



UNIVERSITY OF THE
COMMONWEALTH
CARIBBEAN
Fostering Leadership & Innovation

CARIBBEAN JOURNAL OF APPLIED INNOVATION & RESEARCH

VOL. 1, NO. 1

OCTOBER 2023



A PUBLICATION OF THE UNIVERSITY OF THE COMMONWEALTH CARIBBEAN

CARIBBEAN JOURNAL OF APPLIED INNOVATION & RESEARCH

VOL. 1, NO. 1

OCTOBER 2023

A PUBLICATION OF THE UNIVERSITY OF THE COMMONWEALTH CARIBBEAN

**Caribbean Journal of Applied Innovation & Research
(CJAIR)**

Vol. 1, NO. 1

Published by
University of the Commonwealth Caribbean
17 Worthington Avenue
Kingston 5, Jamaica, West Indies
Tel: 876-906-3000
Website: ucc.edu.jm/journal
e-mail: managingeditor@ucc.edu.jm

© October 2023 University of the Commonwealth Caribbean

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means electronic, photocopying, recording, or otherwise, without the prior permission of the publisher.

Set in Times New Roman 12

EDITORIAL BOARD

Editor-in-Chief	Dr. Veronica Reid-Johnson Assistant Professor, School of Business, Entrepreneurship & Management, UCC
Dr. Tashieka Burris-Melville	Lecturer, Faculty of Education & Liberal Studies, Utech Ja.
Shalieka Burris	Lecturer, School of Behavioural Sciences, Humanities & Law, UCC
Dr. Rabindranath Ramsaroop	Associate Professor, School of Mathematics, Science, & Technology, UCC
Dr. Peter Ndajah	Head, School of Mathematics, Science & Technology, UCC
Dr. Catherine Butcher	Associate Professor, School of Business, Entrepreneurship & Management, UCC
Dr. Cecile Dennis	Assistant Professor, School of Business, Entrepreneurship & Management, UCC
Ana Peralta	Chief Librarian, UCC

CONTENTS

Editorial

Harnessing Research, Perspectives, and Insights: A Holistic Approach to Evolving Academia v

iv

Research Articles

The Impact and Crisis Response to Covid-19: A Study of Jamaica’s Cruise Ports

Angela Johnson, Shemar Lawrence, Shamesh Lee & Paulette Nembhard

3

The Psychological Impact of the Transition to E-learning on Undergraduate Students during the COVID-19

Cecile Dennis, Shemeala Mahabeer Manning, Annett Montaque, Debbia Brown-Rose, Elizabeth King & Trisdane J. Taylor

21

Academic Opinions & Perspectives

Tech-Savvy Teaching: Why Technology Integration Should Be a Priority in Instructional Planning

Nekiesha Reid

48

Underscoring the Need for Higher Education Institutions in Jamaica to be Trauma-Informed

Craig McNally

56

Levelling the Lectern: Pondering Gender, Workloads, and Career Progression Paradoxes in Academia

Veronica Reid-Johnson

64

Practitioner Insights

Leadership Insight: A Candid Conversation on Academic Leadership & Research Vision

Interview by Veronica Reid-Johnson

72

Inclusion in Education: Using Individualised Educational Programmes (IEPs) to Enhance the Delivery of Academic Services for Students with Special Needs

Interview by Cecile Dennis

79

Notes on Contributors

85

The Caribbean Journal of Applied Innovation & Research:

Submission Guidelines

87

EDITORIAL

Harnessing Research, Perspectives, and Insights: A Holistic Approach to Evolving Academia

This inaugural issue of the *Caribbean Journal of Applied Innovation and Research (CJAIR)* opens a new chapter in the grand narrative of intellectual exploration and discourse. Published by the University of the Commonwealth Caribbean (UCC), CJAIR is an international, multidisciplinary, peer-reviewed journal committed to disseminating knowledge across various fields and aims to blend the intellectual rigour of researchers with the experiential wisdom of practitioners. With a commitment to accessibility, CJAIR is available biannually in both traditional hard copy format and online, as an open-access publication, ensuring that scholars, practitioners, and enthusiasts worldwide can access this knowledge.

In this seminal issue, CJAIR showcases seven articles, including research papers, academic commentaries, and practitioner contributions, reflecting UCC's commitment to fostering a dynamic academic ecosystem. In the evolving setting of global education, the diversity of perspectives, research, and insights in this inaugural issue encapsulates a rich tapestry of thought. These pieces collectively present a rich tapestry of perspectives that largely delve into multifaceted challenges and opportunities in higher education, laying the foundation for informed dialogue and action.

Our *Research Articles* open the floor with 'The Psychological Impact of the Transition to E-learning on Undergraduate Students during the COVID-19 Pandemic,' which dives into the mental turmoil precipitated by the abrupt shift to digital learning and underscores the importance of psychosocial support. Meanwhile, 'The Impact and Crisis Response to Covid-19: A Study of Jamaica's Cruise Ports' provides a micro-perspective on the global pandemic's economic aftershocks in Jamaica, imparting a deeper understanding of the effects of global crises on small island developing states (SIDs). These articles, originating from student research, exemplify the

invaluable contributions of emerging scholars in addressing pressing issues.

Our *Academic Opinions & Perspectives* section unpacks the paradoxes and possibilities of contemporary academia. It begins with ‘Tech-Savvy Teaching: Why Technology Integration Should Be a Priority in Instructional Planning,’ a pragmatic article advocating for technology integration as a non-negotiable facet of pedagogical strategy, essential for navigating the digital age. Further, ‘Underscoring the Need for Higher Education Institutions in Jamaica to be Trauma-Informed’ makes an empathetic call for sensitive education practices to foster a supportive and inclusive environment that both acknowledges the varied experiences of students and equips them with the necessary tools to thrive academically and personally. The section concludes with ‘Levelling the Lectern: Pondering Gender, Workloads, and Career Progression Paradoxes in Academia,’ which interrogates the gendered imbalances in academia and throws light on the unnoticed labour that often hinders female academics’ career progression.

Rounding out the inaugural issue, our *Practitioner Insights* offer first-hand wisdom from professionals across various fields. ‘A Candid Conversation on Academic Leadership & Research Vision’ offers a refreshing perspective on the convergence of academic leadership and research vision through the lens of the UCC’s new President. Lastly, we spotlight ‘Inclusion in Education’, an enlightening interview championing the use of Individualised Educational Programmes to bolster academic service delivery for students with special needs.

Taken together, the articles in this issue offer a multi-dimensional view of the intersection of gender, technology, trauma, leadership, inclusion, and the economy in contemporary education. They invite us to engage with these topics, not as isolated entities, but as interconnected threads in the rich tapestry of academia. In this dynamic landscape, it is crucial to engage with, and reflect on, diverse perspectives, to inform both our understanding and action. It is our hope that this issue facilitates such critical discourse and inspires progressive change within the academic realm.

RESEARCH ARTICLE

Uncharted Waters: Examining the Impact of COVID-19 on Jamaica's Cruise Ports

ANGELA JOHNSON, * SHEMAR LAWRENCE, SHAMESH LEE, PAULETTE NEMBHARD
School of Business, Entrepreneurship & Management, University of the Commonwealth Caribbean

* **Corresponding author:** *ajohnson@portjam.com*

Abstract: The economic and social impacts of the COVID-19 pandemic on global cruise tourism have expanded the narrative surrounding the practice of crisis management. This qualitative case study retrospectively investigates two critical issues regarding crisis management and response at Jamaica's cruise ports. Firstly, concerns about the financial impact of the Port Authority, which has oversight responsibility for their regulation, management and development; and secondly, the agency's crisis response. In this regard, the study's interpretivist approach and thematic analysis of qualitative evidence gathered from interviews, news media, industry reports, and organisational documents offer new insights into the evolution of management concerns regarding risk and crisis management efforts to ensure recovery. With the urgency of mitigating the pandemic's adverse effects, a crisis response leadership team emerged at the Port Authority, fulfilling a government mandate to safely re-open the island's cruise ports. Given the uniqueness and scale of the pandemic's public health, social, and economic impacts, the findings highlight key risk and crisis management actions to be taken in an effort to provide speedy recovery of the local cruise tourism industry.

Key terms: COVID-19 pandemic, crisis, crisis management, cruise, cruise ports

Introduction

The emergence of the COVID-19 pandemic has been described as the most complex

and disruptive development in global cruise tourism, changing the risk perceptions of the sector's stakeholders (Aldao et al., 2021;

Holland et al., 2021). Following the discovery of the SARS-CoV-2 virus in Wuhan City, China, in December 2019 (González, 2020), Jamaica reported its first case on March 10, 2020 (Ministry of Health & Wellness, 2020). With the increasing notoriety of cruise ships as super-spreaders, the US Centres for Disease Control (CDC), on March 14, 2020, issued a No-Sail-Order (CDC, 2020a) for the sector, which restricted international travel across all borders (González, 2020). Jamaica followed suit on March 21, 2020 (Morris, 2020) with the exception of cargo operations. The CDC's No-Sail-Order was extended several times in response to the pandemic's persistence (CDC, 2020b).

The prolonged and severe financial distress that followed the shutdown enveloped cruise lines and cruise ports for most of 2020 and 2021 and severely impacted Caribbean economies, which hitherto held the largest share of the global market (ACS-AEC, 2016). The decline in economic activity surrounding Jamaica's cruise ports reflected a significant reversal of growth and is estimated to be at least US\$244.5 million per year, based on

an economic study for fiscal year 2017-18 conducted by Business Research and Economic Advisors (2018). These losses have motivated new and urgent demands for a review of local strategic crisis management practices (Baubion, 2013).

Losses in income have accrued to the Port Authority (PAJ), which has oversight responsibility for regulating, managing, and developing the country's cruise ports. The shutdown in global cruise travel resulted in lost passenger arrivals to Jamaica estimated at 1.72 million from April 2020 to July 2021, culminating in losses in revenues for the Port Authority of approximately J\$2.92 billion (PAJ, 2021b). The ensuing social and economic turbulence has also impacted interdependent actors in the cruise value chain, which comprises cruise lines, cruise passengers, port operators, ground transportation operators, site attraction operators, site amenity operators, travel agents, and destination management organisations (World Tourism Organisation, UNWTO) & Asia-Pacific Tourism Exchange Centre (APTEC), 2016).

Three critical issues emerged from the

financial disruption which motivated this study. Firstly, how prepared was the Port Authority in crisis management to mitigate the resulting extended losses (Carlsson-Szlezak et al., 2020; Zorgati & Garfatta, 2021)? Secondly, what were the implications of the pandemic's complexity for the agency's crisis response and recovery? Thirdly, what prescriptions on best practices in crisis management are most suitable for the Port Authority and the local sector? Le and Phi (2021) provide a notable linear crisis management model that analyses and maps crisis management strategies against linear phases of the COVID-19 pandemic, while Altinay and Kozak (2021) have advanced a chaos theory model which is deemed more suited to the industry's nonlinear and complex system dynamics. For the Port Authority's management, an urgent response to the crisis that addressed these issues had become critical to avoid widespread failure and advance the industry's recovery.

This study aims to address the gap in research on crisis management at the Port Authority in Jamaica and the local cruise sector. In addition, this study explores the financial impact and experiences in crisis recovery of the Port

Authority's management to expand knowledge on how similar crises can be managed. Hence, the following research questions.

- 1. What were the concerns of the Port Authority's management about the financial impact of the COVID-19 pandemic?*
- 2. What were the key actions pursued by port management for the recovery of the local cruise tourism industry as a response to the COVID-19 pandemic?*

Literature Review

This section examines the experiential and risk-averse nature of cruise tourism, perspectives on defining crisis management, studies on the financial and other impacts of the COVID-19 pandemic on cruise tourism and best practices in crisis management. Governments in many countries, including Jamaica, imposed containment measures and restrictions on social interaction in public spaces to combat the spread of COVID-19, resulting in financial distress and contagion. Financial contagion may be defined as the "significant increase in the probability of a crisis in one country, conditional on the occurrence of a crisis in another country"

(Eichengreen et al., 1996 as cited in Zorgati and Garfatta, 2021; p2). Despite interventions by “central banks, governments, and multilateral organisations” amounting to US\$3.3 trillion, which sought to resuscitate economies and financial markets, recovery pathways seemed uncertain (Carlsson-Szlezak et al., 2020; Akhtaruzzaman et al., 2021 pp. 1-2).

The significant and complex impacts of the COVID-19 pandemic on stakeholders within the tourism industry have been described as a crisis of epic proportions (Aldao et al., 2021). A crisis is an “...unnatural, complex and unstable situation that threatens the achievement of an enterprise’s strategic objectives, reputation or even survival.... As a process, it is dynamic and progressive... characterised by threat, surprise and relatively short response time” (Jedynak and Bak, 2022; p.87). Therefore, new courses of action are required to cope with the disruption, including a coordinated crisis response from multiple government agencies (Coombs, 2019).

Kenny & Dutt (2021) advance a narrower focus, defining tourism crises as “event(s) of sufficient magnitude to give rise to

circumstances in which the routine functioning of the tourism industry is severely upset” (p.2). Examples of such events are terrorism attacks, civil unrest, natural disasters, global financial downturns, and pandemics (SARS, H1N1, and MERS). Given the susceptibility of the industry and destinations to significant risks of reduced tourism numbers, Kenny & Dutt (2021) argued that a crisis management strategy was critical to ensuring an appropriate response to and recovery from crisis-related issues as they arose.

Travellers and organisations are more concerned about low probability-high impact risks because of their potential for widespread economic damage, loss of life and extensive periods of infrastructure restoration. Destinations that rely heavily on tourism for their economy will find this to be of paramount importance (Misrahi et al., 2019). The pandemic led to a decline in tourists’ risk perceptions and tourism revenues which impacted the cruise sector globally, extending to Jamaica and other Caribbean destinations which source cruise visitors primarily from North America and Europe. The cruise experience

is a luxurious all-inclusive multi-dimensional holiday (Sucheran, 2021; Holland et al., 2021). It generally progresses through various stages: the anticipation of travel; travel planning; traveling to the destination; stay in the destination (main experience); return travel; and the memories of the experience (Radić & Popesku, 2018; p.525)

However, tourists are risk-averse, and their risk perceptions and need for physiological and psychological health and safety are likely to characterise how a destination's competitiveness continually responds and adapts to risk events (Speakman and Sharpley, 2012; Radic et al., 2020). These issues are reflected in the adverse financial outcomes of the pandemic for tourism in Eastern and Central Europe. For example, financial metrics on liquidity, solvency and economic efficiency for tourism companies in Romania, Hungary, Slovenia, and Croatia showed a collapse, with growth trends reversed in 2020 (Droj & Droj, 2021).

Key Prescriptions for Best Practices in Crisis Management

The search for rich insights into crisis management reflects how the pandemic and crisis management practices likely influenced changes

in Jamaica's recovery and competitiveness as a cruise destination and brand (Gentles-Peart et al., 2019). Crisis management entails distinct processes and resource deployments designed to prevent and mitigate the adverse effects of crises, especially for organisations and their stakeholders. Coombs (2019) highlights four such strategies. *Preparation and prevention* identify and analyse vulnerabilities, detect warning signals, and undertake the required preparatory work. *Response* efforts deploy crisis management resources towards recovery or business continuity and engender learning, leading to a *revision* in the protocols for the forgoing processes (p.7).

Coombs (2019) postulated that leaders should focus on the crisis management team's composition, training, and developing a crisis communication plan. Crisis leaders should rely on a governance-based, information-driven, collaborative and risk-oriented approach while remaining open to unconventional thinking when searching for crisis threats. Rigidity in information sharing and solutions should be discouraged (Baubion, 2013; Coombs, 2019). Leaders can deploy one of four standard crisis

response strategies based on a study of several sectors by Wenzel et al., (2020). Firms may persevere to maintain the status quo while alleviating the adverse impacts of a crisis. Alternatively, retrenchment, to reduce the scope of business activities, investments and assets or innovation to achieve strategic renewal, may be pursued. At the extreme, an exit strategy or business closure is contemplated (Wenzel et al., 2020; pp.9-12).

Two stylised approaches to crisis management have been recently debated - the linear model and the chaos theory models. Crisis management models are conceptual frameworks for all facets of crisis preparation, prevention, response, and recovery (Marker, 2020). The Integrated Strategic Crisis Management framework by Le & Phi (2021) is an example of the linear model. It identifies four linear phases of the COVID-19 pandemic, specifically the pre-event and early symptom phase, emergency, crisis, and recovery phases. In addition, reactive or proactive crisis management strategies and contextual factors are mapped against each phase (**Figure 1**).

While linear models assume that a crisis

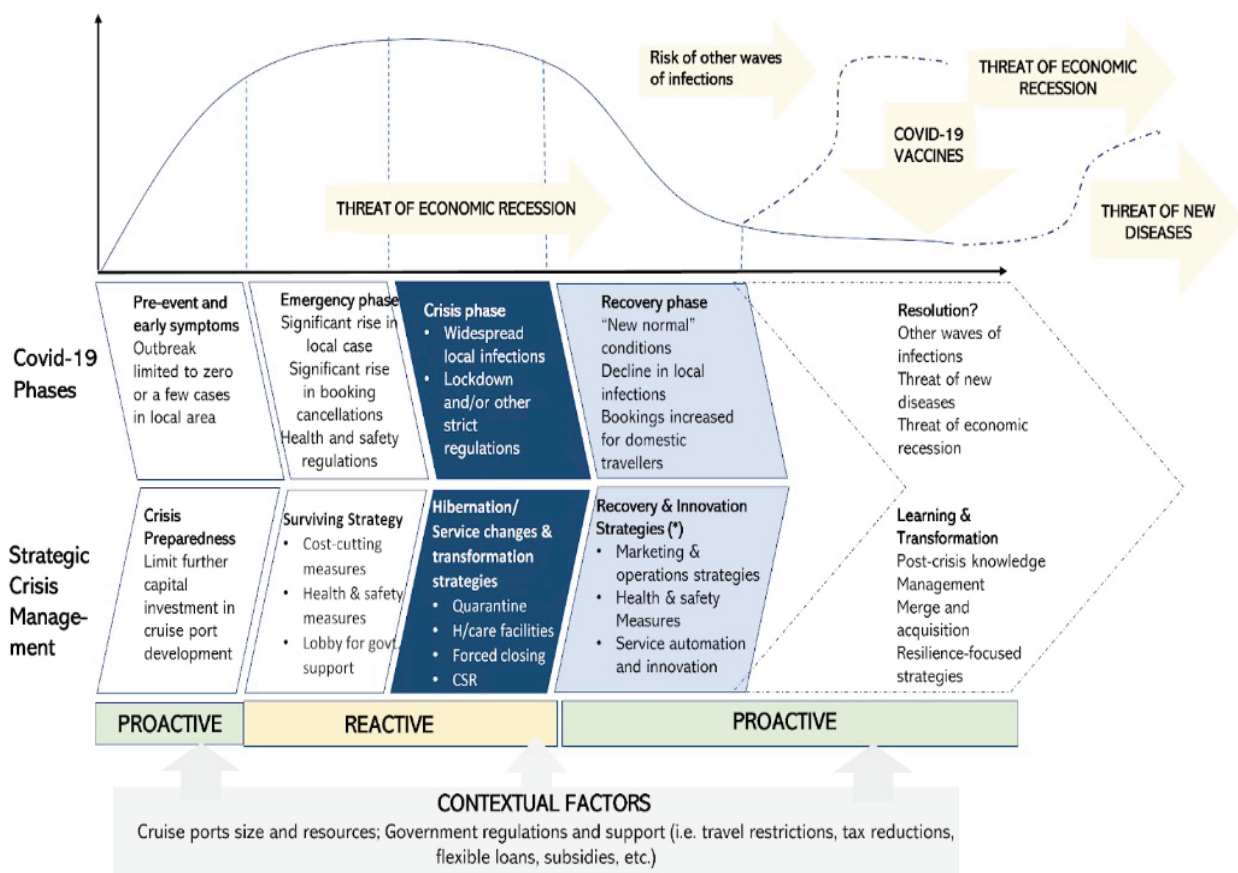
follows consecutive phases within a lifecycle, a crisis might unfold in a complex and chaotic manner at a particular destination:

In reality ...crises and disasters often occur without warning and a destination can immediately enter the 'emergency' phase, by-passing the 'pre-event' ...phase, requiring a rapid reaction. The dramatic suddenness of such events may lead to confusion and inappropriate decision-making (Speakman & Sharpley, 2012, pp. 68-9).

