access becoming more critical than before, both academics and practitioners contemplated on the future of arts consumption, especially from a tertiary level dance program's standpoint (2019). Distinctly drawing upon Freeman's model, the data captured the perceptions and evaluations of different stakeholders on the efficacy of virtual theater as a substitute for live theater and its relevance to the sustainability of the tertiary level dance programs.
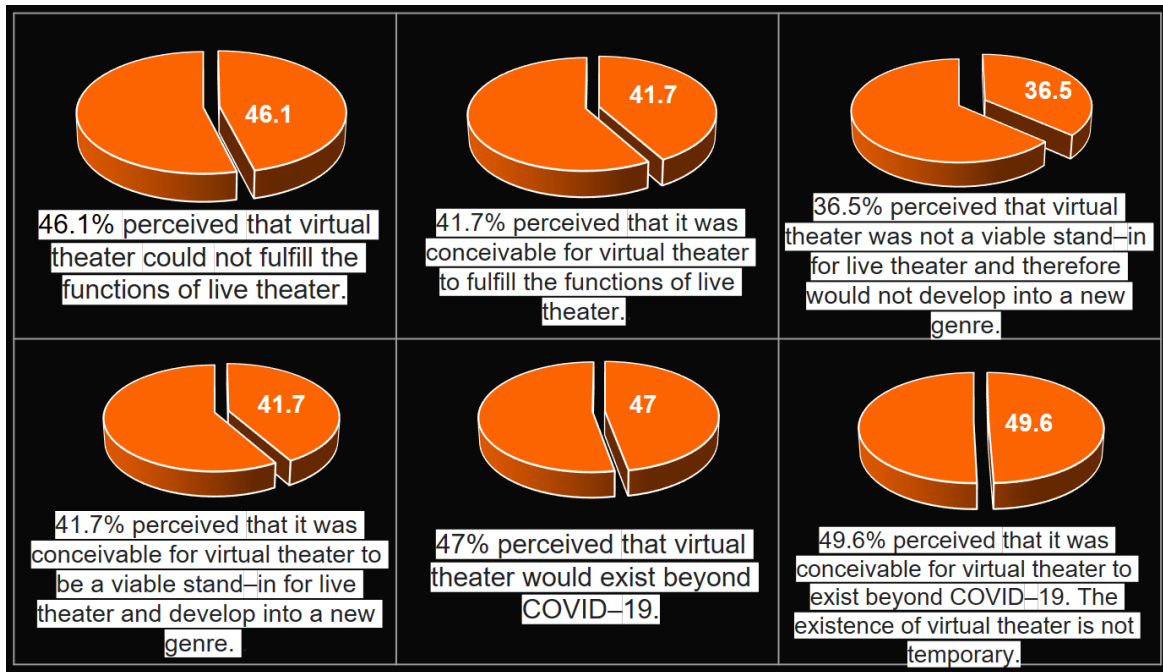
Figure 1: Perceptions of Respondents on Virtual Theater