The principles of the chaos theory are illustrated in the Butterfly Competitiveness model by Altinay and Kozak (2021) (**Figure 2**). The "butterfly effect" refers to the impact of "an initiating set of events that lead to the "edge of chaos" where tourism systems become unstable. Following the disruption, bifurcation or "flashpoints of change" emerge, indicating changes in the direction, character, or structure of the industry. These flashpoints are evidenced by the changing nature of the tourist experience, which must now account for various risks, risk perception and approaches to risk management.

An emerging trend towards digitalisation and artificial intelligence to support reduced face-to-face contact are examples of new drivers which suggest such a turning point.

Figure 1 *The Integrated Strategic Crisis Management Framework (Le & Phi, 2021, p.3)*



Self-organisation and strange attractors are other features of bifurcation within the tourism industry which are explained within the chaos theory model. Self-organisation refers to the process whereby new structures, hierarchies, and understandings emerge from a system in a state of chaos to signal a new, higher-

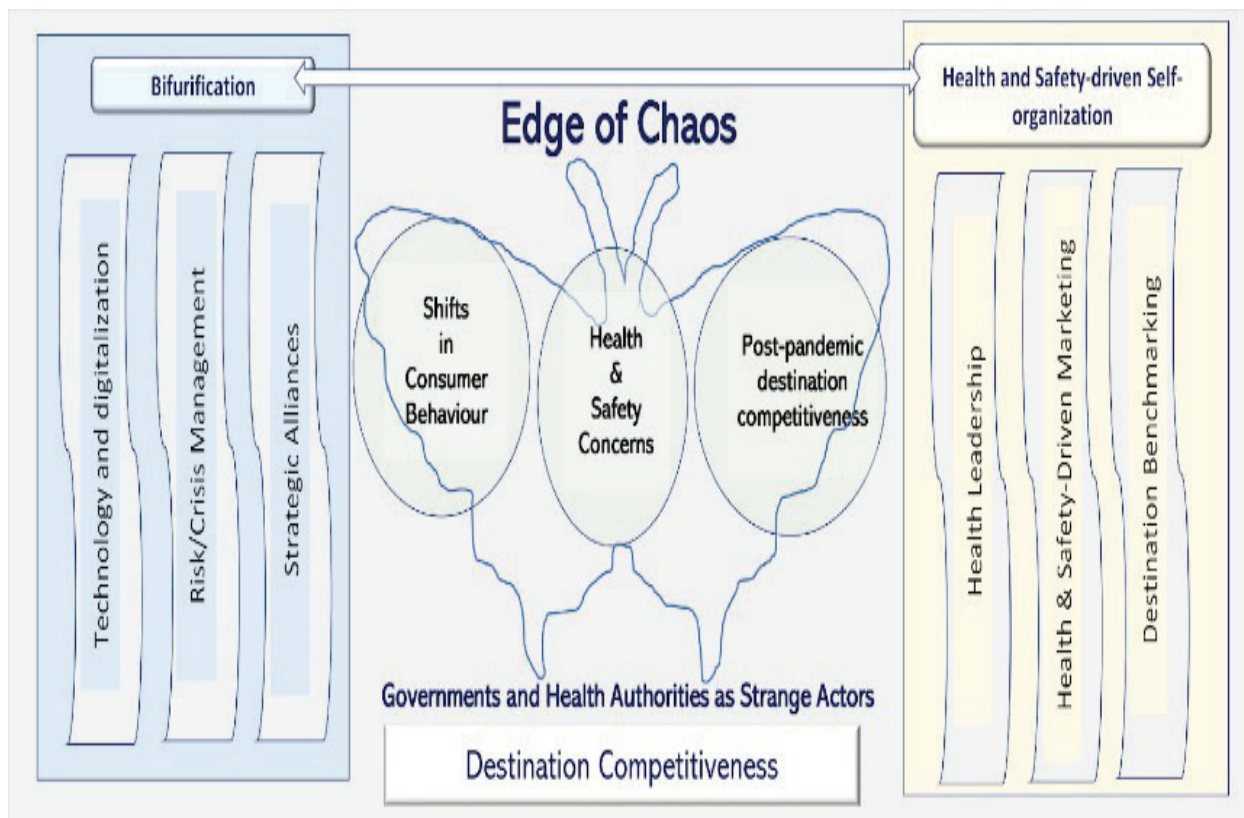
level form of a re-ordered system. Strange attractors refer to the role of government and health authorities in establishing a “common vision, sense of meaning, strategy or value system”, which encourages stability, rational thinking, and order in the new system.

Crisis management practices may be

critical to the competitiveness of Jamaica and the Caribbean market, given the experience-driven and risk-averse nature of the cruise tourism industry. Prescriptions on best practices in crisis prevention, preparation, response and revision are underpinned by the approach to crisis management. For example, the chaos theory approach helped Mexico's tourism industry manage the H1N1 flu virus

(Speakman & Sharpley, 2012). However, the stylised linear and chaos theory approaches have been largely unexamined in Caribbean destinations. Given the pandemic's unexpected developments and impacts and based on a hypothesised progression of crisis management in a nonlinear manner, the chaos theory model is adopted for this study.

Figure 2 *Butterfly Competitiveness Model (Altinay & Kozak, 2021)*



Methodology

The study employs a case study

approach and an interpretivist worldview to retrospectively examine the Port Authority's

concerns about the financial and other impacts of the pandemic and the crisis response strategies employed. A case study is “an empirical method that investigates a contemporary phenomenon... in-depth and within its real-world context, especially when the boundaries between phenomenon and context may not be evident” (Yin, 2018; p.15). This methodological choice reflects the need to understand crisis management experiences as a social phenomenon.

Varied sources of evidence were used, comprising virtual in-depth semi-structured interviews and public and private organisational documents shared with the research team, industry, and news media reports. A sample of six managers from the Port Authority consented to participate in semi-structured interviews. It comprised four senior executives, one port manager, and one senior officer for port security. Maximum variation sampling drew these participants from different functional areas within the agency, ensuring a rich tapestry of perspectives. Significantly, participants were directly involved in crisis management, the management and marketing

of cruise ports, or were engaged with public health protocols, security, and port re-opening. A purposive sampling strategy, based on these pre-determined criteria, determined the sample size (Creswell, 2018).

Public and private organisational documents and news media reports yielded critical statistical, economic, and qualitative data on Jamaica’s cruise visitor arrivals and other compelling insights into the global cruise industry. These included data from the Florida Caribbean Cruise Association website, Cruise Lines International Association website, the Port Authority’s annual reports, corporate budgets, internal memoranda and training manuals. Thematic analysis provides a systematic and objective approach to analysing the decisions, policies and actions taken and implemented in the crisis response (Salem et al., 2021). The data sets were initially coded based on concepts from the literature. NVivo application software was used to facilitate coding all the evidential data. Consistent with Houghton et al., (2012), trustworthiness was achieved by triangulation and utilising multiple sources to corroborate the evidence.

Explanation-building was used to link the chain of events from the onset of the pandemic to the subsequent recovery (Xiao and Smith, 2006). The ethics proposal was approved, and respondents were assured of confidentiality. A case study protocol was used to strengthen the study's reliability (Xiao & Smith, 2006; Yin, 2018).

Findings

This section presents the findings of the thematic analysis organised in three overarching themes and several sub-themes relating to the research questions (see **Tables 1 and 2**).

Theme 1: *The adverse financial impact raised significant concerns* - Participant responses and other evidence indicate that the pandemic triggered a chain reaction of fiscal distress, which highlighted the interconnections among cruise lines, cruise ports, and other local actors. The sub-themes are summarised below.

Major losses for cruise lines - Interviewees described the sudden impact of the no-sail order as catalytic, resulting in a "humanitarian and economic crisis" (P1). Cruise lines were "scrambling to raise money

any way they could" (P2). The Port Authority's statistical publication for 2020-2022 reported that in 2019 cruise brands owned by Carnival Corporation, such as Aida Cruises and Princess Cruises, accounted for 35% to 40% of the 1.5 million cruise passenger arrivals to Jamaica. However, Carnival's second-quarter revenues for 2020 showed a severe decline from US\$4.8bn in 2019 to US\$700m and losses of \$4.4bn (Macola, 2020).

A Marked Decline in Port Authority Revenues - In 2018-19, the Port Authority's total revenues of J\$13.7 billion included J\$3.6 billion from its cruise business segment (PAJ, 2019). The agency's President & CEO described the impact on the agency's cruise business as particularly harsh "with no revenues being earned" (PAJ, 2021a, np). The senior finance officer recalled that they had worked on several budget scenarios but had not anticipated "a total loss" (P6).

Impact on Cruise Tourism Value Chain - Attraction operators lamented about the scope of the ensuing economic crisis.

Table 1 Summary of Key Findings on Research Question 1

What were the concerns of the Port Authority’s management about the financial impact of the COVID-19 pandemic?			
Themes	Sub-themes	Sources	Illustrative Coded Data
Theme # 1: The adverse financial impact raised significant concerns	Major losses for cruise lines	Semi-structured Interview	P“2”: “You had a fleet of...15 ships, and one...or two ships were sailing. So meanwhile, other ships were haemorrhaging. Cruise lines were...scrambling to raise money any way they could.”
	A marked decline in Port Authority revenues	News Media Semi-structured Interview	“Earnings flow into the island through statutory fees... pandemic conditions broke a 13-year record of growth.” (Ustanny Collinder, 2021) P“6”: “[We] realised how close this thing was [when] it hit the States ...None of the [restated budget] scenarios anticipated a total loss of our cruise revenue.”
		Organisational document	“The impact on our cruise business has been particularly harsh as the cruise ports in Jamaica have been closed...with no revenues being earned.” (PAJ, 2020).
	Negative impact on the local value chain	Semi-structured Interview News Media	P“4”: “There was a serious fall-out related to the drivers, craft traders, tour guides and attraction operators...There were problems with the banks and buses on credit...a driver just dropped down and died.” “The level of recovery anticipated is being contrasted with pre-pandemic 2019 when cruise visitor earnings were US\$181.26 million (\$24.2 billion).” (Ustanny Collinder, 2021)

As noted in the Jamaica Observer in 2021: “The absence of cruise ships has taken a huge financial toll on many local tourism entities, including those in the craft and duty-free shopping sectors and transportation/tour operators” (Ustanny Collinder, 2021, np).

The evidence highlighted major issues, approaches, decision models, and information sets deployed by the Port Authority in crisis recovery. Jamaica’s ports are certified under the International Ship and Port Facility Security (ISPS) Code (2003), which requires port security assessments for threats of “varying

security levels” (IMO, 2019). The pandemic offered new practical challenges and learning in crisis management.

Theme 2 *Rethinking Risk Management* - The agency’s Ebola response model, developed in 2014 based on WHO Ebola guidelines, was supplemented with new risk management practices which supported sensemaking about crisis management. For example, their training manual on building resilience in ports were updated with self-diagnosis questions. The Port Authority’s risk management tools would now consider “health security” as well as HR

strategies which prioritised staff well-being through comprehensive COVID-19 workplace protocols.

Theme 3 *Enacting Innovation & Recovery* - This theme explores the Port Authority's crisis response and the enacted crisis management model. A crisis response leadership team had been established within the Port Authority to operationalise a government mandate for the safe re-opening of the industry. In the earliest phase of the crisis response, actions were pursued to mitigate the impact of the revenue loss with efforts to "*figure out ways... [to] cut costs*" (P"2"). An internal company document, *Disaster Management and Continuity of Operations in Ports and Terminals: Adjusting for the Covid-19 pandemic in Cruise Ports in Jamaica*, was published in July 2021 (Innis et al., 2021, p.3). To ensure a unified approach and higher standard for the sector's recovery, the Port Authority consulted locally and internationally, aligning with guidelines from the CDC, the Cruise Lines International Association (CLIA), the European Union (EU) Healthy Sail Panel, the World Health Organisation (WHO) and

the Cruise Ship Operators (Innis et al., 2021; p.8). Scenario analysis ensured port readiness and included "*presentations from cruise lines, building a scenario around possible crises or incidents*" (P"1").

Table 2 Summary of Key Findings on Research Question 2

Thematic Analysis - Research Question 2: What were the key actions pursued by the ports' management for the recovery of the local cruise tourism industry as a response to the Covid-19 pandemic?			
Themes	Sub-themes	Sources of Evidence	Illustrative Coded Data
Theme 2 <i>Rethinking risk management</i>	Greater crisis preparedness	Semi-structured interviews	P"1" : "The whole structure of ISPS, [it] is built around risk management...because ISPS uses risk management tools. What we have now graduated to includes health, and we're now looking at health security" [risks]
Theme 3 <i>Enacting Innovation & Recovery</i>	Innovating port re-opening	Organisational document	"The CDC took a phased approach to the resumption of passenger operations, [including] ... return to passenger voyages [to] mitigate COVID-19 risks among passengers, crews and communities... Several options are being considered, including the creation of a "bubble" (safe zone with restricted access)." (PAJ, 2020).
	Utility of models	Semi-structured interviews	P"4" : "Having had a look at this [linear crisis management] model and reflecting on what we do... it wasn't structured in this way.... there are times when it appears as if we were doing it in this structured way, although the plan was not like this."

Interviewees' accounts varied on how they experienced the crisis and the relevance of the respective crisis management models. The [linear model] "captures it incredibly well ... At the same time, it was brought to the edge of chaos because there was no preparation for this...." (P"2"). P"3" opined that "The chaos model better addresses the dynamism" whilst P"4" thought "There are times when it appears as if we were doing it in this structured [linear] way. P"5" noted, "No, it's not [linear]... in any way, shape, or form. I think that there are a lot of overlapping things...it can be chaotic

at times." "I would say it's a combination... technology in the [chaos] crisis model, played a critical role... the [linear] crisis one, I would think, allows you some time to do a little planning" (P"6").

Discussion

The rapid spread of the pandemic, as a system-wide public health, social and economic crisis, meant the global cruise industry had little time to articulate a coordinated risk assessment and response before a financial crisis erupted, engulfing key actors, such as cruise lines, cruise ports and other local

stakeholders (Sucheran, 2021). These findings are consistent with Jedynek & Bak (2022), who describe the pandemic as “unnatural, complex and unstable” (p.87).

The financial breakdown in the global cruise tourism value chain was systematic and pointed to an increasingly “intricate risk landscape” for global and local cruise tourism actors (Misrahi et al., 2019). Stakeholders’ views on the pandemic as a unique and inescapable financial disruptor crystallised within a few months and became entangled with diminishing perceptions of brand Jamaica as an idealised cruise tourism product (Radić & Popesku, 2018; Holland et al., 2021). Thus, articulating and managing the crisis response effort required strategic sensemaking, meeting evolving international health and safety standards, and proactively developing innovative recovery approaches to reprogramme these perceptions (Le & Phi, 2021).

Re-opening the ports was critical to this sector-wide reprogrammemeing which would re-establish the strong pattern of growth and financial buoyancy that characterised the Port

Authority in the pre-pandemic period. However, expectations about effectively managing the response efforts were initially remote. Port management experienced difficulty in singularly establishing new behavioural norms for the local cruise economy. Global and local public health constraints were arduous, and the leadership team was obliged to collaborate locally and with global partners to ensure acceptance and parity with international best practices in addressing the expanded operational risks of the cruise ports (Kenny & Dutt, 2021; Carlsson-Szlezak et al., 2020).

A significant objective of recovery was rethinking risk management. The response effort included sectoral risk assessment, information sharing and monitoring for situational awareness, coordinating mechanisms, tactical oversight and enacting communication protocols (Baubion, 2013). Service operations were re-engineered to ensure cruise visitors’ physiological and psychological health and safety and to maintain the quality of visitor experiences consistent with brand Jamaica (Altinay & Kozak, 2021; Holland et al., 2021; Gentles-Peart et al., 2019). The mixed views on

the salience of the linear or chaos theory models of crisis management suggested an openness to new insights and learning (Speakman & Sharpley, 2012; Le & Phi, 2021; Altinay and Kozak, 2021).

Conclusion

The findings underscore the critical need to explore crisis management approaches within the local and regional cruise tourism industry. As with other economic sectors, the pandemic's harmful financial impact on the industry was unexpected globally and crystallised with little warning. The success of the Port Authority's crisis response efforts represented a collaborative effort that led to a new evolutionary trajectory for its risk and crisis management system, including its organisational capabilities in strategic sensemaking about crises. Greater standardisation in crisis management practices will likely emerge among Caribbean cruise destinations as the search for a uniform approach continues.

However, while the findings indicate no firm conclusion on the relevance of the linear and chaos theory models, there is now a greater awareness of and appreciation for the

theoretical underpinnings of crisis management. Therefore, this study recommends recognising and including the high-impact risk events in an enhanced enterprise risk and crisis management strategy for all cruise industry actors. An important implication for future research is the development of a research agenda on crisis management practices in Caribbean cruise tourism.

References

- Akhtaruzzaman, M., Boubaker, S. & Sensoy, A. (2021). Financial contagion during COVID-19 crisis. *Finance Research Letters*, 38. <https://doi.org/10.1016/j.frl.2020.101604>
- ACS-AEC. (2016). Cruise Tourism in Greater Caribbean Region. https://www.acs-aec.org/sites/default/files/cruise_tourism_in_the_greater_caribbean.pdf
- Aldao, C., Blasco, D., Poch Espallargas, M., & Palou Rubio, S. (2021). Modelling the crisis management and impacts of 21st century disruptive events in tourism: the case of the COVID-19 pandemic. *Tourism Review*, 76(4), 929-941. <https://doi.org/10.1108/tr-07-2020-0297>
- Altinay, L., & Kozak, M. (2021). Revisiting destination competitiveness through chaos theory: The butterfly competitiveness model. *Journal of Hospitality and Tourism Management*, 49, 331-340. <https://doi.org/10.1016/j.jhtm.2021.10.004>
- Baubion, C. (2013). OECD risk management: Strategic crisis management. *OECD Working Papers on Public Governance*, No. 23, OECD Publishing. <https://doi.org/10.1787/5k41rbd1l1zr7-en>
- Business Research and Economic Advisors. (2018). Economic contribution of cruise tourism to the destination economies: a survey-based analysis of the impacts of passenger, crew and cruise line spending. *Economic impact of cruise tourism*, 1. <http://www.f-cca.com/downloads/Caribbean-Cruise-Analysis-2018-Vol-II.pdf>
- Carlsson-Szlezak, P., Reeves, M., & Swartz, P. (2020). Understanding the economic shock of coronavirus. *Harvard Business Review*. <https://hbr.org/2020/03>
- Centres for Disease Control and Prevention (CDC). (2020a). *No sail order and other measures related to operations*. https://www.cdc.gov/quarantine/pdf/signed-manifest-order_031520.pdf
- Centres for Disease Control and Prevention (CDC). (2020b). *Modification and extension of no sail order and other measures related to operations*. https://www.cdc.gov/quarantine/pdf/No-Sail-Order-Cruise-Ships_Extension_4-9-20-encrypted.pdf
- Coombs, W. T. (2019). *Ongoing crisis communication: Planning, managing, and responding* (5th ed.). Sage.
- Creswell, J. W. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Droj, L., & Droj, G. (2021). Considerations Regarding the Impact of the Covid-19 Pandemics over the Financial Performance at the Level of the Tourism Companies Operating in Central and Eastern Europe. *Annals of the University of Oradea, Economic Science Series*, 30(2), 291-298.
- Gentles-Peart, K., & Johnson, H. N. (2019). *Brand Jamaica: reimagining a national image and identity*. University of Nebraska Press.
- González, V. (2020). *Impact of COVID-19 on transport and logistics connectivity in the Caribbean*. Economic Commission for Latin America and the Caribbean (ECLAC). <https://www.cepal.org/en/publications/46507-impact-Covid-19-transport-and-logistics-connectivity-caribbean>
- Holland, J., Mazzarol, T., Soutar, G., Tapsall, S., & Elliott, W (2021). Cruising through a pandemic: The impact of COVID-19 on intentionstocruise. *Transportation Research Interdisciplinary Perspectives*, 9. <https://doi.org/10.1016/j.trip.2021.100328>

- Houghton, C. Casey, D. Shaw, D. & Murphy, K. (2012). Approaches to rigour in qualitative case study research. *Nurse Researcher*, 20 (4), 12-17.
- IMO (2019). *SOLAS XI-2 and the ISPS code*. International Maritime Organisation. <https://www.imo.org/en/OurWork/Security/Pages/SOLAS-XI-2%20ISPS%20Code.aspx>
- Innis, S., Johnson, K., & Tatham, W. (2021). *Disaster management and continuity of operations in ports and terminals: Adjusting for the Covid-19 pandemic in cruise ports in Jamaica*. Port Authority of Jamaica.
- Jedynak, P., & Bąk, S. (2021). *Risk management in crisis: Winners and losers during the COVID-19 pandemic*. Routledge.
- Kenny, J., & Dutt, C. S. (2021). The long-term impacts of hotel's strategic responses to COVID-19: The case of Dubai. *Tourism & Hospitality Research*, 22(1), 71-85. <https://doi.org/10.1177/14673584211034525>
- Le, D., & Phi, G. (2021). Strategic responses of the hotel sector to COVID-19: Toward a refined pandemic crisis management framework. *International Journal of Hospitality Management*, 94, 102808. <https://doi.org/10.1016/j.ijhm.2020.102808>
- Marker, A. (2020). Crisis management models & theories. Smartsheet. <https://www.smartsheet.com/content/crisis-management-model-theories>
- Ministry of Health & Wellness. (2020). *Jamaica confirms first imported coronavirus case*. <https://www.moh.gov.jm/jamaica-confirms-first-imported-coronavirus-case/>
- Misrahi, T., Turner, R., Scott, H., & Joseph, M. (WTTC). (2019). *Crisis readiness: Are you prepared and resilient to safeguard your people & destinations?* World Travel & Tourism Council and Global Rescue. https://www.globalrescue.com/grmkt_resources/pdfs/Crisis-Readiness-Final.pdf
- Morris, A. (2020). *Jamaica to close airports and seaports to incoming travellers*. Jamaica Information Service – The Voice of Jamaica. <https://jis.gov.jm/jamaica-to-close-airports-and-seaports-to-incoming-travellers/>
- Radic, A., Law, R., Lück, M., Kang, H., Ariza-Montes, A., Arjona-Fuentes, J., & Han, H. (2020). Apocalypse now or overreaction to coronavirus: The global cruise tourism industry crisis. *Sustainability*, 12(17), 6968. <https://doi.org/10.3390/su12176968>
- Radić, A., & Popesku, J. (2018). Quality of cruise experience: Antecedents and consequences. <https://doi.org/10.22190/teme1802523R>
- Salem, I., Elkhwesky, Z., & Ramkissoon, H. (2021). A content analysis for governments and hotels' response to COVID-19 pandemic in Egypt. *Tourism and Hospitality Research*. <https://doi.org/10.1177/14673584211002614>
- Speakman, M., & Sharpley, R. (2012). A chaos theory perspective on destination crisis management: Evidence from Mexico. *Journal of Destination Marketing & Management*, 1(1-2), 67-77. <https://doi.org/10.1016/j.jdmm.2012.05.003>
- Sucheran, R. (2021). Global impacts and trends of the COVID-19 pandemic on the cruise sector: A focus on South Africa. *African Journal of Hospitality, Tourism and Leisure*, 10(1), 22-39. <https://doi.org/10.46222/ajhtl.19770720-84>
- The Port Authority (PAJ) (2019). *Annual Report*. The Port Authority.
- The Port Authority (PAJ) (2020). *Corporate*

- Plan and Budget 2021-22*. [Unpublished]
- The Port Authority (PAJ) (2021a). Shipping activities at Jamaica's ports. https://www.portjam.com/stat-report/Statistical_Publication_September_2021.pdf
- The Port Authority (PAJ) (2021b). *Annual Report*. The Port Authority.
- UNCTAD. (2021, June). *UNCTAD Building Port Resilience against Pandemics*. TrainForTrade. <https://tft.unctad.org/port-management/building-port-resilience/bpr-webinar-video-27-july-2021/>
- Ustanny Collinder, A. (2021). US\$162 million anticipated from cruise sector in new year – MOT. *Jamaica Observer*.
- Wenzel, M., Stanske, S., & Lieberman, M. B. (2021). Strategic responses to crisis. *Strategic Management Journal*, 42(2), V7-V18. <https://doi.org/10.1002/smj.3161>
- World Tourism Organisation (UNWTO) & Asia-Pacific Tourism Exchange Centre (APTEC) (2016). *Sustainable cruise tourism development strategies: Tackling the challenges in itinerary design in South-East Asia*. UNWTO.
- Xiao, H., & Smith, S. (2006). Case studies in tourism research: A state-of-the-art analysis. *Tourism Management*, 27(5), 738-749. <https://doi.org/10.1016/j.tourman.2005.11.002>
- Yin, R. K. (2018). *Case study research and applications*. (6th ed.). Sage.
- Zorgati, I., & Garfatta, R. (2021). Spatial financial contagion during the COVID-19 outbreak: Local correlation approach. *The Journal of Economic Asymmetries*, 24. <https://doi.org/10.1016/j.jeca.2021.e00223>

RESEARCH ARTICLE

The Psychological Impact of the Transition to E-learning on Undergraduate University of the Commonwealth Caribbean (UCC) Students during the COVID-19 Pandemic

CECILE DENNIS, DBA*, SHEMEALA MAHABEER MANNING, ANNETT MONTAQUE, DEBBIA BROWN-ROSE, ELIZABETH KING, TRISDANE J. TAYLOR

School of Business, Entrepreneurship & Management, University of the Commonwealth Caribbean

* **Corresponding author:** *cedennis@faculty.ucc.edu.jm*

Abstract: Jamaica confirmed its first case of the COVID-19 virus in March 2020. Since then, the Jamaican government implemented protocols such as social/physical distancing and the closure of schools across the country. The sudden outbreak of COVID-19 forced universities worldwide to lock down and launch online programmes to maintain classes. Many students experienced stress disorders, frustration, anxiety, depression, and insomnia. The aim of the researchers was to explore the psychological impacts that the shift to e-learning during the COVID-19 pandemic had on tertiary undergraduate students at the University of the Commonwealth Caribbean (UCC), as reflected in their academic performance for the period Spring 2020 to Spring 2022. In this quantitative descriptive study, the researchers collected survey data from 100 participants using the non-probability snowball sampling technique. Participants identified 11 types of negative psychological impact with the top five being fear, stress, anxiety, frustration, and depression. The most reported negative experience for undergraduate students was their inability to socialize with their peers. In terms of academic performance, 34% reported that their grades fell since the pandemic while 42% indicated no change. Twenty-four percent reported that grades improved during this period.

Key terms: e-learning, online learning, mental health, academic stress, COVID-19 Pandemic, psychological impact

Introduction

The COVID-19 pandemic started over two and a half years ago. There were many disruptions to daily life and livelihood. Jamaica confirmed its first case of the COVID-19 virus in March 2020 (Ministry of Health & Wellness,

2020). Since then, the Jamaican government implemented protocols such as social/physical distancing and the closure of schools across the country. Jamaican students had to adjust to a different way of life to cope with the upsurge of the pandemic (The United Nations International

Children's Emergency Fund (UNICEF), 2021). The public was adversely affected by lockdowns, travel bans, job loss, remote work, remote learning, social distancing, and curfews; also fear of contracting and dying from the virus (Kathirvel, 2020).

The sudden outbreak of COVID-19 forced universities worldwide to lock down and launch online programmes to maintain classes (Hu et al., 2022). Online learning also called e-learning, digital learning, or computer-based learning) can be defined as instruction delivered on a digital device that is intended to support learning (Clark & Mayer, 2008). Registration declined because students faced economic challenges including the inability to pay tuition and fees (Gewalt et al., 2022). Psychologists questioned tertiary students' ability to cope with the pandemic Hu et al. (2022) suggested that the makeshift of education to e-learning has caused tremendous difficulties for higher education.

Many students experienced stress disorders, frustration, anxiety, depression, and insomnia (Semo & Frissa, 2020). In this study, the researchers explored the psychological

impact of the COVID-19 pandemic on undergraduate students at the University of the Commonwealth Caribbean (UCC), using academic averages in the Spring 2020 to Spring 2022 term, as a measure of the impact.

Studies have shown that students in online courses feel alienated from instructors and peers, and confused with course content and tasks because of a lack of connection (Kaufmann et al., 2016). As a result of the pandemic, tertiary students underwent severe stress (Virtue, 2020).

Students stayed away from schools for an extensive period with learning being shifted to homes and other safe spaces. The sudden shift to e-learning learning caused stress loads that resulted in anxiety and depression symptoms among university students (Fawaz & Samaha, 2021). The reduced access to teaching professionals increased the risk of poor learning outcomes and could enhance the risk of abandonment, deficiency, abuse, and maladaptive psychosocial outcomes (Pascoe et al., 2021). With the reduced role of face-to-face education, regional governments responded to emerging mental health and

psychosocial support needs. This included the provision of mental health and psychosocial support (MHPSS) to students, their parents or caregivers, and teachers (Pascoe et al., 2021).

Aim of the Study

The aim of the study was to explore the psychological impacts that the shift to e-learning during the COVID-19 pandemic had on tertiary undergraduate students at the University of the Commonwealth Caribbean (UCC), reflected in their academic performance for the period Spring 2020 to Spring 2022. The causal relationship between the impact of e-learning during the COVID-19 pandemic and the academic performance of tertiary students can involve several variables. However, for this research, the researchers limited the 'psychological impact' to stress, frustration, and loneliness, and assessed the impact that the transition to e-learning had on undergraduate students at UCC as it relates to their academic performances from Spring 2020 to Spring 2022.

There were two primary research questions:

1. How has the COVID-19

pandemic psychologically affected undergraduate students at UCC?

2. How has the COVID-19 pandemic affected undergraduate students' academic averages/performances from spring 2020 to spring 2022?

To address these research questions, three hypotheses were tested:

H₁: The levels of stress experienced by undergraduate students at UCC from Spring 2020 to Spring 2022 is negatively related to their academic averages for the same period.

H₂: The levels of loneliness experienced by undergraduate students at UCC from Spring 2020 to Spring 2022 is negatively related to their academic averages for the same period.

H₃: The levels of frustration experienced by undergraduate students at UCC from Spring 2020 to Spring 2022 is negatively related to their academic averages for the same period.

Significance of the Study

This study is significant because the

research highlighted how students have been psychologically impacted by the pandemic, and how important it is for university leaders to understand the impact of the pandemic to identify strategies to mitigate the negative impact of crises such as the COVID-19 pandemic on their students. The findings of this research will help tertiary institution leaders to implement strategies to protect the psychological/mental state of undergraduate students at the University of the Commonwealth Caribbean (UCC).

Conceptual Framework

The coping style theory was the framework that guided the study. Joff and Bast (1978) defined an individual's coping style as a cognitive adjustment behaviour method and strategy when they face stressful events when individual and situational factors interact. In a study carried out among 320 high school students Wang (2013) found that there are different degrees of correlation between coping style and mental health, but that by grade, there were significant differences in the relationship between coping style and the three factors of compulsion, anxiety and mental imbalance in

mental health.

Literature Review

Psychological Effect of E-learning on University Students

Students continued their education at home during the COVID-19 pandemic. The lockdown enforced by many countries resulted in University students experiencing different forms of stress like academic, psychological, and social stress during the COVID-19 pandemic lockdown (Almomani et al., 2021). In the study of Jordanian university students, researchers identified that distance learning created academic stress that affected the students' mental health (Almomani et al., 2021). Additionally, frustration and depression were noticed among university students during the pandemic (Alla, 2020).

These measures greatly impacted people's way of life and led to numerous adverse psychological effects and feelings such as anger, confusion, distress, loneliness, and depression. Given their connection with several incapacitating psychological health conditions and disorders (such as major depression and schizophrenia, obsessive-compulsive, trauma-

related, and panic attacks), the rapid emergence of such sensations was dangerous (Fiorillo & Gorwood, 2020).

The COVID-19 pandemic appears to have had a harmful effect on university students' psychological health, but not much longitudinal data measuring such changes exist, according to Savage et al. (2020). The COVID-19 pandemic's effects on students' psychological health were a concern for universities around the globe. The United Kingdom (UK) government instituted a statewide lockdown in reaction to the pandemic, requiring individuals to stay inside, save for needed activities such as shopping for needs and getting some fresh air once a day.

Consequently, several students had to vacate their term-time housing because institutions closed their campuses and switched to online teaching and evaluation techniques. Along with the challenges posed by government-enforced travel limitations and social separation orders, these significant changes to students' housing and employment situations are anticipated to have a detrimental effect on their psychological health (Savage

et al., 2020). Participants were engaged in Student Health Research, a long-term cohort study at the UK's East Midlands University that examines the health and well-being of students (Savage et al., 2020). Though online teaching is one of the promising alternatives to the physical classroom, students show a negative perception of online learning behavior (Rohman et al., 2020). The negative perception of online learning might be a significant consequence that is responsible for psychological distress (Hasan, 2020).

According to Yuen-kwan Lai et al. (2020), the COVID-19 outbreak has interrupted university teaching globally and the effects on international university students' mental health have been underappreciated. The researchers from this study examined university students, related stressors, and coping mechanisms. The study compared the effects of COVID-19-related stressors on the mental health of international university students studying in the United Kingdom or the United States of America who went back to their home country or region (returnees) and those who stayed in their institution country (stayers), and it

identified COVID-19-related stressors and coping mechanisms that were predictors of mental health. The researchers used a non-discriminatory, exponential snowball sampling technique during an electronic questionnaire survey that ran from April 28 to May 12, 2020.

Types of Psychological Problems

Globally, the coronavirus 2019 (COVID-19) outbreak sparked anxiety and panic, which increased the prevalence and seriousness of psychological health problems such as stress (Yuen-kwan Lai et al., 2020). Pitt et al. (2018) defined stress as the body's response or reaction to psychosocial stressors such as mental stress or life burdens. Rosdialena et al. (2021) identified that academic stress can be caused by factors such as (a) challenging subjects generating fear of teachers or lectures; (b) students' perceptions of how much knowledge must be mastered and limited time available, or (c) a mismatch between environmental demands and the student's ability. Zhai and Du (2020) also noted that in addition to the worry brought on by school closure, college students also experienced discomfort because of the uncertainty and

abrupt interruption of the semester. After Spring break, as more colleges switched to remote learning, some students experienced poor mental health due to the interruption of their regular academic schedule (Zhai & Du, 2020).

When colleges evacuated students off campus, many students had to stop their research projects and internships. In addition, interruptions to their research projects and internships put their academic programmes in danger, postpone their graduation, and reduced their ability to compete for jobs, which in turn caused college students to become more anxious and stressed (Zhai & Du, 2020). Additionally, students struggled with managing their possessions and the cost of traveling back home which also brought on excess stress (Zhai & Du, 2020). Many students became reluctant in completing studies, while some stopped attending classes or school. This decreased the number of students applying to universities (Flores et al., 2021). Some universities even lowered their fees to attract students, however, this did not draw students back to the schools.

In the United Kingdom (UK), researchers

studied the impact of the COVID-19 virus on the psychological effects on university/tertiary students. Chen and Lucock (2022) mentioned that the psychological well-being of higher-learning students was a rising concern even before COVID-19, with escalating numbers of students going through mental health problems. The pandemic presented several challenges for students in higher education, such as the move to more online learning. Many students found it challenging to engage effectively and experienced increasing anxiety and worries about their academic performance and long-term employment (Chen & Lucock, 2022).

University students are particularly susceptible to stress and mental health problems but there has not been much research done on how COVID-19 affected their mental health status (Chen & Lucock, 2022). Chen and Lucock found high levels of anxiety and depression, with more than 50% experiencing levels above the clinical cut-offs, and females scoring significantly higher than males.

In a study to examine the psychological impact and mental health of Bangladeshi tertiary-level students while transitioning to

the coronavirus' new norms in April 2020, researchers identified psychological stress-related sensitivity and protective factors as well as the prevalence of mental disorders (Faisal et al., 2021). The findings of the Bangladesh study indicated that a significant portion of the university student sample scored strongly for both anxiety and depression. Specifically, 40.2% of students reported symptoms of moderate to severe anxiety (23.6%) and critical (16.6%), while 72.1% showed signs of depression (Faisal et al., 2021).

Prowse et al. (2021) asserted that the COVID-19 outbreak has unquestionably had a considerable impact on post-secondary students' academic experience, interpersonal connections, and mental health. This was also concerning since college/university students were a vulnerable group because one in three of them already had a mental health disorder prior to the COVID-19 outbreak. According to Prowse et al., the COVID-19 outbreak brought about a wide range of unprecedented challenges, many of which seem to be disproportionately impacting the mental health and general well-being of young adults, including tertiary

students.

Coping Mechanisms

The prevalence of mental health illnesses among university students is well documented, but little is known about the specific effects of the COVID-19 pandemic on student mental health and how they are handling this stress. To fill this gap, Prowse et al. (2021) performed an online survey with undergraduate students (n = 366) to look at how the COVID-19 pandemic has affected their academic performance, social isolation, and mental health as well as how much they have been using different coping mechanisms.

The findings of the study showed that female students' academic performance, social isolation, stress levels, and mental health were more adversely impacted by the pandemic than those of their male counterparts. Furthermore, compared to males, females reported stronger perceived negative effects on their academic performance and stress levels from regular usage of social media as a coping method (Prowse et al., 2021). However, both men and women who use social media frequently experienced similar detrimental consequences

on their mental health. According to Prowse et al. (2021), both male and female students reported using drugs or alcohol to cope, but male users of cannabis had worse effects on their academic performance, stress levels, and mental health than female users.

Having a range of coping strategies can assist students in achieving greater levels of academic success, and this may reduce their stress (Ahmad & Meriç, 2020). Stress management psychoeducational programmes help people to develop skills to manage, cope with, and reduce stress, and may include mindfulness training, health promotion, exercise, cognitive-behavioural therapy, relaxation techniques, personal and interpersonal skill training, acceptance, and commitment therapy, psychosocial intervention training, coping skills training, and resilience training (Ahmad & Meriç, 2020). To address the COVID-19 pandemic's effects, our research emphasized the need for adequate student support services across the post-secondary sector. The findings also emphasized the significance of gender-informed treatments (Prowse et al., 2021).