This study strongly suggests that respondents perceive the existence of virtual theater beyond COVID–19. Virtual theater is a tool that tertiary level dance programs can use effectively and efficiently, to achieve its objectives. In summary, the need for virtual theater is recognizable, and, thereby, the demand for research on the nature and dynamics of virtual theater is imperative to develop adequate measurements about the effectiveness of virtual theater from the perspective of its users (Gottlieb & Bianchi, 2017; Rismayanti, Hasjim, & Kurniawan, 2022; Wozny, 2021). The presiding opinion was of virtual theater enhancing the functions of live theater and possibly developing into a full blown genre with Dance Majors occupying a new niche as dance film makers. Virtual theater therefore is the extension, not the experience (Keam–George, 2021).
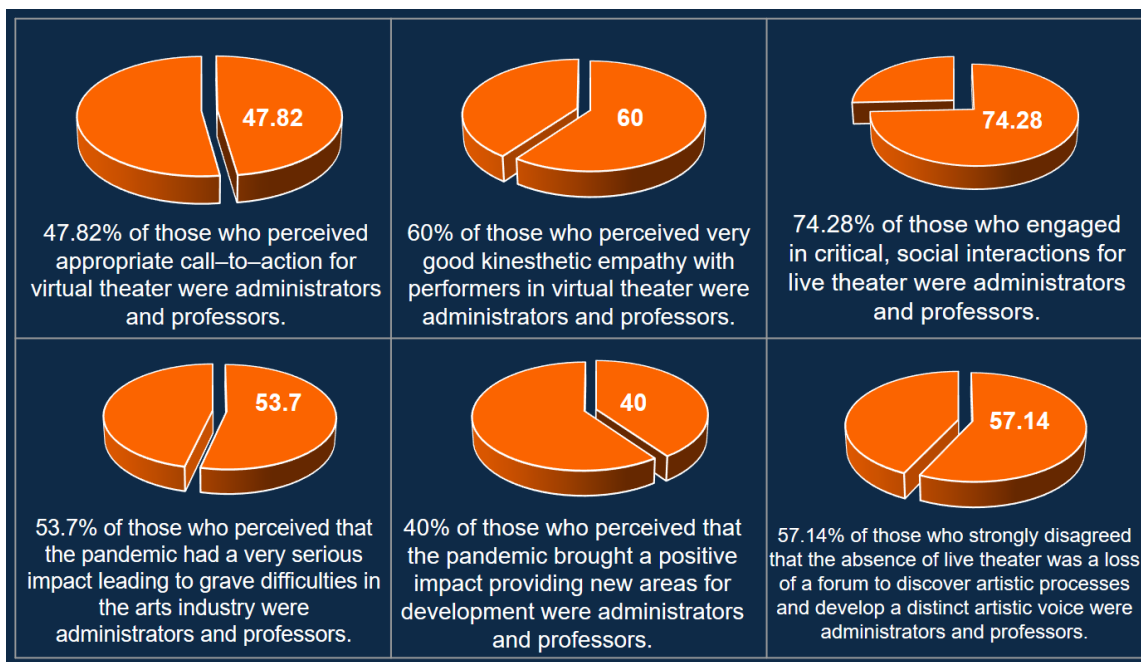

Figure 2: Perceptions of Administrators and Professors on the Future of Virtual Theater

Based on this study's findings, although virtual theater in pandemic times was deemed incapable of fulfilling the functions of live theater in pre–pandemic times, virtual theater's continued existence beyond COVID–19 is resoundingly predicted and anticipated (Morrongiello, 2020). There was generally no significant difference between the responses of stakeholders, albeit in some areas where responses were significant, by virtue of stakeholder position (Fűzi et al., 2022; Hong, 2019). The administrators and professors as a group, (1) disagreed that the absence of live theater was analogous to a loss in discovering artistic processes and developing a distinct artistic voice (Wozny, 2021). This group also (2) disagreed with the idea that a perceived absence of live theater denoted a loss of a forum to express and comment upon the human condition (Chandler, 2021). Furthermore, administrators and professors (3) agreed that a perceived absence of live theater promoted the establishment of virtual theater, and increased arts engagement (Cunningham, 2020). Perhaps as internal stakeholders interested in the development of a new theater form, the administrators and professors (4) perceived a call–to–action and kinesthetic empathy present in virtual theater (Luciew, 2021). They were also almost unanimous in expressing (5) that the absence of live theater did not connote a loss of a forum to discover artistic processes and develop a distinct artistic voice (Ritzel, 2021). Instead, this group attested to (6) the absence of live theater as promoting the establishment of virtual theater (Roe, 2021).

Interestingly, maturity, characterized by greater emotional control, less negative affect, and a more positive outlook (Carstensen et al, 2000) seems to be a catalytic factor as seen by the data on administrators and professors' perceptions on the future of virtual theater beyond COVID–19. This group seems to have a more differentiated emotional experience and views the emergence of virtual theater as a bolstering of the performing arts, possibly branching out into a new genre. Students on the other hand, are conceivably neutral regarding the future of virtual theater, adamantly pointing to virtual theater as a mere stop–gap measure in response to a negative stimuli, COVID–19. This is in keeping with Carstensen's Socioemotional Selectivity Theory (SST), which posits that psychological mechanisms account for age differences in emotional experiences. In other words, older adults' decreased attention to negative affect may reflect a motivational difference between young and old, with the administrators and professors focusing more strongly on maintaining positive affective states. Their perceived growth of virtual theater beyond the pandemic implies a strengthened commitment to the arts and acknowledgment of changes in the arts industry for the common good.

Conclusions

COVID–19 led to substantial demands and opportunities for a new format, i.e., "virtual events, shows, and theater" (Cahapay & Rotas, 2022; Levy, 2021; Romita, 2018). The transformational power of various types of technologies influenced the design of performing arts events and enabled tertiary level dance programs to hold a blended type of teaching–learning environment by fusing real and virtual components.