The study concluded that young individuals, including university students, appeared to be suffering disproportionately from many of the exceptional challenges caused by the COVID-19 outbreak. Although research suggests that university students experienced high rates of mental health disorders, less is known about the specific consequences of the COVID-19 outbreak on student mental health and how they are managing this stress (Prowse et al., 2021).

Wathelet et al. (2020) highlighted concerns about the psychological impact of the coronavirus pandemic and quarantine measures on university students. The study stated that university students appeared to be particularly vulnerable to mental health issues among the overall population (Wathelet et al., 2020). The objective of this study measured the pervasiveness of self-reported mental health symptoms, detect associated factors, and assess care-seeking among university students who experienced COVID-19 confinement in France (Wathelet et al., 2020).

This study concluded that university students in France who were quarantined

during the COVID-19 pandemic reported significant rates of suicidal thoughts as well as severe feelings of anguish, depression, anxiety, and perceived stress. Student psychological health protection is a public health matter that becomes much more urgent in the event of a pandemic. The findings suggested that students who identified as women, nonbinary, or who have had prior psychiatric follow-ups should receive extra consideration (Wathelet et al., 2020).

According to Plakhotnik et al. (2021), the state of college students' well-being as problematic before the pandemic (Poots & Cassidy, 2020). For instance, in the United States, just one in ten university graduates scored highly across all dimensions of well-being (Gallup, 2020). Undergraduate students appeared less happy than the public in the United Kingdom, and their happiness had been diminishing for some years (Hewitt, 2019). The pandemic which has brought sadness, frustration, discomfort, anxiety, loss, and other bad experiences and emotions, has wreaked havoc on this poor condition of well-being among students. Students were now expected

to work and learn online around the world, which necessitates connectivity, availability of high-quality information technology (IT) infrastructure and tools, and a range of digital and cognitive skills. Students worried about their degree completion and job after graduation, which already had an impact on their well-being before the pandemic (Moate et al., 2019).

The degree to which students felt individually welcomed, respected, included, and supported by others in the school social environment is referred to as “school belongingness” (Goodenow & Grady, 1993). Belongingness involves how young people feel about themselves as significant, worthwhile, and crucial components of their schools (Arslan & Duru, 2017). According to the need-to-belong theory, the ability to feel a sense of belonging is a fundamental psychological need that is crucial for forging close, enduring relationships with others (Baumeister & Leary, 1995).

Studies looked at coping techniques and the psychological effects of the pandemic on college students since the COVID-19 outbreak.

Disruptions to the academic process brought on by the COVID-19 pandemic have increased student anxiety (Wang et al., 2020), especially for those lacking adequate social support (Cao et al., 2020).

Stress and anxiety levels grew because of the pandemic’s heightened burden on students’ uncertainty over the conclusion of the semester, and ambiguity surrounding study requirements (Stathopoulou et al., 2020).

Due to the limited social life experienced during the outbreak, students also expressed feelings of loneliness, anxiety, and depression (Essadek and Rabeyron, 2020). Earlier studies have illuminated a few coping techniques. For instance, students who sought information about the pandemic and a sense of purpose in their life report higher levels of mental well-being (Capone et al., 2020; Arslan et al., 2020). Students who were eager to take part in online learning and who spent a lot of time on social media sites also report decreased distress (Plakhotnik et al., 2021). As Plakhotnik et al. (2021) stated, providing help should enable students to discuss their worries, anxieties, and concerns about COVID-19 and

assist them in de-stigmatizing the impact that fear has on their education and future.

Summary

The COVID-19 virus first emerged in December 2019 and quickly became a pandemic by April 2020. With the rapid rise and spread of the virus, many sectors in various countries were severely impacted, particularly the education sector. Approximately 1.4 billion students worldwide were affected by the temporary school closure due to the pandemic (UNESCO, 2020). This closure appeared to have a serious effect on students' psychological health because it physically cut off students from their peers and their larger social network. This might have undermined students' sense of community, which led to feelings of isolation and stress.

University students encountered distinctive challenges leading to poor psychological health in the wake of the COVID-19 outbreak (Zhai & Du, 2020). Before the pandemic started, one in five university students suffered one or more diagnosable psychological disorders globally, and the pandemic pushed students to further develop

more stress which also contributed to mental breakdowns (Zhai & Du, 2020). In summary, many universities were hard-hit resulting in tertiary students being deeply impacted psychologically, developing feelings of stress, loneliness, and frustration.

Methodology

Method and Design

This study used a quantitative descriptive method. A descriptive design aids in providing answers to the research problem of what, when, where, and how questions, rather than why (Babbie, 2018). Quantitative descriptive statistics are used to measure research data using numbers based on the results of questionnaires that have been administered to respondents. In this quantitative descriptive study, the researchers collected survey data using the non-probability snowball sampling technique. Non-probability sampling is a technique for selecting 100 participants based on the researcher's discretion. The questionnaire used in this study was self-designed and consisted of 18 items that measured psychological impacts, namely stress, loneliness, and, frustration. Validity evaluates accuracy or precision, and

correct data gathering while reliability refers to the consistency with which a method assesses something (Babbie, 2018).

A survey question's validity is determined by how clearly it can be connected to the researcher's motivation for conducting the study and that the people included in the study were all qualified to be in the sample (Haradhan, 2017). Reliability serves as a foundation for doing research that yields compelling outcomes (Haradhan, 2017). The researchers established reliability by testing the internal consistency through a process of cross-validation of items on the questionnaire. Based on the validity and reliability test results, the academic stress questionnaire on e-learning was deemed acceptable.

Population and Sample Selection

The population was approximately five thousand (5,000) students registered at the UCC at the time of the survey. Researchers used the non-random snowballing technique to draw a sample of one hundred (100) students. Although this strategy raised the possibilities of non-response and bias, the technique reduced the time spent searching for interested

participants.

Data Collection and Analysis Procedures

Researchers gathered primary data from 100 undergraduate UCC students through a structured 18-item questionnaire administered online between October 4 and October 10, 2022. Participants completed an 18-item questionnaire of which 16 were closed-ended questions measured using a 5-point Likert scale and other pre-coded responses. The researchers utilized SPSS 27.0 to produce descriptive statistics and bivariate analyses and to perform Chi-square tests to determine statistically significant relationships between variables identified in the three established hypotheses. Researchers identified the inability to generalize the findings due to the relatively small sample size.

Findings and Discussions

The researchers expected 100 responses from the respondents. However, the response rate was 84% of which 50 responses were valid. The results showed that most of the responses came from female respondents with a percentile of 76. The majority of respondents were in the 20-24 years and 25-29 years age

groups (Figure 1). Participants belonging to a medium-sized family (3-5 members) accounted for 54%. While those from a large family (6+members) accounted for 12%. First and second-year students accounted for 80%, of which 2nd-year students accounted for 50% of the sample.

The researchers analysed the data collected and tested the stated hypotheses using the Chi-square test. Three hypotheses were tested.

Hypothesis 1: The levels of stress experienced by undergraduate students at UCC from Spring 2020 to Spring 2022 is negatively related to their academic averages for the same period. The Pearson coefficient. for hypothesis 1 was $p=.091$. With p . being greater than 0.05 (2-tailed), the researchers rejected the notion that stress levels had no impact on student academic grades.

Hypothesis 2: The levels of loneliness experienced by undergraduate students at UCC from Spring 2020 to Spring 2022 is negatively related to their academic averages for the same period. For hypothesis 2, $p = .349$. Consequently, we failed to accept the notion

that there is no relationship between levels of loneliness experienced by undergraduate students at UCC from Spring 2020 to Spring 2022 and their academic averages for the same period.

Hypothesis 3: The levels of frustration experienced by undergraduate students at UCC from Spring 2020 to Spring 2022 is negatively related to their academic averages for the same period. For hypothesis 3, $p = 0.481$, which leads the researchers to reject the notion that there is no relationship between levels of frustration experienced by undergraduate students and their academic averages for the same period.

The outcomes are consistent with Almomani (2021) who identified that university students experienced academic stress. Chen and Lucock (2022) stated that many students found the switch to online learning challenging and experienced anxiety. While the researchers focused on three psychological factors: stress, loneliness, and frustration, participants identified 11 types of negative psychological impact with the top five being fear, stress, anxiety, frustration, and depression (Table 1).

In the coping style theory which guided the

study, theorists have suggested that individuals' coping mechanisms in situations of stress vary, depending on how individual and situational factors interact (Joff & Bast, 1978). When participants were asked about the disruption that the pandemic brought, respondents identified seven primary activities that were disrupted (Table 2).

The findings are consistent with Stathopoulou et al. (2020) who suggested that uncertainty over the conclusion of the semester, and ambiguity surrounding study requirements contributed to negative feelings. Further, Essadek and Rabeyron (2020) suggested that, due to the limited social life students experienced during the outbreak, students also expressed feelings of loneliness, anxiety, and depression.

In terms of academic performance, 34% reported that their grades fell since the pandemic while 42% indicated no change. Twenty-four percent reported that grades improved during this period. While 66% of students were able to maintain or improve pre-Covid averages the lower grades that 34% experienced implied a possible inability to apply coping mechanisms,

as suggested by Ahmad & Meriç (2020).

Table 1 *Multiple Response Analysis of Reported Psychological Impacts of COVID-19 on Participants*

Activities	Count	% of responses	% of cases
Fear	10	14.7	20.0
No change	9	13.2	18.0
Stress	9	13.2	18.0
Anxiety	9	13.2	6.0
Frustration	7	10.3	14.0
Depression	5	7.4	10.0
[More] Mindful	3	4.4	6.0
Loneliness	3	4.4	6.0
Confusion	2	2.9	4.0
Negatively	2	2.9	2.0
Economic Challenges	2	3.9	2.0
Sadness	1	1.5	2.0
Annoyance	1	1.5	2.0
Demotivation	1	1.5	2.0
Instability	1	1.5	2.0
Coping	1	1.5	2.0
No response	1	1.5	2.0
<i>Total</i>	68	100.0	136.0

Table 2 Respondents' Primary Activities Disrupted by the Pandemic

Activities	Count	% of responses	% of cases
Socialising with peers	38	33.3	76.0
Spending time with loved ones	23	20.2	46.0
Personal private time	22	19.3	44.0
Completing group assignments	13	11.4	26.0
Participating in study sessions	13	11.4	26.0
None	3	2.6	6.0
Mobility	1	0.9	2.0
Ability to meet new people	1	0.9	2.0
Total	114	100	228

Respondents were asked about the impact of the 'difficulties' was the primary impact (Table 3). pandemic on tertiary education. '[Increased]

Table 3 Respondents' Views of COVID-19's Impacts on Tertiary Education

Impact	Count	% of responses	% of cases
[Increased] difficulties	19	27.5	38.0
Misunderstood the question	11	15.9	22.0
Economic Challenges	10	14.5	20.0
Improved flexibility	9	13	18.0
No comment/Neutral	6	8.7	12.0
Convenience	4	5.8	8.0
Improved education	2	2.9	4.0
Became unemployed	2	2.9	4.0
Demotivation	1	1.4	2.0
Frustration	1	1.4	2.0
Economic improvements	1	1.4	2.0
Dropped out	1	1.4	2.0
Reduced socialization	1	1.4	2.0
Uncategorized	1	1.4	2.0
Total	68	100	138

Comparing Student Stress, Loneliness, and Frustration levels Before, During, and After the Peak of the Pandemic

Respondents identified changes in their feelings of loneliness, sadness, annoyance, demotivation, and instability (Figures 1.1 – 3.3). The findings are indicative of the coping theory’s proposition that some individuals may

be unable to make a cognitive adjustment to cope with stressful situations and therefore, experience a negative mental impact. Before the pandemic, 26% of participating students experienced higher levels of stress (Figure 1.1) while 66% (Figure 1.2) and 38% (Figure 1.3) experienced high levels of stress during and after the pandemic, respectively

Figure 1.1 Respondents’ Stress Levels Before the Pandemic

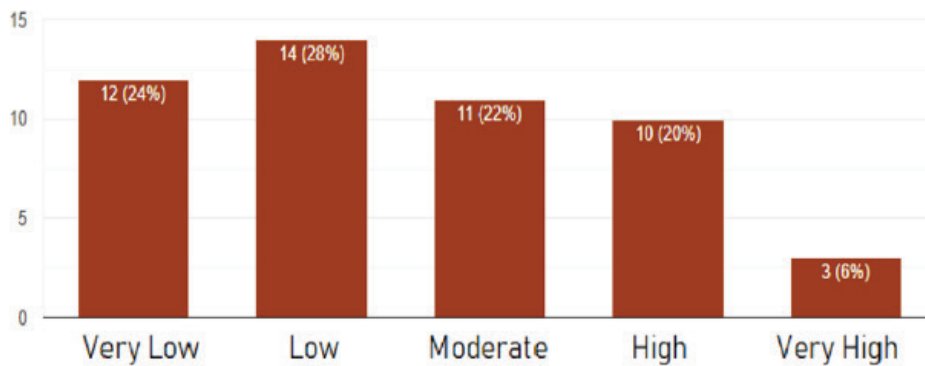


Figure 1.2 Respondents’ Stress Level During the Peak of the Pandemic

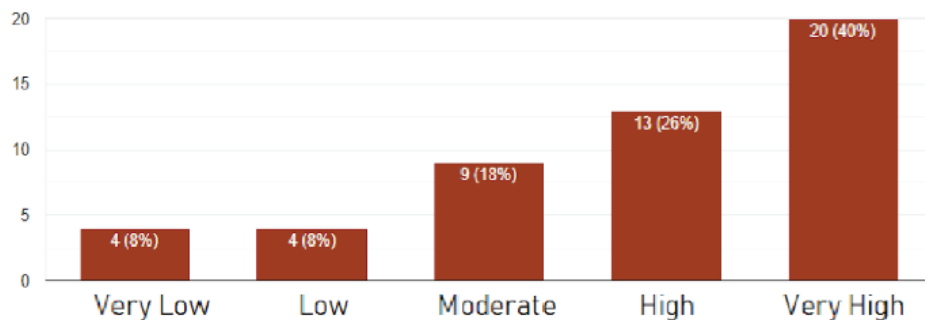
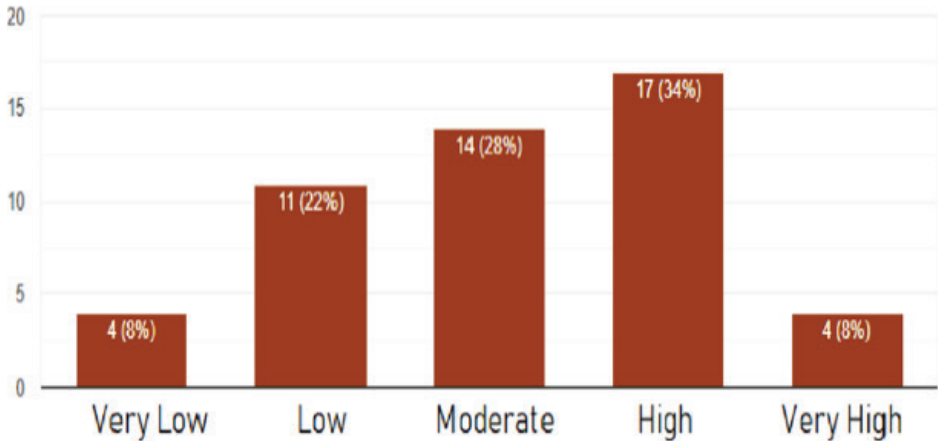


Figure 1.3 Respondents' Stress Levels after the Peak of the Pandemic



Over 70% of respondents reported low levels of frustration before the pandemic (Figure 2.1). Frustration levels peaked during the pandemic, with 76% of students reporting high

or very high frustration levels at the peak of the pandemic (Figure 2.2) then declined to 24% after the pandemic (Figure 2.3).

Figure 2.1 Respondents' Frustration Levels Before the Pandemic

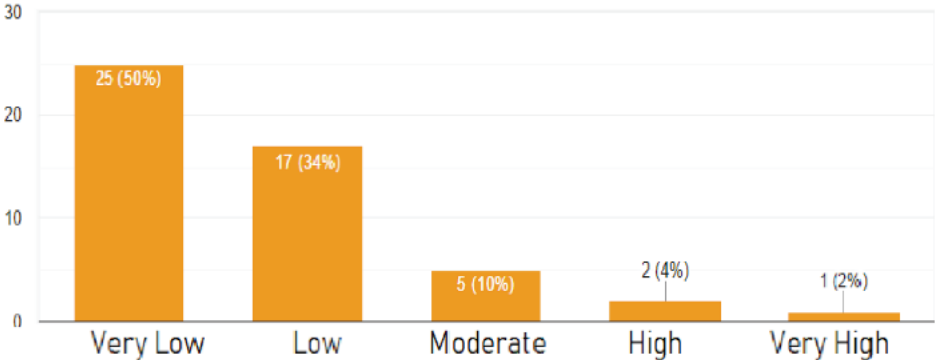


Figure 2.2 Respondents' Frustration Levels During the Peak of the Pandemic

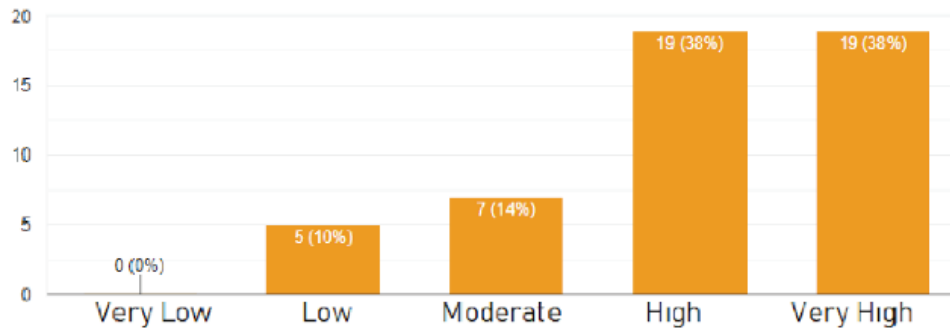
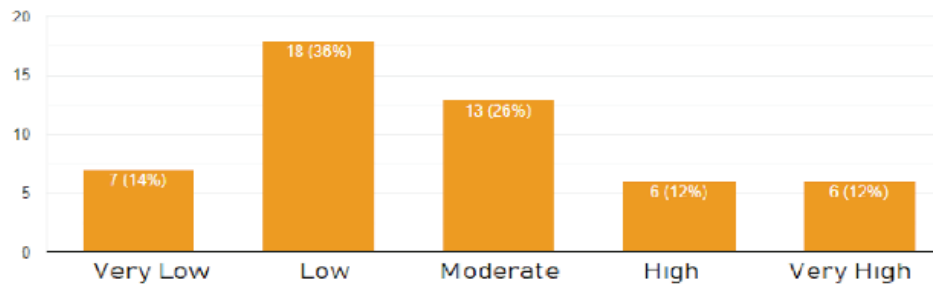


Figure 2.3 Respondents' Frustration Levels After the Peak of the Pandemic



The trend for measures of loneliness was similar to those for stress and frustration levels. Before the pandemic 76% of respondents low levels of loneliness (Figure 3.1). This

proportion declined from 76% to 8% during the pandemic (Figure 3.2) but increased to 50% after the pandemic (Figure 3.3).