COVID–19 seems to be accelerating long–term trends that have troubled performing arts organizations for years (Paulson & Hernández, 2022). The rise of live streaming during the pandemic has stimulated virtual theater (report, 2020; Rismayanti et al., 2022); and virtual theater, despite its more obvious limitations, is now being considered as a strong forerunner in the arts (Welsh, 2021). Virtual theater's advantages (convenience, efficiency, and diversity), the least being the inclusion of and participation of remotely located students, cannot be denied (Langston, 2022).

Various literature on traditional, live theater, as well as virtual theater, by studies of Ambrecht et al (2017), Cunningham (2020), Geigenmüller, (2010), Gottlieb & Bianchi (2017), and Pearlman & Gates (2010), defined virtual theater as web–based, pre–recorded performances in virtual environments such as Zoom and live streaming platforms rather than physical places, at a given time for particular purposes. Although there have been considerable research on declaring virtual theater as advantageous (Geigenmüller, 2010; Gottlieb & Bianchi, 2017), the data exhibited that thirty six point five percent (36.5%) of the respondents perceived that virtual theater could not be substituted for real face–to–face theater, as the benefits of the former failed to exceed those of the latter (Adema & Roehl, 2010). This was supported by thirty eight point six percent (38.6%) of the respondents who perceived human connection in virtual theater to a lessened degree.

However, with the coronavirus pandemic came a critical reconsideration of the way humans work and live. Remote and online communication technologies have become more widely adopted in many industries, across the board, including the arts industry (Gössling et al, 2020). Regardless of the fact that thirty six point five percent (36.5%) of the respondents perceived that virtual theater was not a viable substitute for live theater, forty one point seven percent (41.7%) of the respondents perceived that it was conceivable for virtual theater to be a viable stand–in for live theater and to furthermore develop into a new genre. This signaled a wait–and–see attitude prevalent among the tertiary level, dance program stakeholders. It was therefore essential to understand user perceptions of virtual theater more comprehensively based on relevant studies and systematic approaches.

Since tertiary level dance program stakeholders (administrators, professors, students, and staff) possess dance specific capacities, abilities, experience, and knowledge, it is logical that they would have a multi–layered, more nuanced, invested interest in ensuring that the program remain robust, despite pandemic challenges (Hong 2019; Langrafe et al., 2020). The rapid growth of virtual theater as a vehicle for their continued development as dance artists is a testament to this (Chandler & Scheuber–Rush, 2021). Although virtual theater may not necessarily fulfill live theater's functions of providing human connection and critical, social interaction, it endures as an alternative avenue for artists to converge as a virtual dance community to address contemporary, societal issues (Roe, 2021; Taylor, 2022; Wozny, 2021).

In general, tertiary level dance programs through the interactions and collaborations of their stakeholders (Hong, 2019) accelerated digital strategies and made agile changes to their programming where physical space was not the only focus (Wozny, 2021). Virtual theater allowed for uninterrupted movement exploration, addressing issues of accessibility and inclusion, as well as exploiting digital content as a new source of transformative experience (Levy, 2021). The shift to virtual theater obliged tertiary level dance programs to reconsider their social role with respect to their new positioning on the market as filmmakers (Chandler & Scheuber–Rush, 2021; Lu, 2021). Certainly, tertiary level dance programs revealed the importance of virtual theater as their main survival instrument in the pandemic (Roe, 2021). Virtual theater delivered the tertiary level dance program stakeholders' expectations of creating and performing dance studies showing complex thematic materials, despite restrictive pandemic protocols. The digitized approach of virtual theater was a resilient response to the COVID–19 pandemic and the consequent loss of live theater (Luciew, 2021). The simple fact that there was involvement in virtual theater despite the fact that it was COVID–19 driven, implies that virtual theater as a pandemic panacea to solve the pain points

of tertiary level dance program stakeholders, was actually realized as a value to the sustainability of the dance programs (Wozny, 2021).

Recommendations

Operational Solutions

As COVID–19 drastically influenced the learning and performative environment of tertiary level dance programs, the circumstances coerced stakeholders to make adaptations toward virtual theater in the absence of vital resources such as studios and live theater. Various provisions for tech software must be facilitated to ensure that dance programs remain at the forefront of the performing arts conversation.

Information Technology (IT) has significantly impacted educational processes, from the nature of pedagogy to the ways of delivering content during the pandemic. This department needs strengthening. Outside support, from other external partners like R&D laboratories and centers, philanthropic foundations, etc., must be tapped for higher educational institutions to perform unimpeded during cataclysmic events such a pandemic.