Figure 3.1 Respondents' Loneliness Levels Before the Pandemic

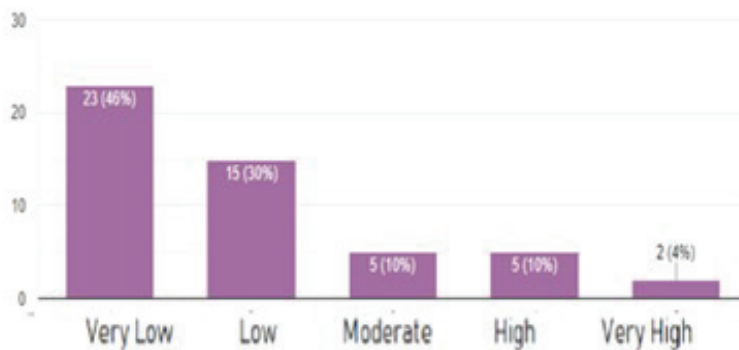


Figure 3.2 Respondents' Loneliness Levels During the Peak of the Pandemic

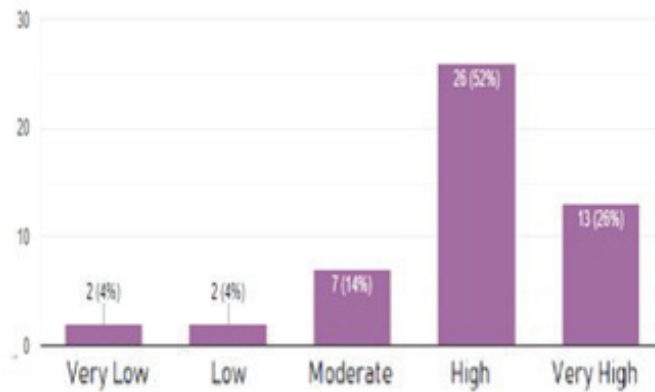
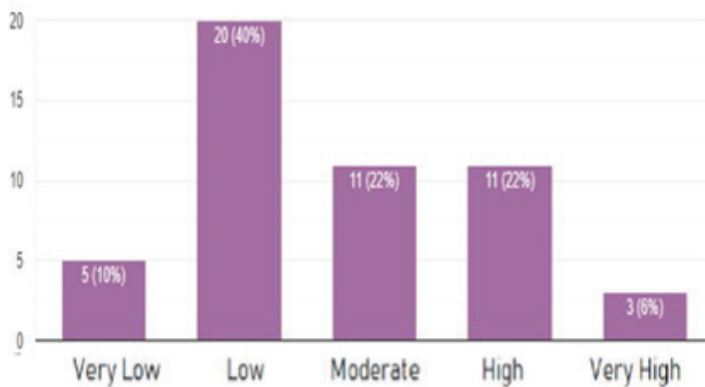


Figure 3.3 Respondents' Loneliness Levels After the Peak of the Pandemic



Recommendations to Improve the Learning Experience

Respondents provided recommendations that they believe would result in an improved e-learning experience (Table 4). While the majority made no recommendations, the three primary recommendations provided were (a) using teaching aids, (b) retaining

online school, and (c) exercising patience with students as they adjusted to e-learning.

Some recommendations provided by students such as mental health support, online learning support, and attention to student concerns were consistent with coping mechanisms such as coping skills training and personal and interpersonal skill training

recommended by Ahmad & Meriç (2020).

Conclusion

The findings of this research revealed that most respondents experienced heightened stress, loneliness, and frustration levels during the pandemic compared to their levels of the same before the pandemic. The outcomes were consistent with the findings of the literature that identified COVID-19-related frustration and depression (Alla, 2020; Fiorillo & Gorwood,

2021) and academic, psychosocial, and social stress (Almomani et al., 2012) among university students. Specifically, the results of this study showed that before the onset of the COVID-19 pandemic, frustration levels among UCC students were low with 84% indicating low to moderate feelings of frustration, and that while students experienced high levels of frustration during the peak of the pandemic, post-pandemic frustration levels dropped significantly to 24%.

Table 3 Respondents' Views of COVID-19's Impacts on Tertiary Education

Activities	Count	% of responses	% of cases
None	29	50.0	58.0
Use engaging teaching aids	5	8.6	10.0
Maintain fully online	4	6.9	8.0
Display patience with students while adjusting to e-learning	3	5.2	6.0
Implement Group-type end of semester assessments/projects	2	3.4	4.0
Conduct lecturer e-learning workshops	2	3.4	4.0
'Against proctoring'	2	3.4	4.0
Reduce the number of ad-hoc changes	2	3.4	4.0
Mental health support for students	2	3.4	4.0
Pro proctor	1	1.7	2.0
"E-learning is convenient"	1	1.7	2.0
"I misunderstood the question"	1	1.7	2.0
Improve online support	1	1.7	2.0
Provide more makeup assignments	1	1.7	2.0
'I prefer more individual Assignments'	1	1.7	2.0
Pay more attention to students' concerns	1	1.7	2.0
Total	58	100.0	116.0

Prior to the onset of the COVID-19 pandemic, loneliness among respondents was low based on the results of the research. The results showed that 94% of the respondents did not experience any high levels (levels 4 & 5 on the scale) of loneliness before the pandemic. However, during the peak of

the pandemic, respondents experienced a high level of loneliness (78%).

Isolation and lockdown measures significantly impacted people's way of life and produced several detrimental psychological effects, including anger, confusion, distress, loneliness, and depression. According to Yuen-

kwan Lai et al. (2020), the global dread and anxiety caused by the coronavirus disease (COVID-19) pandemic may increase the frequency and seriousness of mental health issues in university students. The same ideas were supported by Zhai and Du (2020), who noted that in addition to the worry brought on by school closure, college students also feel extreme distress because of the uncertainty and abrupt disruption of the semester.

Recommendations for Practice and Suggestions for Future Studies

More consideration should be given to the role of demographics in determining how students respond to the 'pressure' created by e-learning during the peak of the COVID-19 pandemic. Prowse et al. (2021) found that among females there was a greater negative

mental impact. However, gender was not a focus in this study. Students as critical stakeholders should be involved in the early stages of reviewing the impact of the transition to e-learning.

Fegert et al. (2020) identified the psychological decomposition of students in their day-to-day functioning at school evident in a strong sense of stress and frustration in students. Therefore, having a range of coping strategies can assist students in achieving greater levels of academic success, and this may reduce their stress. As universities develop crisis-management strategies, it is important that they consider the psychological impacts on students' mental health and prioritize the establishment of facilities to minimize the negative impact on a student's mental health.

References

- Ahmad, T. B., & Meriç, M. (2020). The effect of an online psychoeducational stress management programme on international students' ability to cope and adapt. *Perspect Psychiatry Care*, 57, 1673–1684. <https://doi.org/10.1111/ppc.12735>
- Al-Tammemi, A. B., Akour, A., & Alfalah, L. (2020). Is it just about physical health? An online cross-sectional study exploring the psychological distress among university students in Jordan in the midst of COVID-19 pandemic. *Frontiers in Psychology*, 11(552213), 1-11. <https://doi.org/10.3389/fpsyg.2020.562213>
- Almomani, E. Y., Qablan, A. M., Atrooz, F. Y., Almomany, A. M., Hajjo, R. M., & Almomani, H. Y. (2021). The influence of Coronavirus diseases 2019 (COVID-19) pandemic and the quarantine practices on university students' beliefs about the online learning experience in Jordan. *Frontiers in Public Health*, 8. <https://doi.org/10.3389/fpubh.2020.595874>
- Arslan, G., Duru, E. Initial Development and validation of the School Belongingness Scale. (2017). *Child Indicator Research*, 10, 1043-1058. <https://doi.org/10.1007/s12187-016-9414-y>
- Babbie, E. (2018). *The practice of social research* (7th ed.). Cengage Learning.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497. <https://psycnet.apa.org/doi/10.1037/0033-2909.117.3.497>
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
- Capone, V., Caso, D., Donizzetti, A. R., & Procentese, F. (2020). University student mental well-being during COVID-19 outbreak: What are the relationships between information seeking, perceived risk and personal resources related to the academic context? *Sustainability*, 12(17), 7039. <https://doi.org/10.3390/su12177039>
- Chen, T., & Lucock, M. (2022). The mental health of university students during the COVID-19 pandemic: An online survey in the UK. *Plos One*, 17(1), e0262562. <https://doi.org/10.1371/journal.pone.0262562>
- Clark, R. C., & Mayer, R. E. (2008). Learning by viewing versus learning by doing: Evidence-based guidelines for principled learning environments. *International Society for Performance Improvement*, 47(9), 5-13. <https://doi.org/10.1002/pfi.20028>
- Essadek, A., & Rabeyron, T. (2020). Mental health of French students during the Covid-19 pandemic. *Journal of Affective Disorders*, 277, 392-393. <https://doi.org/10.1016/j.jad.2020.08.042>
- Faisal, R. A., Jobe, M. C., Ahmed, O., & Sharker, T. (2022). Mental health status, anxiety, and depression levels of Bangladeshi university students during the COVID-19 pandemic. *International Journal of Mental Health & Addiction*, 20(3), 1500-1515. <https://doi.org/10.1007/s11469-020-00458-y>
- Fawaz, M., & Samaha, A. (2021). E-learning: Depression, anxiety, and stress symptomatology among Lebanese university students during COVID-19 quarantine. *Nursing Forum*, 56(1), 52-57. <https://doi.org/10.1111/nuf.12521>

- Fegert, J. M., Vitiello, B., Plener, P. L., & Clemens, V. (2020). Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child Adolescent Psychiatry Mental Health*, 14(20). <https://doi.org/10.1186/s13034-020-00329-3>
- Fiorillo, A., & Gorwood, P. (2020). The consequences of the COVID-19 pandemic on mental health and implications for clinical practice. *European Psychiatry*, 63(1), E32. <https://doi.org/10.1192/j.eurpsy.2020.35>
- Flores, A. M., Barros, A., Veigo Simão, A. M., Pereira, D., Flores, P., Fernandes, E., Costa, L., & Costa Ferreira, P. (2021). Portuguese higher education students' adaptation to online teaching and learning in times of the COVID-19 pandemic: personal and contextual factors. *Higher Education*, 83, 1389-1408. <https://doi.org/10.1007/s10734-021-00748-x>
- Gallup. (2020). Gallup Q12® Meta-Analysis. <https://www.gallup.com/workplace/321725/gallup-q12-meta-analysis-report.aspx>
- Gewalt, S., Berger, S., Krisam, R., Krisam, J., & Breuer, M. (2022). University students' economic situation during the COVID-19 pandemic: A cross-sectional study in Germany. *PLoS ONE*, 17(10), e0275055. <https://doi.org/10.1371/journal.pone.0275055>
- Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *The Journal of Experimental Education*, 62(1), 60-71. <https://doi.org/10.1080/00220973.1993.9943831>
- Hasan, K. (2020). Education during Covid-19: Experts fear students may not return to school. *Dhaka Tribune*. <https://archive.dhakatribune.com/bangladesh/2020/05/16/education-during-covid-19-experts-fear-students-may-not-return-to-school>
- Hewitt, R. (2019). Measuring well-being in higher education. HEPI policy note 13. Higher Education Policy Institute. <https://eric.ed.gov/?id=ED598124>
- Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., & Przybyl, A. K. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. *Lancet Psychiatry*, 7, 547-560. [https://doi.org/10.1016/S2215-0366\(20\)30168-1](https://doi.org/10.1016/S2215-0366(20)30168-1)
- Hu, X., Zhang, J., He, S., Zhu, R., Shen, S., & Liu, B. (2022). E-learning intention of students with anxiety: Evidence from the first wave of COVID-19 pandemic in China. *Journal of Affective Disorders*, 309, 115-122. <https://doi.org/10.1016/j.jad.2022.04.121>
- Joff, P. E., & Bast, B. A. (1978). Coping and defense in relation to accommodation among a sample of blind-man. *Journal of Nervous and Mental Disease*, 166, 537-552. <http://dx.doi.org/10.1097/00005053-197808000-00001>
- Kathirvel, N. (2020). Post COVID-19 pandemic mental health challenges. *Asian Journal of Psychiatry*, 53, 1-2. <https://doi.org/10.1016/j.ajp.2020.102430>
- Kaufmann, R., Sellnow, D. D., & Frisby, B. N. (2016). The development and validation of the online learning climate scale (OLCS). *Communication Education*, 65(3), 307-321. <https://doi.org/10.1080/03634523.2016.1191111>

- 015.1101778**
Ministry of Health and Wellness. (2020, March 10). Jamaica confirms first imported Coronavirus case. <https://www.moh.gov.jm/jamaica-confirms-first-imported-coronavirus-case/>
- Moate, R. M., Gnilka, P. B., West, E. M., & Rice, K. G. (2019). Doctoral student perfectionism and emotional well-being. *Measurement and Evaluation in Counselling and Development*, 52(3), 145-155. <https://doi.org/10.1080/07481756.2018.1547619>
- Pascoe, M., Bailey, A., Craike, M., Carter, T., Patten, R., Stepto, N., & Parker, A. (2021). Single session and short-term exercise for mental health promotion in tertiary students: A scoping review. *Sports Medicine Open*, 7(72), 1-24. <https://doi.org/10.1186/s40798-021-00358-y>
- Pitt, A., Oprescu, F., Tapia, G., & Gray, M. (2018). An exploratory study of students' weekly stress levels and sources of stress during the semester. *Active Learning in Higher Education*, 19(1), 61–75 <https://doi.org/10.1177/1469787417731194>.
- Plakhotnik, M. V., Volkova, N. V., Jiang, C., Yahiaoui, D., Pheiffer, G., McKay, K., Newman, S., & ReiBig-Thust, S. (2021). The perceived impact of COVID-19 on student well-being and the mediating role of the university support: Evidence from France, Germany, Russia, and the UK. *Frontiers in Psychology*, 1-13. <https://doi.org/10.3389/fpsyg.2021.642689>
- Poots, A., & Cassidy, T. (2020). Academic expectation, self-compassion, psychological capital, social support and student wellbeing. *International Journal of Educational Research*, 99. <https://doi.org/10.1016/j.ijer.2019.101506>.
- Prowse, R., Sherratt, F., Abizaid, A., Gabrys, R., Hellemans, K. G. C., Patterson, Z. R., & McQuaid, R. J. (2021). Coping with the COVID-19 Pandemic: Examining gender differences in stress and mental health among university students. *Frontiers in Psychiatry*, 12, 650759. <https://doi.org/10.3389/fpsyg.2021.650759>
- Rohman, M., Marji, D. A. S., Sugandi, R. M., & Nurhadi, D. (2020). Online learning in higher education during Covid-19 pandemic: Students' perceptions. *Journal of Talent Development and Excellence*, 12(2s), 3644-3651. <https://repo.uniramalang.ac.id/id/eprint/387/>
- Rosdialena, R., Trinova, Z., Dewita, E., Deswila, N., & Maiseptian, F. (2021). Investigating students' academic stress on the transition to online learning during the Covid-19 Pandemic. *Al-Ta lim Journal*, 28(3). <https://doi.org/10.15548/jt.v28i3.676>
- Savage, M., James, R., Magistro, D., Donaldson, J., Healy, L., Nevill, M., & Hennis, P. (2020). Mental health and movement behaviour during the COVID-19 pandemic in UK university students: Prospective cohort study. *Mental Health and Physical Activity*, 19, 100357. <https://doi.org/10.1016/j.mhpa.2020.100357>
- Semo, B., & Frissa, S. (2020). The mental health impact of the COVID-19 pandemic: Implications for Sub-Saharan Africa. *Psychology Research and Behaviour Management*, 13, 713-720, <https://doi.org/10.2147/PRBM.S264286>
- Stathopoulou, T., Mouriki, A., & Papaliou, O. (2020). *Student well-being during the COVID-19 pandemic in Greece: Results from the C19 ISWS Survey*. Athens: National Centre for Social Research.
- The United Nations International Children's Emergency Fund (2021). Lasting impact:

- Educational, social, and psychological effects of the COVID-19 pandemic on children.* <https://www.unicef.org/jamaica/media/3241/file/Lasting%20impact.pdf>
- University of the Commonwealth Caribbean (UCC) (2020). Coronavirus response bulletin #2. <https://www.ucc.edu.jm/student-affairs/updates/2020/coronavirus-response-bulletin-%232>
- Virtue, E. (2020, December 20). COVID pressure: Doctors angry at vacation directive ruling out international travel; pandemic causing mental, physical trauma. The Jamaica Gleaner. <https://jamaica-gleaner.com/article/lead-stories/20201220/covid-pressure-doctors-angry-vacation-directive-ruling-out>
- Wang, Y., Zhao, X., Feng, Q., Liu, L., Yao, Y., & Shi, J. (2020). Psychological assistance during the coronavirus disease 2019 outbreak in China. *Journal of Health Psychology, 25*(6), 733-737. <https://doi.org/10.1177%2F1359105320919177>
- Wang, Z. (2013). Coping style and mental health on high school students. *Health, 5*, 170-174. <https://doi.org/10.4236/health.2013.52023>
- Wathelet, M., Duhem, S., Vaiva, G., Baubet, T., Habran, E., Veerapa, E., Debien, C., Molenda, S., Horn, M., Grandgenèvre, P., Notredame, C., & D'Hondt, F. (2020). Factors associated with mental health disorders among university students in France confined during the COVID-19 pandemic. *Jama Network Open, 3*(10):e2025591, 1-13. <http://doi:10.1001/jamanetworkopen.2020.25591>
- Yuen-kwan Lai, A., Lee, L., Wang, M., Feng, Y., Tze-kwan Lai, T., Ho, L., Suk-fun Lam, V., Sau-man Ip, M., & Lam, T. (2020). Mental health impacts of the COVID-19 pandemic on international university students, related stressors, and coping strategies. *Frontiers in Psychiatry, 11*(584240), 1-13. <https://doi.org/10.3389/fpsy.2020.584240>
- Zhai, Y., & Du, X. (2020). Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry Research, 288*(113003), 1-2. <https://doi.org/10.1016/j.psychres.2020.113003>

ACADEMIC OPINIONS & PERSPECTIVES

Tech-Savvy Teaching: Why Technology Integration Should Be a Priority in Instructional Planning

NEKIESHA REID, MA*

Department of Language and Cultural Studies, University of Guyana

* **Corresponding author:** *nekiesha.reid@uog.edu.gy*

Technology's Impact on Education

In a rapidly evolving world driven by technology, education must keep pace to prepare students for the challenges of tomorrow. In the classroom, improvements in Information and Communication Technologies (ICTs) have led to greater potential for innovation in teachers' pedagogical practices (Janssen et al., 2019). The integration of new technologies into teaching is transforming education, and universities are facing important tangible and intangible changes (Rocha et al., 2022). The Covid-19 pandemic accelerated these changes, as it forced educational instruction to embrace the online environment (Oyedotun, 2020). Technological changes are ongoing as seen in the 2023 launch of ChatGPT, a state-of-the-art artificial intelligence (AI) language model released by OpenAI on November 30, 2022

(Rudolph et al., 2023). These technologies have the potential to revolutionise traditional approaches to teaching in higher education by providing personalised feedback to students, enabling more efficient grading, improving access to educational resources, and facilitating collaboration and communication (Kasneji et al., 2023; Rudolph et al., 2023).