Aside from technological provisions, the model of competition between universities as centers of research and learning, must be altered to one of shared collaborative endeavors. Global cooperation in higher education and research should be the norm as well as enhanced networks for tertiary level education to facilitate local knowledge for training people with globally relevant, research–based education.

More attention should be paid to developing e–resources that should respect copyright as a whole, including facilitating uses through licensing of material in educational and research settings. This could limit piracy damages in crisis times and support the development of local industries while paying attention to creators.

Strategies for a More Resilient and Sustainable Virtual Theater

Given that live theater in pre–pandemic times, facilitates intellectual reflection about a performance among tertiary level dance program stakeholders (Cunningham, 2020; Luciew, 2021), new and more innovative designs for the presentation of virtual theater are required to enhance the implied, reflective nature of the virtual theater environment and its potential for enhancing intellectual amplification (Sorensen, 2004; Yukawa, 2006).

Knowledge gained from this study's findings could determine directions for innovating software solutions to enhance the productivity and operational costs for the performing arts sector. While it is true that the emergence of virtual theater propelled initiatives intended to expand and diversify the audience for the arts, the survival of virtual theater is dependent on the creation of new formats, structures, and systems, and further innovation and strategies (Chiland, 2021; Morrongiello, 2020).

For Future Research

We need more stringent, analytical approaches of research that relate communicative qualities of virtual contexts to qualities of the knowledge–building process. This suggests that new, didactic, and instructional platforms, addressing virtual theatergoers' communicative

awareness at a meta–level, need to be developed in order to fully utilize the interactive and reflective potential of virtual theater (Sorensen, 2004). A deeper understanding of the reflective nature of the online environment and its potential for enhancing intellectual amplification should give rise to the birth of new and more innovative designs for the presentation of virtual theater (Yukawa, 2006).

The findings of this study suggested that human connection or social presence was an important key attribute in determining virtual theater's efficacy (Gunawardena & Zittle, 1997). The social solidarity discerned by tertiary level dance program stakeholders as they participated in virtual theater, was an active driver towards their perceived satisfaction (Short et al., 1976). The data would therefore provide tertiary level dance programs with a basis to approach this concept more strategically as they "intentionally" determine and manipulate social presence in virtual theater.

Another point of interest that surfaced in this study was how the Zoom chat box was perceived to have shifted virtual theater from a space of individual viewing to a space of collective viewing (Miller, 2020). This double channel created a viewing experience that was somehow more inter–connected as virtual theater participants were encouraged to continue conversations while they grappled with new information (Blackmon, 2012). In a study by Broadbent and Lodge (2021), respondents reported that such a feature was a good approximation for more traditional face–to–face conversations. While a full discussion on perceptions of chat box usage was outside the scope of this study, it would be good if more research was conducted on chat boxes as a communication tool in virtual theater.

Building virtual theater capabilities for a fast changing environment requires research to understand changing dynamics and new pain points as well as agile innovation to address them (Bakk, 2022; Giles, 2021). Administrators who master this approach will create value for external stakeholders (students, parents, HEI authorities, the government, suppliers, the community, etc.) in high–priority areas and in an environment of increased competition (Hong, 2019; Langrafe et al., 2020).

In summary, the need for virtual theater is recognizable, and, thereby, the demand for research on the nature and dynamics of virtual theater is imperative to develop adequate measurements about the effectiveness of virtual theater from the perspective of its users (Gottlieb & Bianchi, 2017; Rismayanti, Hasjim, & Kurniawan, 2022; Wozny, 2021). Such research should enable policymakers to determine, with confidence, whether virtual theater could be a replacement for live theater. It could also be worthwhile to examine the leadership practices that lead to the empowerment and consequent sustenance of virtual theater, as well as other antecedents as external pressures, virtual application effectiveness, software availability, and academic outcomes.

While tertiary level dance program stakeholders' rapid adoption of technology for remote work proves that they are open and ready to find new ways of performing, or proactively creating their own measures of sustainability, their committed shift to virtual theater may require more research, participant guidance, and technology testing, (Chandler & Scheuber–Rush, 2021; Langrafe et al., 2020).

For Higher Educational Institutions' (HEI) policymakers

As the COVID–19 pandemic drastically influenced the learning and performative environment of tertiary level dance programs, the circumstances coerced stakeholders to make adaptations toward virtual theater in the absence of vital resources such as studios and live theater (report, 2020). Various provisions for tech software must be facilitated to ensure that dance programs remain at the forefront of the performing arts conversation (Levy, 2021; Mitchell, 2021).