Despite the potential for innovation and improvement, the adoption of technology in Caribbean teaching has been limited, perhaps due to a lack of training, insufficient support by administration and other stakeholders or the reluctance of some educators to adapt to the rapidly changing environment (Gaffar et al., 2011; Jorge-Vázquez et al., 2021). Indeed, this is a global issue and the slow uptake of technology in the classroom relative to the rate at which ICTs evolve has left many researchers

bemoaning the state of integration in teaching and learning practices (Marshall, 2010; Watty et al., 2016).

What is certain is that even though many lecturers in higher education may have been asked to use ICTs in their teaching, this does not automatically mean that they will be able to do so successfully. The COVID-19 pandemic, for example, magnified the need for effective technology integration in education, with many lecturers having to adapt to online teaching with limited time and training (Hu et al., 2021). However, it bears repeating that the demand for lecturers to use technological tools did not automatically lead to effective integration of technology in instruction, nor did access to these tools guarantee success.

Educators must embrace technology in their educational practices to ensure, primarily, that their students can effectively compete in a shrinking global workforce (Rocha et al., 2022). This necessity is further emphasised in the absence of formal professional development for faculty members in many Caribbean higher educational institutions (Gill & Gosine-Boodoo, 2021; Oyedotun, 2020). However, the

effective integration of technology into teaching and learning remains a challenge despite the widespread use of technology in everyday life (Hakim, 2020; Krauskopf et al., 2012). This article thus discusses the need for educators to prioritise technology integration within their instructional planning, which would allow for the effective implementation of educational technologies to accomplish intended learning outcomes (Tondeur et al., 2010).

Technology Integration at the Instructional Planning Stage

Instructional planning refers to “the process of mapping out a global sequence of instructional goals and actions that provides consistency, coherence and continuity in the instructional process” (Mohan et al., 2013, p. 53). Lecturers have to be intentional in their inclusion of technology in their teaching in order to benefit in any meaningful way (Krauskopf et al., 2012; Swart, 2017). This need to be intentional is also likely to be why lecturers have to spend more time planning when integrating technology into lessons (Bauer & Kenton, 2005) and the value of doing so has to be understood in order to justify this

additional time.

One good reason for seeking to effectively integrate technology into instructional planning is that technology can be used to design lessons in various ways to maximise student learning (Moore, 2014). This is partially because there are a range of functional benefits of using technology in teaching. For example, the availability of visual information from all over the world across an extensive range of topics via Web-based digital video tools like YouTube makes it much easier for lecturers to bring live action and reality into the classroom, providing the ability to improve both the content and delivery of lessons (Krauskopf et al., 2012). Further, the availability of technology can also provide an opportunity for lecturers to include more differentiated instruction for students in order to meet their needs as individual learners, including potentially facilitating students working at different paces (Moore, 2014).

In addition to functional benefits, existing technologies can help lecturers to support the development of a range of knowledge and skills among students. For

example, technologies like Google Docs can better facilitate team working among students (Krauskopf et al., 2012; Moore, 2014). Similarly, students at the tertiary level are expected to be self-directed, and the availability of many more sources of information provide ample opportunity for project-based learning and encourage students to creatively develop innovative projects. As research has shown, problem-based learning is significantly related to students' self-directed learning skills (Bagheri et al., 2013). An important caveat here is that students' self-regulation skills will affect their actual use of technology in self-directed learning (Lai et al., 2022), indicating a recursive relationship that lecturers have to consider when they are determining the best technologies to incorporate in their teaching.

Finally, technology has been shown to be able to affect student behaviour in a way that can enhance their learning. For example, technology use can positively affect the level of student preparation for and participation in class, their attentiveness, and their level of learning (Lavin et al., 2011). However, as noted above, lecturers need to be careful how

technology is used because using the benefits for teaching and learning are not automatic. For example, there are other aspects of student behaviour that are 'technology neutral' such as student attendance, amount of study time, and amount of notes taken and, therefore, lecturers need to understand how and in what contexts ICTs can improve student behaviour and be realistic of what can be achieved through technology integration (Hutchison & Woodward, 2014; Lavin et al., 2011). Similarly, for the use of technology to effectively help develop students' higher-order thinking skills, lecturers need to be actively involved in the process since research shows that when students work alone with the technology for a significant amount of time, this negatively affects technology's impact on higher-order thinking skills (Baylor & Ritchie, 2002).

Technology Integration using the TPACK Framework

There are three main areas involved in instructional planning: determining what is to be learnt/taught, determining how this content is to be learnt/taught, and determining how learning is to be assessed/evaluated (Moore, 2014).

Thus, the process of instructional planning starts by outlining the general goals and specific objectives of the lesson/course followed by the planning of the instructional activities that will be undertaken to facilitate students' attainment of these objectives (Hutchison & Woodward, 2014). In line with this, instructional planning can be divided into two main aspects, which are content planning (what to teach) and delivery planning (how to teach) (Mohan et al., 2013), along with the planning of the assessments to be used to determine the extent to which students have achieved the set objectives.

To successfully integrate technology at the level of instructional planning, educators must engage in deliberate and systematic practices. This includes identifying appropriate technology tools, aligning them with content objectives, and designing pedagogically sound instructional strategies. Specifically, the TPACK (Technological Pedagogical Content Knowledge) framework argues that effective teaching with technology is dependent on a synergy between technological representations of concepts, pedagogical techniques for teaching content using technology, and

knowledge of the content to be learned and how technology can aid in the learning of specific content (Mishra, 2019).

This is seen in Harris and Hofer's (2009) expansion of the instructional planning elements to include instructional decisions made by lecturers when planning a learning event in which educational technology is included. Specifically, they add that lecturers also choose the technologies that they will be using based on their ability to most effectively support students in benefitting from the learning experience. Hutchison and Woodward (2014) are even more particular in this area, arguing that lecturers should reflect on whether a digital technology tool will most effectively achieve the learning goals and only use such a tool if they are convinced that the tool will do so. Further, they argued that the lecturer should also consider the technology's constraints, how these may be overcome, and how this may affect instruction, including the impact on the class routine and environment.

When it comes to instructional planning, the integration of TPACK principles can be used for effective technology use

(Mishra, 2019). First, content knowledge helps educators identify the most relevant and appropriate content to be delivered using technology. They need to have a deep understanding of the subject matter to ensure accurate representation and alignment between content and technology (Harris & Hofer, 2009). Second, pedagogical knowledge guides teachers in selecting appropriate instructional strategies and designing activities that engage students in meaningful learning experiences. Pedagogical knowledge informs decisions regarding instructional goals, sequencing, and assessment methods within the technology-enhanced context.

Finally, technological knowledge plays a vital role in instructional planning by enabling educators to make informed decisions about which technologies and tools are most suitable for achieving instructional objectives. Educators with strong technological knowledge can select appropriate software, hardware, or digital resources that align with the content and pedagogical goals. This knowledge also helps teachers anticipate potential challenges and make necessary adjustments to ensure effective

technology integration.

By using the TPACK model, educators can make informed decisions about technology integration, ensuring that technology is effectively woven into instructional practices. This framework thus provides a valuable lens for understanding the integration of technology in instructional planning. Specifically, lecturers with this type of knowledge can leverage technology not just as an auxiliary tool, but as an integral aspect of instructional design. This involves analysing how digital tools can present educational content in a manner that is engaging, interactive, and conducive to student comprehension.

Summary

The COVID-19 pandemic has accelerated the need for effective technology integration in education across the Caribbean and elsewhere, and the emergence of technologies such as ChatGPT has highlighted the potential for technology to revolutionise traditional approaches to teaching. However, the adoption of technology in teaching has been limited before the pandemic. Further, the fact that educational technologies are available

has been used as a reason for employing those technologies, however, lecturers have to be intentional in their inclusion of technology in their teaching in order to gain the benefits in any meaningful way. This article highlights the significance of technology integration through instructional planning, underscoring the importance of aligning technology with pedagogy to enhance learning outcomes. Specifically, by integrating TPACK into instructional planning, educators can design technology-enhanced lessons and activities that effectively engage students and promote deep learning. The synergy among content, pedagogy, and technology empowers teachers to create authentic learning experiences that cater to diverse student needs and foster critical thinking, creativity, collaboration, and problem-solving skills.

References

- Bagheri, M., Ali, W., Abdullah, M., & Daud, S. (2013). Effects of project-based learning strategy on self-directed learning skills of educational technology students. *Contemporary Educational Technology, 4*(1), 15-29.
- Bauer, J., & Kenton, J. (2005). Toward technology integration in the schools: Why it isn't happening. *Journal of Technology and Teacher Education, 13*(4), 519-546.
- Baylor, A., & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers & Education, 39*(4), 395-414. [https://doi.org/10.1016/S0360-1315\(02\)00075-1](https://doi.org/10.1016/S0360-1315(02)00075-1)
- Gaffar, K., Singh, L., & Thomas, T. (2011). Are we ready for Web 2.0? Evidence from a Caribbean University. *The Caribbean Teaching Scholar, 1*(2).
- Gill, M., & Gosine-Boodoo, M. (2021). A case for purposeful mentorship in research and publishing at a Caribbean academic library. *The Journal of Academic Librarianship, 47*(2), 102302. <https://doi.org/10.1016/j.ahalib.2020.102302>
- Hakim, B. (2020). Technology integrated online classrooms and the challenges faced by the EFL teachers in Saudi Arabia during the COVID-19 pandemic. *International Journal of Applied Linguistics and English Literature, 9*(5), 33-39.
- Harris, J., & Hofer, M. (2009). Grounded tech integration: An effective approach based on content, pedagogy, and teacher planning. *Learning & Leading with Technology, 37*(2), 22-25. <https://doi.org/10.1080/0022027032000276961>
- Hu, X., Chiu, M., Leung, W., & Yelland, N. (2021). Technology integration for young children during COVID-19: Towards future online teaching. *British Journal of Educational Technology, 52*(4), 1513-1537. <https://doi.org/10.1111/bjet.13106>
- Hutchison, A., & Woodward, L. (2014). A planning cycle for integrating digital technology into literacy instruction. *The Reading Teacher, 67*(6), 455-464. <https://doi.org/10.1002/trtr.1225>
- Janssen, N., Knoef, M., & Lazonder, A. (2019). Technological and pedagogical support for pre-service teachers' lesson planning. *Technology, Pedagogy and Education, 28*(1), 115-128. <https://doi.org/10.1080/1475939X.2019.1569554>
- Jorge-Vázquez, J., Nández Alonso, S. L., Fierro Saltos, W. R., & Pacheco Mendoza, S. (2021). Assessment of digital competencies of university faculty and their conditioning factors: Case study in a technological adoption context. *Education Sciences, 11*(10), 637. <https://doi.org/10.3390/educsci11100637>
- Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *EdArXiv*. <https://doi.org/10.35542/osf.io/5er8f>
- Krauskopf, K., Zahn, C., & Hesse, F. W. (2012). Leveraging the affordances of YouTube: The role of pedagogical knowledge and mental models of technology functions for lesson planning with technology. *Computers & Education, 58*(4), 1194-1206. <https://doi.org/10.1016/j.compedu.2011.12.010>
- Lai, Y., Saab, N., & Admiraal, W. (2022). University students' use of mobile technology in self-directed language learning: Using the integrative model of behaviour prediction. *Computers & Education, 179*, 104413. <https://doi.org/10.1016/j.compedu.2021.104413>

- Lavin, A., Korte, L., & Davies, T. (2011). The impact of classroom technology on student behaviour. *Journal of Technology Research*, 2(1), 1-13.
- Marshall, S. (2010). Change, technology and higher education: Are universities capable of organisational change? *Australasian Journal of Educational Technology*, 26(8). <https://doi.org/10.14742/ajet.1018>
- Mishra, P. (2019). Considering contextual knowledge: the TPACK diagram gets an upgrade. *Journal of Digital Learning in Teacher Education*, 35(2), 76-78. <https://doi.org/10.1080/21532974.2019.1588611>
- Mohan, P., Greer, J., & McCalla, G. (2003). Instructional planning with learning objects. In Baumgartner, P., Cairns, P., Kohlhase, M., & Melis (eds.) *Knowledge representation and automated reasoning for e-learning systems* (pp. 52-58). Universität Koblenz-Landau.
- Moore, K. (2014). *Effective instructional strategies: From theory to practice*. Sage.
- Oyedotun, T. (2020). Sudden change of pedagogy in education driven by COVID-19: Perspectives and evaluation from a developing country. *Research in Globalisation*, 2, 100029. <https://doi.org/10.1016/j.resglo.2020.100029>
- Rocha, Á., Gonçalves, M., da Silva, A., Teixeira, S., & Silva, R. (2022). Leadership challenges in the context of university 4.0: A thematic synthesis literature review. *Computational and Mathematical Organisation Theory*, 28(3), 214-246. <https://doi.org/10.1007/s10588-021-09325-0>
- Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning and Teaching*, 6(1). <https://doi.org/10.37074/jalt.2023.6.1.9>
- Swart, R. (2017). Critical thinking instruction and technology enhanced learning from the student perspective: A mixed methods research study. *Nurse Education in Practice*, 23, 30-39. <https://doi.org/10.1016/j.nepr.2017.02.003>
- Tondeur, J., Cooper, M., & Newhouse, C. (2010). From ICT coordination to ICT integration: A longitudinal case study. *Journal of Computer Assisted Learning*, 26(4), 296-306. <https://doi.org/10.1111/j.1365-2729.2010.00351.x>
- Watty, K., McKay, J., & Ngo, L. (2016). Innovators or inhibitors? Accounting faculty resistance to new educational technologies in higher education. *Journal of Accounting Education*, 36, 1-15. <https://doi.org/10.1016/j.jaccedu.2016.03.003>

ACADEMIC OPINIONS & PERSPECTIVES

Underscoring the Need for Trauma-Informed Higher Education Institutions in Jamaica

CRAIG MCNALLY, PHD*

Adjunct Faculty, University of the Commonwealth Caribbean

* **Corresponding author:** *cmcnally@faculty.ucc.edu.jm*

Adverse Childhood Experiences

By the time children in Jamaica of primary and secondary school ages enrol in their first year of university, they would have been exposed to multiple adverse childhood experiences (ACEs). Defined as negative and chronic events occurring during the psychosocial development of a child, ACEs include traumatic life events such as witnessing the death or harm of a loved one, exposure to violence, facing various forms of maltreatment and abuse (physical, emotional, sexual), and having to deal with multiple types of losses (Báez et al., 2019).

ACEs interrupt youth development physically and emotionally, making it challenging for children to self-regulate, and appropriately express emotions (Hunter, 2022). The greater the number of ACEs, the

greater the resulting level of chronic stress to which the child is subjected. In fact, Báez et al. (2019) argues that ACEs result in toxic stress in children and this both impairs their ability to learn and increases their likelihood to have poor physical and mental health in adulthood. Menschner and Maul (2016) observed that situations involving abuse and neglect tended to result in persons participating in high-risk behaviours. It is also not uncommon for adult trauma survivors to present with psychological comorbidities such as depression, sexual dysfunction, dissociation, anger, suicidality, self-harm, and substance abuse (Poole et al., 2013).

Despite the devastating and long-term effects of ACEs, it appears that many higher educational institutions (HEIs) in Jamaica are headed by educational leaders

(ELs) who are unaware of or inattentive to the progressive and deep emotional wounds their enrollees encounter long before entering their institutions. As a result, student trauma survivors are situated within campuses that do not appreciate nor adequately account for their unique needs. In this reflection, I posit that in order to effectively support students and enhance their academic outcomes, it is imperative for HEIs in Jamaica to transition towards becoming trauma-informed entities.

Having introduced ACEs as a salient feature in the Jamaican student lifecycle, socio-economic status is then discussed as a significant precipitating factor in experiencing discouraging conditions. The paper then highlights the lack of psycho-social intervention traumatised children receive, and how this later acts as a predisposing factor for the emerging negative mental health outcomes in persons of traditional university age. Attention is then given to how early unresolved trauma impairs the university student's academic ability. Hereafter, the trauma-informed school care model is presented as a reparative measure, led by educational leaders, in meeting the needs

of student trauma survivors and preventing re-traumatisation.

ACEs and Low Socio-economic Status

There is a strong correlation between higher exposure to ACEs and low socio-economic status (Wade et al., 2014). In fact, according to Pottinger (2012), the ACEs that Jamaican children from inner city communities encounter are co-occurring, experienced in multiple settings directly and through vicarious exposure. In other words, inner-city children are victims of a range of chronic stressful events such as abuse meted out to them by a family member; they face housing and food insecurity, violence in the community as well as school, peer-bullying, and even punitive and harsh educators at the primary and secondary school levels. It can be assumed then that Jamaican adults who grew up in low-income households located in underserved communities are more likely to have experienced varied traumatic events, and therefore will have higher ACEs scores. Higher scores on ACEs questionnaires are indicative of mental health comorbidities. Pottinger has also asserted that, "Directly experiencing violence in more than one setting

was associated with poorer psychological outcomes for boys than girls, while vicarious exposure through witnessing violence in different settings was associated with poor outcomes for girls” (2012, p. 137).

Adult Survivors of Trauma

Unfortunately, many children who are victims of ACEs in Jamaica do not receive the mental health supports they need. A 2021 study by the Caribbean Policy Research Institute (CAPRI) revealed that children in Jamaica need increased access, frequency, and specialised mental health services. These mental health gaps result in traumatised children being left untreated, and subsequently adult survivors entering higher education institutions (HEIs), carrying with them years of trauma which increases their risk of poor educational outcomes.

According to the literature, when a student is impacted by trauma, the calm state needed to engage in learning is lost (Cole et al., 2005). As a survival mechanism, the student’s brain redirects focus to resolve the issue (Babcock & Ruize de Luzuriaga, 2016; Craig, 2016). The student’s academics suffer

because the level of focus required to complete academic tasks, becomes impaired (Hallett & Crutchfield, 2017). Additionally, according to Babcock (2014), trauma blunts executive functioning in three areas: impulse control, working memory, and mental flexibility. As well, trauma causes the amygdala portion of the brain responsible for flight, fight, and freeze response to become overactive, limiting students’ classroom capacity (Hallett & Crutchfield, 2017). Likewise, Henshaw (2022) stated that trauma also impairs socio-emotional ability, limiting students’ capacity to engage with peers and lecturers, and participate in class discussions.

Trauma-informed Care

Traditional paradigms conceptualised trauma as a single event and saw the survivor as a perpetual victim (Goodman, 2017). Contemporary trauma theory however rethinks survivors as in need of restorative care, rather than being impaired psychologically and physically (Goodman, 2017). While HEIs are not mental health clinics, their role in society is boundary-breaking, trendsetting, and culture-forming. In fulfilling this mandate, higher

educational leaders must see their institution's role as 'nationalistic', transcending the university campus – holding positive societal wide implications (Brown, 2006). Miller (2013) also took this position and affirmed that those in educational leadership in the Caribbean are regarded as being bridled with the task of sourcing from students, future members of society.

In other words, HEIs should see themselves as incubators that have the capacity to hold the mental health challenges of students, and sustain their holistic development through policies, systems and services that equalize, support, and provide the tools needed to excel, and eventually graduate work-ready students. As a matter of fact, Hunter (2022) postulated that educators and administrators in contemporary higher education have become more aware of vulnerable students and have begun to promote a modern culture that measures student success as extending beyond academic achievement. As a result, educational leaders have taken on human services roles by meeting the psycho-social needs of their enrollees.

One way that HEIs can support traumatized enrollees is by becoming trauma-informed care (TIC) institutions. Creating higher education institutions that support students with current or previous experiences with trauma requires them to be trauma-sensitive, and that educators “embody empathy and support to create a safe base for students to learn” (Hallett & Crutchfield, 2017; Henshaw, 2022, p. 1). Trauma-informed care is indicated for use in higher education institutions given that the negative impact of toxic stress on educational outcomes. (Hallett & Crutchfield, 2017).

Trauma-Sensitive Higher Educational Institutions

Among other settings, trauma-informed care has been applied in the higher education context (Hales et al., 2017). Hallett and Crutchfield (2017) have postulated that “trauma-informed institutions take responsibility to develop opportunities and systems for outwardly engaging students versus waiting for students to take the lead in accessing resources and services” (p. 78). Educational leaders should be proactive and

direct how and where resources are used and ensure knowledge about violence and abuse are incorporated into the culture and practices of the organisation (Harris & Falot, 2001).

There is little research on the impact of trauma on higher education students (Henshaw, 2022). However, Craig's (2016) coinage of trauma-sensitive schools is instructive. It has been regarded as a "holistic multi-layered approach to student development" (Hallett & Crutchfield, 2017, p. 73). Craig (2016) said trauma-sensitive schools are environments that consider how the school's climate, instructional designs, procedures, and policies are designed to support students who need to attain academic and prosocial proficiencies but have a history of trauma. Hallett and Crutchfield (2017) have transposed this, and other pre-university research and theory conducted by Cole and colleagues (2005, 2013), into an emerging higher education model referred to as Trauma-Informed and Sensitive College (TISC). The TISC model was originally intended to be used with higher education students facing housing insecurity, but Hallett and Crutchfield (2017) have asserted that its use is expandable to

meeting the needs of other vulnerable student populations with a history of trauma.

The following are the steps involved in the TISC Model:

Localising – The first step in becoming a trauma-sensitive educational institution is knowing the students. Among other things, this means identifying the trauma histories and analysing how these impact students and manifest on campus.

Evaluating – Assess institutional policies and practices to determine if they are supportive, and prevent re-traumatisation of students, especially as they try to access services.

Implementing – This step involves putting in place policies and other supportive measures that provide a warm, safe psychosocial environment in which attending to the negative learning effects of trauma is at the heart of the institution's educational philosophy (Cole et al., 2013).

Sustaining – Without meaningful plans in place, trauma-informed approaches will not be maintained. Hallett and Crutchfield (2017) have asserted that for an institution to remain trauma-informed and sensitive, they must

be intentional in putting in place system of maintenance and ongoing evaluation.

Conclusion

The TISC model is but one demonstration of the utility of trauma-informed care. It can be applied by educational leaders to promote healing campuses and building a framework for ongoing trauma-sensitive service delivery. Persisting consciousness that enrollees may be traumatised adults, HEIs in Jamaica are in a position by virtue of the expertise they possess and their guiding philosophies, to prevent re-traumatisation and create safe campuses that can be modelled by the wider society. By starting with their students, higher education institutions have the capacity to ‘teach’ society the importance of recognising and addressing the developmental effects of ACEs.

References

- Babcock, E., & Ruiz De Luzuriaga, N. (2016). Families disrupting the cycle of poverty: Coaching with an intergenerational lens. *Economic Mobility Pathways*.
- Báez, J. C., Renshaw, K. J., Bachman, L. E. M., Kim, D., Smith, V. D., & Stafford, R. E. (2019). Understanding the Necessity of Trauma-Informed Care in Community Schools: A Mixed-Methods Programme Evaluation. *Children & Schools, 41*(2), 101–110. <https://doi-org.rproxy.uwimona.edu.jm/10.1093/cs/cdz007>
- Brown, D. G. (Ed.). (2006). University presidents as moral leaders. *Praeger Publishers*.
- Caribbean Policy Research Institute. (2021). Capri's newest study examines shortfalls in children's mental health services. Retrieved from <https://www.capricaribbean.org/content/capri%E2%80%99s-newest-study-examines-shortfalls-children%E2%80%99s-mental-health-services-0>
- Cole, S. F., Eisner, A., Gregory, M., & Ristuccia, J. (2013). Creating and advocating for trauma-sensitive schools. *Massachusetts Advocates for Children*.
- Cole, S. F., O'Brien, J. G., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2005). Helping traumatized children learn: Supportive school environments for children traumatized by family violence. *Massachusetts Advocates for Children*.
- Craig, S. E. (2016). Trauma-sensitive schools: Learning communities transforming children's lives, K–5. *Teachers College Press*.
- Goodman, R. (2017). Contemporary trauma theory and trauma-informed care in substance use disorders: A conceptual model for integrating coping and resilience. *Advances in Social Work, 18*(1), 186-201. <https://doi.org/10.18060/21312>
- Hales, T., Kusmaul, N., & Nochajski, T. (2017). Exploring the dimensionality of trauma-informed care: Implications for theory and practice. *Human service organisations: Management, leadership & governance, 41*(3), 317-325. <https://doi.org/10.1080/23303131.2016.1268988>
- Hallett, R. E., & Crutchfield, R. (2017). Special issue: Homelessness and housing insecurity in higher education--A trauma-informed approach to research, policy, and practice. *ASHE Higher Education Report, 43*(6), 1–129. <https://doi.org/10.1002/aehe.2017.43.issue-6/issuetoc>
- Harris, M., & Fallot, R. D. (2001). Envisioning a trauma-informed service system: A vital paradigm shift. *New Directions for Mental Health Services, 89*, 3–22. <https://doi.org/10.1002/yd.23320018903>
- Henshaw, L. A. (2022). Building Trauma-Informed Approaches in Higher Education. *Behavioural Sciences (2076-328X), 12*(10), N.PAG. <https://doi-org.rproxy.uwimona.edu.jm/10.3390/bs12100368>
- Hunter, J. (2022). Clinician's voice: Trauma-informed practices in higher education. *New Directions for Student Services, 2022*(177), 27–38. <https://doi.org.rproxy.uwimona.edu.jm/10.1002/ss.20412>
- Menschner, C., & Maul, A. (2016). Key ingredients for successful trauma-informed care implementation. *Centre for Health Care Strategies Inc*.
- Miller, P. (Ed.). (2013, May). School leadership in the Caribbean: Perceptions, practices, paradigms. *Symposium Books Ltd*.
- Poole, N., Urquhart, C., Jasiura, F., Smilie, D., Schmidt, R. (2013). Trauma Informed Practice Guide. *BC Centre of Excellence for Women's Health*. <https://doi.org/10.1002/yd.23320018903>

org/10.13140/RG.2.1.5116.9122.

Pottinger, A.M. (2012). Children's exposure to violence in Jamaica: over a decade of research and interventions. *The West Indian Medical Journal*, 61(4), 369-71. <https://doi.org/10.7727/wimj.2012.146>

Wade, R., Jr., Shea, J. A., Rubin, D., & Wood, J. (2014). Adverse childhood experiences of low-income urban youth. *Paediatrics*, 134(1), 13–20. <https://doi.org/10.1542/peds.2013-2475>

ACADEMIC OPINIONS & PERSPECTIVES

Levelling the Lectern: Pondering Gender, Workloads, and Career Progression Paradoxes in Academia

VERONICA REID-JOHNSON, PHD*

School of Business, Entrepreneurship & Management, University of the Commonwealth Caribbean

* **Corresponding author:** *businessfaculty4@ucc.edu.jm*

The Challenge

One morning over breakfast, I found myself deep in thought, reflecting on the concept of inclusion within academia. These ruminations were sparked by a recent interaction with a fellow academic that stayed with me. This individual, tasked with significant teaching responsibilities, has also been able to regularly disseminate their research. They attribute this to a strong work ethic and an equally solid research support system, which are enhanced by connections with scholars from different higher education institutions (HEIs). Still, it made me question if the sustainability of this ‘work ethic’ might be put to the test if there were shifts in personal circumstances, such as becoming a parent in the future.

These thoughts came to me as I considered the intersections that often are not

considered when institutional workload policies are being developed. How inclusive are these policies for people at different stages of their lives? Are these policies accommodating the diverse needs and circumstances of academic professionals of all genders, especially when teaching commitments already consume the equivalent of a full-time job, leaving research to be conducted in personal time? Are our policies evolving to ensure they are as comprehensive and inclusive as they need to be?

As a female academic, I discuss this issue from my perspective, shaped by my gender and unique life experiences. As a working mother, juggling marriage, raising primary-school-age children, and leaning on a robust support system of four grandparents and extended family for childcare, I recognise how these factors shape my perspectives. They

influence my understanding of the intricate balances required in academia, reinforcing the significance of these discussions for myself and countless others in similar situations.

While this is not an issue exclusively affecting women, women are largely the primary caregivers within their families. For example, recent statistics from the USA show that full-time working mothers dedicate 50% more of their day to child-rearing than their male counterparts (Bateman & Ross, 2020). In Jamaica, a 2018 study by the Caribbean Policy Research Institute (CAPRI) concluded that women do the bulk of (unpaid) household and community/voluntary work in the country. This unequal distribution of household and caregiving responsibilities place a disproportionate burden on women (Arntz et al., 2020), reflected at a societal level in their lower productivity and reduced labour force participation in Jamaica (CAPRI, 2018).

These work-home responsibilities can have a significant impact on women's career trajectories within the academic hierarchy, as explored by scholars like Barrett and Barrett (2011). For example, despite women making up

a disproportionate part of the teaching faculty, men often progress to higher levels more rapidly (Lee and Won, 2014). As a result, we see women continuing to be underrepresented in higher-ranking positions and leadership roles within academia, often facing barriers to career advancement such as limited access to tenure, promotion, and research opportunities (Aiston & Fo, 2021; Cama et al., 2016; Górska et al., 2021). This reality underscores the urgency for more inclusive and comprehensive policies that consider the diverse needs and life circumstances of all academics.

Women's Balancing Act

The existing workload in teaching and research in academia can impose significant challenges and disadvantages for women, particularly in relation to their professional commitments. Traditionally, women often face obstacles in maintaining long working hours due to their primary caregiving roles within their families (Barrett and Barrett, 2011; Mennino & Brayfield, 2002). These gendered expectations can create a conflict between their professional responsibilities and personal obligations, making it difficult for women to

fully engage in their academic pursuits (Khan & Siriwardhane, 2021).

Moreover, the academic reward system, which tends to prioritise research output as the primary metric for success and advancement, can exacerbate these challenges and disproportionately disadvantage individuals who are unable to devote time beyond standard working hours (Barrett & Barrett, 2011). The pressure to meet the demands of research expectations within a limited timeframe further amplifies the difficulties faced by women in academia (Probert, 2005). For example, female academics tend to exhibit lower research productivity compared to their male counterparts (Aiston & Jung, 2015). This is consistent with Jamaican data indicating that “[n]early half of all workers with care responsibilities state that the lack of care support hinders their ability to focus and this affects their productivity” (Chisholm et al., 2023, p. v).

Further, teaching and service contributions, which are predominantly associated with women’s work, are devalued and given less weight in evaluations of academic

performance (Park, 1994). In academia, the perception of women struggling to balance teaching, research, and service obligations reflects the systemic challenges many women encounter (Khan & Siriwardhane, 2021; Probert, 2005).

As identified by CAPRI (2018), the work undertaken by women “redound to the benefit of the family, the community and the country as a whole and make an important contribution to national development, but at an opportunity cost to women’s participation in the labour market” (p. 2). Overall, there are several ways in which the current academic system reflects gender biases and traditional definitions of success that fail to acknowledge the unique intersections faced by many women in academia. This often results in a gender wage gap and impediments to career progression, particularly for those who require flexible work arrangements or reduced work hours due to family responsibilities (Arntz et al., 2020; Maume, 2006). The gender wage gap is an issue in Jamaica as in most other countries, as women on average earn 61% of men’s earnings and this is largely driven by the unpaid care and

domestic work for which women are primary responsible (Hamil et al., 2023).

This inequality became glaringly apparent during the Covid-19 pandemic, which, despite facilitating a transition to remote work, only served to magnify pre-existing gender disparities (Górska et al., 2021). Even before the pandemic, parenthood tended to have a more significant impact on women's careers compared to men, often leading to occupational downgrading and slower career progression for women (Nautet and Piton, 2021). During the pandemic, closures of schools and childcare facilities greatly increased childcare needs and this disproportionately impacted working mothers. Thus, like women across professions, female academics often had to juggle increased workloads as a result of intensified caregiving and household responsibilities, which subsequently limited their time and energy for academic work. These constraints often negatively affect women's scholarly output during the pandemic, which is likely to have the impact discussed above of hindering their professional advancement (Górska et al., 2021).

Thus, as discussed, women have historically shouldered a larger share of childcare and unpaid care work compared to their male counterparts, even when working full-time, and the pandemic simply amplified these existing inequalities (Arntz et al., 2020; Bateman & Ross, 2020). The disproportionate impact on women's careers highlights the long-term implications of institutional work policies on gender gaps, particularly within higher education, demonstrating the need for systemic changes to address the barriers faced by women in academia (Górska et al., 2021).

Reimagining Academic Workloads to Support Gender Equity

Addressing these disparities requires us to strongly advocate for changes within the profession. In order to foster gender equity, HEIs must implement policies and practices that promote work-life balance and support the career progression of academics of all genders. This includes recognising and valuing the contributions of women in teaching and service roles, providing mentorship and networking opportunities, and implementing family-friendly policies such as flexible work

arrangements and affordable childcare options (Allen et al., 2021; Chisholm et al., 2023; Khan & Siriwardhane, 2021). By providing support for employees with care obligations, HEIs and other organisations can also address the gender wage gap since it is correlated with the women's unpaid care obligation (Hamil et al., 2023).

In concluding this discussion, I want to focus in particular on workload allocation in academia, since this is a critical area where HEIs can effect direct change to address gender inequity and enhance research productivity (Aiston & Fo, 2021). To redress this issue, four recommendations can be considered. First, there should be a conscious effort to address gender biases in workload allocation. HEIs should provide training and awareness programmes to decision-makers, highlighting the potential biases that can influence workload distribution (Allen et al., 2021). Implementing policies that promote fair treatment of women in the workplace not only advance gender equality but can also contribute to bolstering Jamaica's economic prospects (Hamil et al., 2023).

Second, institutions should develop and implement policies that ensure transparent and fair workload allocation practices (Barrett & Barrett, 2011; Górska et al., 2021). Clear criteria for workload distribution should be established, and these criteria should be consistently applied to all faculty members, regardless of gender (Mennino & Brayfield, 2002). Third, HEIs should actively encourage collaboration and support mechanisms for women academics since women's research productivity can be positively influenced by effective mentorship and supportive networks (Aiston & Jung, 2015). Establishing mentoring programmes and fostering a collegial environment can thus help mitigate the impact of workload disparities.

Fourth, regular evaluation and feedback mechanisms should be implemented to monitor and address workload allocation practices. Institutions should collect and analyse data on workload distribution by gender to identify any discrepancies and take corrective measures (Allen et al., 2021). This process should be ongoing and involve collaboration between faculty members and institutional leadership.

In this regard, the final recommendation is for decisions on workload allocation to involve a diverse range of faculty, including younger employees who may have young children or other caregiving responsibilities. Their input can help ensure that institutional policies and practices are not out of touch with the realities faced by today's academics. Further, HEIs should actively promote the representation of women in senior faculty roles in order to address the gender gap in academic positions and salaries (Lee & Won, 2014). By increasing the number of women in leadership positions, institutions can influence decision-making processes and advocate for equitable workload allocation.

This brief examination highlights the fact that the gender disparities that exist within the academic environment necessitate comprehensive and structural changes. Such changes go beyond merely addressing individual-level solutions and require systemic interventions that tackle the root causes of these disparities (Allen et al., 2021). Thus, addressing gender inequity in academia requires a collective and sustained commitment to challenging

systemic barriers and creating an environment that supports the success and advancement of all academics. This commitment is vital to creating supportive environments that amplify and value the voices and contributions of academic women (Aiston and Fo, 2021).

Ultimately, achieving gender equity in academia requires us to rethink our definitions of success, challenge our biases, and reimagine our work environments. It is a shared responsibility that calls for concerted efforts from all HEI stakeholders. By creating supportive, inclusive environments that truly value the contributions of all academics, we can bridge the gender gap in academic careers and foster a more equitable future.

References

- Aiston, S., & Fo, C. (2021). The silence/ing of academic women. *Gender and Education*, 33(2), 138-155. <https://doi.org/10.1080/09540253.2020.1716955>
- Aiston, S., & Jung, J. (2015). Women academics and research productivity: an international comparison. *Gender and Education*, 27(3), 205-220. <https://doi.org/10.1080/09540253.2015.1024617>
- Allen, K. A., Butler-Henderson, K., Reupert, A., Longmuir, F., ... & Flear, M. (2021). Work like a girl: redressing gender inequity in academia through systemic solutions. *Journal of University Teaching & Learning Practice*, 18(3), 03.
- Alon, T., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). The impact of Covid-19 on gender equality (No. w26947). *National Bureau of Economic Research*.
- Arntz, M., Ben Yahmed, S., & Berlingieri, F. (2020). Working from home and Covid-19: The chances and risks for gender gaps. *Intereconomics*, 55, 381-386. <https://doi.org/10.1007/s10272-020-0938-5>
- Barrett, L., & Barrett, P. (2011). Women and academic workloads: career slow lane or cul-de-sac? *Higher Education*, 61, 141-155. <https://doi.org/10.1007/s10734-010-9329-3>
- Bateman, N., & Ross, M. (2020). Why has COVID-19 been especially harmful for working women? [Essay]. *Brookings Institute*. <https://www.brookings.edu/essay/why-has-covid-19-been-especially-harmful-for-working-women/>
- Cama, M. G., Jorge, M. L., & Peña, F. J. A. (2016). Gender differences between faculty members in higher education: A literature review of selected higher education journals. *Educational Research Review*, 18, 58-69. <https://doi.org/10.1016/j.edurev.2016.03.001>
- CAPRI (2018). *Low labour productivity and unpaid care work*. CAPRI. https://www.capricaribbean.org/sites/default/files/public/documents/report/low_labour_productivity_and_unpaid_care_work.pdf
- Carli, L. L. (2020). Women, gender equality and Covid-19. *Gender in Management*, 35(7/8), 647-655. <https://doi.org/10.1108/GM-07-2020-0236>
- Chisholm, S., Alexander, P., Williams, Y., & Thorburn, D. (2023). *The business of care: Boosting productivity by supporting workers' care obligations*. CAPRI.
- Górska, A., Kulicka, K., Staniszevska, Z., & Dobija, D. (2021). Deepening inequalities: What did COVID-19 reveal about the gendered nature of academic work? *Gender, Work & Organisation*, 28(4), 1546-1561. <https://doi.org/10.1111/gwao.12696>
- Hamadeh, R., AlSabbagh, M., Bugawa, A., Kamal, A., Ali, F., Al Bufalasa, G., & AlShaibani, T. (2022). The impact of the COVID-19 pandemic in higher education: a gender perspective. *Arab Gulf Journal of Scientific Research*, 40(4), 424-439. <https://doi.org/10.1108/AGJSR-07-2022-0104>
- Hamil, K., Alexander, P., Williams, Y., Blake, R., & Thorburn, D. (2023). *Fair Pay: The wage gap barrier to women's empowerment*. CAPRI.
- Khan, T., & Siriwardhane, P. (2021). Barriers to career progression in the higher education sector: Perceptions of Australian academics. *Sustainability*, 13(11), 6255. <https://doi.org/10.3390/su13116255>
- Lee, Y. J., & Won, D. (2014). Trailblazing women in academia: representation of women in senior faculty and the gender gap in junior faculty's salaries in higher educational institutions. *The Social*

- Science Journal*, 51(3), 331-340. <https://doi.org/10.1016/j.sosci.2014.05.002>
- Maume, D. (2006). Gender differences in restricting work efforts because of family responsibilities. *Journal of Marriage and Family*, 68(4), 859-869. <https://doi.org/10.1111/j.1741-3737.2006.00300.x>
- Mennino, S. & Brayfield, A. (2002). Job-family trade-offs: The multidimensional effects of gender. *Work and Occupations*, 29(2), 226-256. <https://doi.org/10.1177/073088840202900>
- Nautet, M., & Piton, C. (2021). How does parenthood affect the careers of women and men? NBB Economic Review.
- Park, S. (1996). Research, teaching, and service: Why shouldn't women's work count? *The Journal of Higher Education*, 67(1), 46-84. <https://doi.org/10.1080/00221546.1996.11780249>
- Probert, B. (2005). 'I just couldn't fit it in': Gender and unequal outcomes in academic careers. *Gender, Work & Organisation*, 12(1), 50-72. <https://doi.org/10.1111/j.1468-0432.2005.00262.x>

LEADERSHIP INSIGHT

A Candid Conversation on Academic Leadership & Research Vision

Interview by **VERONICA REID-JOHNSON, PHD***
School of Business, Entrepreneurship & Management, University of the Commonwealth Caribbean

* **Corresponding author:** *businessfaculty4@ucc.edu.jm*

Precis: In an era where educational institutions grapple with rapid technological advancements and societal changes, this conversation provides insight into the pioneering vision of an academic leader. In this interview with Professor Haldane Davies, President of the University of the Commonwealth Caribbean (UCC), delves into his forward-thinking strategies for enhancing academic leadership and cultivating an institution that aspires to be at the forefront in the region. Academic leadership plays a critical role in higher education institutions, particularly in ensuring adaptability and innovation (Kruse et al., 2020), and is also essential in advancing research, which is a linchpin for progress within universities (Kohtamäki, 2019).