As digitized experiences continue to grow in popularity and COVID–19 is quelled, changes in virtual theater users' preferences are expected to outlast the immediate crisis (Pandey & Pandey, 2022). The bricks and mortar model of live theater will have to be re–imagined as a possible significant number of practitioners will have grown comfortable with the digital, remote, and low–touch options and make a permanent shift to virtual theater, accelerating behavior shifts that were perhaps already underway before the crisis (Raza, 2022; Welsh, 2021). Migrating to virtual theater should boost savings for higher educational institutions (HEI). The savings should consequently be funneled into advanced software programs and further optimizing digital training.

From the user perspective, information Technology (IT) has significantly impacted educational processes, from the nature of pedagogy to the ways of delivering content during the pandemic. This department needs strengthening. Outside support, from other external partners like R&D laboratories and centers, philanthropic foundations, etc., must be tapped for HEIs to perform more suitably during cataclysmic events such a pandemic.

Notwithstanding the urgent need to digitize the learning environment, it would be ideal to keep stakeholders at the forefront of management decisions. In stakeholders lie the resources, information, commitment, and wisdom needed to support the goals of the higher educational system, creating the conditions for students to thrive now and in the future. Policymakers must make stakeholder engagement more inclusive during COVID–19 and past the post–pandemic scenario. Frequent opportunities to gather as equals in dialogue and collaboration must be enacted to move beyond communication to the ultimate goal of connection.

For government interventions

The respondents proposed several sustainability measures for virtual theater to exist beyond COVID–19. The said measures involve government intervention such as (1) Government recognition of new and non–standard forms of employment (freelance, intermittent, hybrid, e.g., combining salaried part–time work with freelance, digital work); (2) Expansion of government strategies and policies to include non–profit institutions (e.g. dance and theater companies, museums) designed to keep virtual theater employees going; (3) Financial support to develop technological solutions for enhanced digital access to wider markets; (4) Financial support in building digital infrastructure that can amplify advances in virtual theater, and (5) Support for artists in generating income from their online content.

Table 2: Perceived Sustainability Measures for Virtual Theater
beyond COVID–19 in the Order of Increasing Frequency

Percentage of Respondents	Perceived Sustainability Measures for Virtual Theater beyond COVID–19
79.8%	Increasing accessibility to tech and digital solutions to address the large discrepancy in this area, especially between cities and remote regions.
78.1%	Support artists in generating income from their online content.
68.4%	Explore how these digital solutions can be extensions and enhancements to the virtual theater experience.
57.9%	Development of technological solutions for enhanced digital access to wider markets.
57.9%	Investing in entrepreneurial skills and capacity, especially in areas of funding diversification, sponsorship and fundraising.
56.1%	Expand government strategies and policies to include non–profit institutions (e.g. dance companies, museums) designed to keep virtual theater employees going.
56.1%	Identify R&D (Research and Development) initiatives that artists can access.
56.1%	Government recognition of new and non–standard forms of employment (freelance, intermittent, hybrid, e.g., combining salaried part–time work with freelance, digital work).
54.4%	Invest in digital infrastructure that can amplify advances in virtual theater.
52.6%	Creatively reuse content archives to develop new forms of programming and audience engagement.

Government involvement and support in the arts, both financial and advisory, is important for the development of a progressive cultural environment (Barresi, 1981). Educational structures in the cultural and creative sectors are affected by significant changes in the economic, cultural, and social frameworks in which they operate (Park & Kim, 2020), COVID–19 being the great game changer. A collaborative and supportive relationship between the government and educational institutions requires a process of social dialogue that should aim to improve the quality and status of education, and professionalize standards and conditions of its stakeholders (Hernando–Malipot, 2017). A possible entry point is a retooling and recalibration of research learning and instruction on the performing arts.

As the National Commission on Culture and the Arts (NCCA) faces unprecedented governance challenges, the pandemic has uncovered gaps in both government coordination and the use of evidence for policy making, which directly affect the nature and quality of the measures adopted to tackle the crisis and its aftermath (2021). The aforementioned quick fixes should be assessed when the worst of the crisis is over. It would be good for the government to devise policy responses based on this study's government intervention proposals with a special focus on three (3) main dimensions: coordination and strategic planning, the use of evidence to inform decision–making, and communicating consequent resolutions to the public.

Acknowledgments

References

Adema, K. L., & Roehl, W. S. (2010). Environmental scanning the future of event design. *International Journal of Hospitality Management*, *29*(2), 199–207. https://doi.org/10.1016/j.ijhm.2009.10.017

Ambrecht, J., Lundberg, E., Andersson, T. D., & Getz, D. (2017). The value of events. https://doi.org/10.4324/9781315558950

Bakk, A. (2022, January 24). *The future of the post-pandemic virtual theatre*. ZipScene Magazine. Retrieved August 6, 2022, from https://zip-scene.com/2022/01/24/the-future-of-the-post-pandemic-virtual-theatre/

Barresi, A. L. (1981). The role of the federal government in support of the Arts and Music Education. *Journal of Research in Music Education*, *29*(4), 245–256. https://doi.org/10.2307/3345001

Blackmon, S. (2012). Outcomes of chat and discussion board use in Online learning: A research synthesis. *The Journal of Educators Online*, *9*(2). https://doi.org/10.9743/jeo.2012.2.4

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Broadbent, J., & Lodge, J. (2021). Use of live chat in higher education to support self-regulated help seeking behaviours: A comparison of online and blended learner perspectives. *International Journal of Educational Technology in Higher Education*, *18*(1). https://doi.org/10.1186/s41239-021-00253-2

Burmeister, E., & Aitken, L. M. (2012). Sample size: How many is enough?. Australian Critical Care, 25(4), 271-274.

Cahapay, M. B., & Rotas, E. (2022). Remote learning stress, adaptive coping strategies, and academic performance of Filipino University students amid covid-19 crisis. *Computers and Children*, *1*(1). https://doi.org/10.29333/cac/11823

Carstensen, L. L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current Directions in Psychological Science*, *4*(5), 151–156. https://doi.org/10.1111/1467-8721.ep11512261

Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality and Social Psychology*, *79*(4), 644–655. https://doi.org/10.1037/0022-3514.79.4.644

Carstensen, L. L. (2021). Socioemotional selectivity theory: The role of perceived endings in human motivation. *The Gerontologist, 61*(8), 1188–1196. https://doi.org/10.1093/geront/gnab116

Chandler, C., & Scheuber   Rush, S. (2021). "does anybody have a map?": The impact of "virtual broadway" on Musical Theater Composition. *The Journal of Popular Culture*, *54*(2), 276–300. https://doi.org/10.1111/jpcu.13013

Chiland, E. (2021, February 28). *Are virtual concerts the future of Live Entertainment?* Los Angeles Business Journal. Retrieved August 6, 2022, from https://labusinessjournal.com/media/are-virtual-concerts-future-live-entertainment/

Crouch, J. (2022, January 5). *Live streaming for the arts: Lo-fi and low cost options*. The Space. Retrieved January 13, 2022, from https://www.thespace.org/resource/live-streaming-arts-lo-fi-and-low-cost-options

Culture shock: Covid-19 and the cultural and creative sectors. (n.d.). Retrieved August 4, 2022, from https://www.oecd.org/coronavirus/policy-responses/culture-shock-covid-19-and-the-cultural-and-creative-sectors-08da9e0e

Cunningham, V. (2020, October 2). *How are audiences adapting to the age of virtual theatre?* The New Yorker. Retrieved July 1, 2022, from https://www.newyorker.com/magazine/2020/10/12/how-are-audiences-adapting-to-the-age-of-virtual-theatre

Education: From disruption to recovery. UNESCO. (2021, November 30). Retrieved January 13, 2022, from https://en.unesco.org/covid19/educationresponse

The enduring value of the performing arts in the age of social distancing. (2020, April 29). The Hub. Retrieved January 13, 2022, from https://hub.jhu.edu/2020/04/29/fred-bronstein-performance-arts-coronavirus/

The evolving story of Dance on film: An overview of new forms then and now. Dance International Magazine. (2021, February 26). Retrieved January 13, 2022, from https://danceinternational.org/evolving-story-dance-film-overview-new-forms-now/

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

Fűzi, B., Géring, Z., & Szendrei-Pál, E. (2022). Changing expectations related to digitalisation and socialisation in higher education. horizon scanning of pre- and post-covid-19 discourses. *Educational Review*, *74*(3), 484–516. https://doi.org/10.1080/00131911.2021.2023101

Geigenmüller, A. (2010). The role of virtual trade fairs in relationship value creation. *Journal of Business & Industrial Marketing*, *25*(4), 284–292. https://doi.org/10.1108/08858621011038243

Giles, J. (2021, December 9). *What will college dance departments look like in a COVID-19 world?* Dance Magazine. Retrieved January 13, 2022, from https://www.dancemagazine.com/college-dance-covid/

Glien, J. A., & Glien, R. R. (2003). *Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-Type scales*. Presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH, October 8-10, 2003.

Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of covid-19. *Journal of Sustainable Tourism*, *29*(1), 1–20. https://doi.org/10.1080/09669582.2020.1758708

Gottlieb, U., & Bianchi, C. (2017). Virtual trade shows: Exhibitors' perspectives on Virtual Marketing Capability Requirements. *Electronic Commerce Research and Applications*, *21*, 17–26. https://doi.org/10.1016/j.elerap.2016.12.004

Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer   mediated conferencing environment. *American Journal of Distance Education*, *11*(3), 8–26. https://doi.org/10.1080/08923649709526970

Hernando–Malipot, M. (2017, June 8). Insufficient supply of qualified teachers remains DepEd's challenge. *Manila bulletin.*

Hong, C.-Z. (2019). The feasibility of the application of stakeholder theory in Higher Education. *Proceedings of the 6th International Conference on Management Science and Management Innovation (MSMI 2019).* https://doi.org/10.2991/msmi-19.2019.50

How covid–19 is changing the world: A statistical perspective, volume II. UNICEF DATA. (2021, September 22). Retrieved January 13, 2022, from https://data.unicef.org/resources/how-covid-19-is-changing-the-world-a-statistical-perspective-volume-2/

Kaufman, S. L., Brodeur, M. A., & McGlone, P. (2020, August 20). Empty classrooms, studios and stages: In the covid-19 era, an arts education requires an even greater leap of faith. *Washington Post*.

Keam–George, D. (2021, September 1). *Are virtual events virtually over?* The Drum. Retrieved August 29, 2022, from https://www.thedrum.com/opinion/2021/09/01/are-virtual-events-virtually-over

Kim, J., Kim, E., & Hong, A. (2021). Ott streaming distribution strategies for dance performances in the post-covid-19 age: A modified importance-performance analysis. *International Journal of Environmental Research and Public Health*, *19*(1), 327. https://doi.org/10.3390/ijerph19010327

Kim, S.-E. (2021). *Measuring Quality of Virtual Event: Scale Development and Validation* (dissertation). Digital Scholarship@UNLV

Kim, S. Y. (2018). AHP analysis of distribution activation plan in Performing Arts Industry. *Journal of Korea Culture Industry*, *18*(1), 21–34. https://doi.org/10.35174/jkci.2018.03.18.1.21

Langrafe, T. de, Barakat, S. R., Stocker, F., & Boaventura, J. M. (2020). A stakeholder theory approach to creating value in higher education institutions. *The Bottom Line*, *33*(4), 297–313. https://doi.org/10.1108/bl-03-2020-0021

Langston , S. (2022, April 13). *The pandemic nearly killed theatre – the creative way it fought back could leave it stronger*. The Conversation. Retrieved August 4, 2022, from https://theconversation.com/the-pandemic-nearly-killed-theatre-the-creative-way-it-fought-back-could-leave-it-stronger-176185

Levy, J. (2021, January 29). *Story from Dean College: Technology helps dance students adapt to COVID-19*. Wicked Local. Retrieved January 13, 2022, from https://www.wickedlocal.com/story/sponsor-story/dean-college/2021/01/29/technology-helps-dance-students-adapt-covid-19/4261414001/

Lu, C. (2021, November 4). *Frame dance has kept dance films alive and well, before and during the pandemic – and now, as we come out of it*. Houston Arts Journal. Retrieved September 3, 2022, from https://houstonartsjournal.com/2021/11/04/frame-dance-has-kept-dance-films-alive-and-well-before-during-and-now-after-the-pandemic/

Luciew, J. (2021, March 29). *'raw emotions' from covid-19 will fuel drama for years, actors say*. pennlive. Retrieved September 3, 2022, from https://www.pennlive.com/coronavirus/2021/03/raw-emotions-from-covid-19-will-fuel-drama-for-years-actors-say.html

Lu, D., Burstein, J., & Jesus, J. (2019). Ethics of Research without Informed Consent.

Miller, R. (2020, October 8). *The zoom chat solves education problems we didn't even know we had*. Slate Magazine. Retrieved September 1, 2022, from https://slate.com/technology/2020/10/long-live-zoom-class-chat-remote-learning.html

Mitchell, B. (2021, December 9). *How covid has changed college dance departments*. Dance Magazine. Retrieved January 13, 2022, from https://www.dancemagazine.com/college-dance-departments-covid/

Morrongiello, J. (2020, June 30). *Why virtual events are the future* . Medium. Retrieved August 6, 2022, from https://medium.com/point-nine-news/why-virtual-events-are-the-future-8a659ec2d692

1.3 billion learners are still affected by school or university closures, as educational institutions start reopening around the world, says UNESCO. UNESCO. (2021, May 4). Retrieved January 13, 2022, from https://en.unesco.org/news/13-billion-learners-are-still-affected-school-university-closures-educational-institutions

Pandey, K., & Pandey, A. K. (2022, January 15). *Virtual concerts the post-covid future of the music industry*. Jumpstart Magazine. Retrieved August 6, 2022, from https://www.jumpstartmag.com/virtual-concerts-the-post-covid-future-of-the-music-industry/

Park, H.-S., & Kim, H.-C. (2020). Impact of government support on performing artists' job and life satisfaction: Findings from the National Survey in Korea. *International Journal of Environmental Research and Public Health*, *17*(20), 7545. https://doi.org/10.3390/ijerph17207545

Paulson, M., & Hernández, J. C. (2022, August 21). *Live performance is back. but audiences have been slow to return.* The New York Times. Retrieved August 29, 2022, from https://www.nytimes.com/2022/08/21/arts/performing-arts-pandemic-attendance.html

Pearlman, D. M., & Gates, N. A. (2010). Hosting business meetings and special events in virtual worlds: A fad or the future? *Journal of Convention & Event Tourism*, *11*(4), 247–265. https://doi.org/10.1080/15470148.2010.530535

Raza, S. (2022, May 13). *The future of virtual events in 2022.* vFairs.com. Retrieved August 6, 2022, from https://www.vfairs.com/the-future-of-virtual-events/

Rismayanti, R., Hasjim, M., & Kurniawan, M. F. (2022). The existence of virtual theater performances of pandemic era. *Advances in Social Science, Education and Humanities Research.* https://doi.org/10.2991/assehr.k.220408.059

Ritzel, R. J. (2021, June 14). *One strategy for creating dance during a pandemic? Digital Now, live later.* Dance Magazine. Retrieved January 13, 2022, from https://www.dancemagazine.com/dance-performances-online/

Roe, A. (2021). Port in a storm: Arriving at a virtual theatre through the pandemic of 2020. *The Eugene O'Neill Review*, *42*(1), 54–63. https://doi.org/10.5325/eugeoneirevi.42.1.0054

Romita, N. (2018, October 18). *Why major in dance? A case for dance as a field of study in universities in 2018.* OUPblog. Retrieved January 13, 2022, from https://blog.oup.com/2018/10/dance-field-of-study-in-universities/

Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications.* London: John Wiley & Sons.

Sorensen, E. K. (2004). Reflection and intellectual amplification in online communities of collaborative learning. *Online Collaborative Learning*, 242–261. https://doi.org/10.4018/978-1-59140-174-2.ch011

Straub, D., Boudreau, M.-C., Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13, 380-427.

Student dancers and filmmakers highlight the strengths of collaboration. UNCSA. (n.d.). Retrieved August 4, 2022, from https://www.uncsa.edu/news/20210726-dance-film-video-collaboration.aspx

Taylor, A. (2022, January 24). *The pandemic revolutionized theater and the Performing Arts. get used to seeing musicals with a VR headset on.* Fortune. Retrieved August 6, 2022, from https://fortune.com/2022/01/24/pandemic-theater-performing-arts-virtual-reality/

Toczauer, C. (2021). *Can Theater Studies Succeed Online? How Covid-19 Has Reshaped the Performing Arts*. OnlineEducation. https://www.onlineeducation.com/features/challenges-of-theater-studies-online

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC medical research methodology*, *18*(1), 1-18.

Welsh, A. (2021, May 19). *Why don't I feel more excited about returning to the theatre?* Exeunt Magazine. Retrieved August 6, 2022, from http://exeuntmagazine.com/features/dont-feel-excited-returning-theatre/

Wozny, N. (2021, April 2). No Theater? No problem. Dancers Are Making the World Their Stage. *Dance Magazine*.

Yukawa, J. (2006). Co-reflection in online learning: Collaborative critical thinking as narrative. *International Journal of Computer-Supported Collaborative Learning*, *1*(2), 203–228. https://doi.org/10.1007/s11412-006-8994-9

Contact emails: marialucina.desantos@benilde.edu.ph
magdalena.deleon@benilde.edu.ph