Background to the Interviewee

Professor Haldane Davies, a native of the British Virgin Islands, assumed the presidency of the University of the Commonwealth Caribbean in September 2022. He is a highly accomplished university administrator with extensive expertise in university structuring and operations, emphasizing quality and quality assurance. Holding a PhD in Educational

Administration, with a specialization in higher education, he previously served as the Vice President for Business Development at the University of the Virgin Islands.

Professor Davies brings a wealth of experience and commitment to advancing the UCC's mission. Through this conversation, we unpack President Davies' overarching vision for UCC and his ambition to weave innovation

into the fabric of the institution. He discusses how academic leadership is indispensable for shaping universities into not just educational centres, but also catalysts for societal progression and economic advancement.

The UCC Vision

Dr. Reid-Johnson (Interviewer): On the matter of academic leadership and research vision at UCC, could you elaborate on your overarching vision in terms of leadership and research at UCC?

President Davies (Respondent): It's always a pleasure to interact with our faculty and staff and to talk about UCC – [to speak about] who we are, our plans for the future, and how we can work together for a great university. One of the key aspects of academic leadership is fostering an environment where collaborative research and innovative teaching methodologies can thrive. The UCC is an excellent place for individuals across Jamaica, the region, and the world, to bring their minds, thoughts, views, and opinions together to ensure progress. My vision is to see the UCC as one of the premier institutions in this region – an institution that

provides opportunities for higher education to people from various walks of life. We want to impact the lives of our students, their families, and communities. In line with this, I see the UCC leading in programming and expanding our research base with a focus on cutting-edge research, in order to work with communities on relevant societal issues, and progressing in economic advancement and community engagement.

New Leadership Strategies for the UCC

Q: Could you speak to any specific leadership strategies or research initiatives that are in place or are being developed at UCC to achieve your long-term vision?

President Davies: Certainly. In terms of leadership, a fundamental goal is to develop and implement our new strategic plan, which is grounded in collaboration and inclusive input from all stakeholders.

The matter of accreditation is also vital. As a leader, I believe in the continuous improvement of our institution and aligning our strategies with the evolving demands of higher education. Thus, we are continuing with ASIC [Accreditation Service for International

Colleges] accreditation, UCJ [the University Council of Jamaica] accreditation, and exploring other types of accreditations. At the programme level, we will be continue adding programmes that are relevant to societal needs, such as public service management, ethics, and conflict resolution.

In terms of research, we aim to establish collaborations for multidisciplinary research that can address complex societal challenges. There are many other initiatives we will be moving forward on, such as growing our enrolment, expanding our research base, and providing access to as many individuals as possible, not only in Jamaica but across the region and the world. These initiatives are vital in our journey to become one of the premier institutions in the region by extending our reach and influence globally.

Institutional Expansion

Q: You have mentioned growing enrolment, is the vision for UCC to be a lot bigger than it is at the moment?

President Davies: Certainly. Growing enrolment is our aim. For many years, even

prior to my arrival here at UCC, our former presidents, President Emeritus Adams and President Emeritus Gayle, have been working to advance the concept of a university town. This is still high on our agenda. We are working collaboratively with other entities to bring this to fruition. Our plan for a university town involves an economic impact with millions of dollars flowing into the community during construction. Students will live on campus, faculty will have housing opportunities, and businesses will operate within the context of the university's offerings. Moreover, we are growing online as well. We recently relaunched our asynchronous platform with more than 100 micro-credentials, short courses, and additional graduate programmes. Through these various avenues, we hope to work with outstanding institutions of higher education from around the world to conduct joint research and explore new discoveries. The future is bright for the UCC, and we envisage it as a beacon of academic leadership and innovation.

Positioning the UCC

Q: How would you seek to differentiate the

UCC from other universities within Jamaica and the Caribbean? [Could you also share how academic leadership and fostering a culture of research are part of this differentiation?]

President Davies: There is so such a big gap in this region regarding higher education provision that we do not need to be concerned about competition. The statistics show that 65% of Jamaica's workforce is skilled but not qualified. There is a wide field for individuals to access educational programmes. We will provide programmes that we have developed, and where necessary, we will collaborate locally and internationally. We continue to sign agreements with regional and international entities to offer a comprehensive range of programmes. For instance, just the other day, I visited a school in a challenged community in Montego Bay. We will be doing something for the school to ensure that the students have an opportunity to look beyond where they are and see the wider scope of opportunities in Jamaica. We aim to transform lives, which is what the UCC is here for.

Creating Positive Social Impact

Q: The UCC seems to have a strong focus on making a meaningful societal impact on Jamaica and the wider Caribbean. I also see innovation as a key theme in the UCC's agenda. Could you elaborate on how the UCC is positioning itself in terms of innovation and academic excellence?

President Davies: There are a number of initiatives in that in the works. One part of these is related to allowing our students to experience new discoveries through simulation. This goes beyond just simulation labs; they will be able to immerse themselves in environments where they can interact with cutting-edge technologies and developers. Thus, as part of our academic leadership vision, we want to attract innovative companies and individuals to the university to work with our students and communities, showcasing that creativity is vibrant here at home and across our region. Moreover, we are leveraging technology and innovation in artificial intelligence, data science, and big data to make scenario predictions and conduct relevant research for our communities, particularly in areas such as the impact of crime

in our cities and towns.

We also want to explore the natural environment, for example, looking into our forests for native species that could contribute to groundbreaking treatments in healthcare. This is consistent with our research vision to achieve not only academic excellence but also make significant contributions to society. We are also looking at the ocean surrounding us to see what new ocean-based technologies we can develop. The goal is to scale up these inventions for a global market and ensure resources flow back to the university. This is just a glimpse into what we have in store, especially in the area of innovation. We like to maintain an element of surprise, but we will be announcing more as we move forward.

Q: To reflect on my understanding, sustainability is a key challenge and specific areas must be addressed for the university to continue being a self-sustaining entity. In light of this, how do you see academic leadership and a forward-thinking research vision as essential to ensuring UCC's sustainability?

President Davies: Academic leadership and a forward-thinking research vision are

indeed critical components of sustainability in higher education. We must plan well, execute strategically, and establish partnerships that enable us to grow and provide the services that our clients need. The level of service must be second to none, so that our clients do not look elsewhere for these services. By fostering a culture of innovation and academic excellence through our leadership and research endeavours, we can ensure the sustainability and continued growth of UCC.

Q: Now, considering your role as a top educational leader, how do you see the role of academic leadership evolving in the next 5 to 10 years, given the changes in technology, politics, and other factors?

President Davies: We are indeed living in a time of change. A couple of years ago, I was in Tampa, Florida at a strategic planning workshop. We visited biomedical facilities and observed new discoveries in technology. One instance that stuck with me was when a colleague held up his cell phone and mentioned that in 7 to 10 years it would be obsolete. He talked about microchips in our ears and mouths. It seemed far-fetched, but we actually saw these

microchips being developed and tested.

As an academic leader, it is crucial to understand that these changes in technology are bound to have an impact on higher education. We need to adapt and rethink how we operate. This involves working closely with industry to understand their needs and requirements. There's a need to focus on smaller, stackable bits of information that individuals can learn in a short span, and receive credit for it, which they can then apply to other areas if they wish.

Traditional academic paths may be altered. For example, rather than spending four years to acquire a bachelor's degree in computer engineering, a student might opt for a six-month certification course from Google, Microsoft, or another company. This would allow them to earn substantially more than they would with a traditional degree. Overall, as the leaders of this organisation, it is essential for us to be adaptable and innovative in a rapidly changing environment.

Embracing Agility

Q: Finally, considering the UCC's capability to transition fully to virtual learning during

the pandemic and the potential emphasis on being a dual-mode university with both online and face-to-face options, what implications does this have for leaders who might have a traditional face-to-face perspective in an environment that is changing rapidly?

President Davies: Leading in a dynamic and changing environment is always exciting. It keeps us alert and up-to-date with research and opportunities. As for students' preferences, yes, online learning is here to stay. But there are also students who face challenges navigating online platforms. As academic leaders, we need to strike a balance between embracing the technological shifts and providing the much-needed human interaction. This calls for a more flexible and adaptive leadership style that is not only open to change but actively seeks it, especially when it comes to incorporating new educational technologies and methodologies. We also need to be aware of the diverse needs of our students and be prepared to meet them where they are.

References

Kohtamäki, V. (2019). Academic leadership

and university reform-guided management changes in Finland. *Journal of Higher Education Policy and Management*, 41(1), 70-85. **<https://doi.org/10.1080/1360080X.2018.1553499>**

Kruse, S., Hackmann, D., & Lindle, J. (2020). Academic leadership during a pandemic: Department heads leading with a focus on equity. *Frontiers in Education*, 5, p. 614641. **<https://doi.org/10.3389/feduc.2020.614641>**

PRACTITIONER INSIGHT

Inclusion in Education: Using Individualised Educational Programmes (IEPs) to Enhance the Delivery of Academic Services for Students with Special Needs

Interview by **CECILE DENNIS, DBA***

School of Business, Entrepreneurship & Management, University of the Commonwealth Caribbean

* **Corresponding author:** *cedennis@faculty.ucc.edu.jm*

Precis: The Education for All Handicapped Children Act of 1975 of the United States of America states that each state and local educational agency must develop an individualized education programme (IEP) for every child receiving special education. Dr. Cecile Dennis researcher interviewed a special educator and supported the findings with details of an IEP developed for a student with an emotional disability.

Background to the Interviewee

Mrs. Browne¹ is a trained special educator with over 35 years of experience working in the field of special education. Our participant earned a diploma in Special Education specializing in learning disabilities from a Jamaican teachers' college, then a Bachelor of Education specializing in multiple retardations from a local university, and is a US certified special educator. Mrs. Browne later earned a Master of Education specializing in curriculum and instruction and has been working in the United States in the field of

education since 2009, with special needs students in an inclusion setting (classrooms where students with and without learning disabilities learn alongside each other). In the USA individualized education plans are an integral part of special education and are required by law for all students identified with intellectual, physical or emotional needs classified as special needs.

Background to the IEP

Interviewer: What is an IEP?

Respondent: I will be speaking from my experience within the context of the county in

¹Pseudonym

which I work, as there may be variations across states and counties. An IEP is a legal document developed to ensure that every individual (adult or child) in the USA with a learning disability or exceptionality is given an equal opportunity to earn similar education as any other student, but with some modification that will help the individual to accomplish goals in the educational setting. I use the term exceptionality because if there are students with a higher intelligence quotient (IQ) than their peers, they too qualify for an IEP to be developed and accommodations must be made to assist them to perform in the specific education setting. Accommodations may include providing English speakers of another language (ESOL) services to a second-generation English language learner, that is, a student born in the United States to parents who speak a foreign language, a teacher reading to the student who has a reading challenge, during non-reading tests or who is visually impaired, or providing a calculator or additional time during a mathematics test to a student who reads but works slowly, or is easily distracted.

Interviewer: Tell us about the history of IEPs

Respondent: IEPs were developed in the 1970s when many students with disabilities were not attending schools, as sometimes happened in Jamaica too. Some states established laws that excluded persons with disabilities such as deafness, blindness, and emotional and intellectual disabilities. By 1975 Congress enacted the Education for All Handicapped Children Act (known also as the EHA or Public Law 94142) to support States and other localities, to protect the rights of individuals with disabilities to meet their needs and to improve the educational results of infants, toddlers, and children and their families by extension, So this allowed many children with disabilities, who previously stayed home to begin attending school. In 1990 EHA was changed to IDEA – Individuals with disabilities education act (the EHA law was reauthorised and later revised in 2004 with improvements on the EHA to convert it to IDEA). The main discussions were about the implementation of the document and how IEPs should be interpreted by persons working

with the documents. The US Department of Education said that in 2021 public schools provided 7.5 million students with disabilities with special education when compared to the 1970s when 1.8M special needs students were excluded from the public education system. The data also showed that 66% of students with disabilities were placed in the general school system, spending 80% of their time in general classrooms. Note that the IEP may recommend inclusion, that is, that students be placed in the general classroom. However, for some students such as those with severe autism, they could be recommended for a self-contained classroom. The IEP, however, will state that the student should be placed in the least restrictive environment (LRE).

Interviewer: How is an individual/student identified initially for an IEP?

Respondent: At the start of the school year, the county conducts pre-tests on all students, including a reading running record to determine their reading levels, and the results are retained and used for reference. This is the 'present level of performance' (PLOP) test. However, a

teacher with gut feeling can tell that a student is not performing on or near required grade level expectations based on the norms or curriculum standards that have been established based on research. Teachers have an idea of what students at different grade levels are able to do once they have been properly instructed. Where there are drastic differences the teacher intervenes with a one-on-one solution, reaches out to the parent, and uses research-based strategies that are likely to bring about that change in the students while trying to get the parent on board at home as well.

Interviewer: What is a compartmental IEP?

Respondent: The IEP is also referred to as a compartmental IEP because it has several parts which makes it easy for the parent of the individual to understand what the IEP is about.

Interviewer: What is the process for developing an IEP and when is an IEP completed?

Respondent: The process begins when the teacher recognises that the student is performing below the standards of his grade

level. The teacher reaches out to the parent to share details of the observation, then prepares a ‘Response to Intervention’ (RTI) which details corrective strategies to be used for a specified period and documented performance data. If the RTI fails, the teacher contacts the student support team (SST) which may include an administration representative, the school’s guidance counselor, the class teacher, and possibly a reading intervention teacher or a math intervention teacher, which may even include the school psychologist depending on the observed difficulty. Because sometimes there are behavioral difficulties, the school psychologist and guidance counselor are required.

The SST formally requests details of the child’s background, challenges, and difficulties, reviews the information, and arranges a ‘permission to test’ (PTT) meeting with the parent, led by the IEP facilitator and including the teacher and relevant professionals depending on the disabilities. Where necessary the child is observed and tested and the results are presented to the parent. The IEP facilitator outlines the recommended interventions to the

parent. The IEP is then developed electronically and routed to the parent for review and signature. The IEP can only be implemented after the parent signs the document.

However, before the IEP is implemented the child is tested and the team returns to a meeting called ‘Review of Testing’ (ROT) in which each professional discusses the results of the tests they conducted. County regulations allow the IEP facilitator three attempts to meet with the parents, after which the IEP can be implemented without the parent’s permission. Note that prior to meeting with the parent, the psychologist receives all results and utilizes a set of mandatory questions to determine if the child qualifies for an IEP and must state under what disability category the child qualifies, that is, learning, speech, emotional, or physical. The psychologist then advises the parent of the relevant professional who will develop the IEP with specific goals. The group reconvenes with the parent within 30 days to present the IEP. The document is submitted to the parent who has 5 business days to sign and return the document after which the IEP is implemented.

Interviewer: What is the process of transitioning students to another level?

Respondent: IEPs are done at any level as early as the preschool stage where the student is described as an individual with a developmental delay but at the kindergarten level, the assessment begins to identify the disability level. To move to the next level, there is a transition meeting between IEP members of the outgoing school and the incoming school. The student's strengths, weaknesses, goals, and service hours as the schedule changes when school levels change. The school may implement a plan to prepare the student to transition based on the anticipated changes and this is discussed with the parent

Interviewer: Where does the IEP end?

Respondent: An IEP ends when after a series of years of data collection, assessments, and re-evaluation prove that the child's goals have been met or exceeded, the IEP team recommends that the student can exit the programme. However, IEPs continue through to the college level, and in that case, there is a transition meeting between the members of

the IEP teams of both institutions to discuss interventions and the details of the student's special needs.

IEP in Action: Emotional Disability

The Case of a Student with Severe Anxiety and Dyscalculia

The case data involved a middle school student in the USA whose parent observed that at around 11 am each day, the student would become sick and throw up. Additionally, the school's guidance counselor contacted the parent to discuss their observation that the student was sick daily. Professional assessments identified that the student suffered from severe anxiety and dyscalculia, a learning disorder that affects a person's ability to understand number-based information and mathematics. On the 'mathematics days,' she would undergo what medical professionals displayed as an anxiety attack, evidenced in severe vomiting.

Following an assessment by professionals and a meeting with school officials, the student was placed on an IEP, which permitted her to be home-schooled under parent instruction. During that period,

the student acquired a dog. After being in the programme for an extended period, the student expressed a desire to return to school so she could graduate with her peers. Following the parent's request and discussions with the IEP team, the psychologist recommended that the school should make accommodations for the student to be allowed to resume school with her dog, a psychiatric service dog trained to perform specific tasks for individuals living with phobias, suffering from mental illness, other anxiety disorders, or unnoticeable disabilities.

References

- Gallagher, J. J., & Desimone, L. M. (1995). Lessons learned from implementation of the IEP: Applications to the IFSP. *Topics in Early Childhood Special Education, 15*, 353–378. <https://doi.org/10.1177/027112149501500307>

NOTES ON CONTRIBUTORS

DR. CECILE DENNIS is an Assistant Professor at the University of the Commonwealth Caribbean in the School of Business, Entrepreneurship & Management. She has years of corporate experience in leadership, product and customer research across multiple industries. Her research interests include fraud, organisational culture and HR productivity.

DR. CRAIG MCNALLY is a licensed associate counselling psychologist and adjunct lecturer at the University of Technology, Jamaica, University of the West Indies, Mona, and the University of the Commonwealth Caribbean. His research interests are diversity and inclusion, educational leadership and mental health.

MS. NEKIESHA REID is a Lecturer in the Department of Language & Cultural Studies at the University of Guyana. Her expertise extends to academic writing and research and curriculum development. Her research interests include technology integration and the impact of digital tools on learning outcomes.

DR. VERONICA REID-JOHNSON is an Assistant Professor at the University of the Commonwealth Caribbean in the School of Business, Entrepreneurship & Management. Her research interests currently include technology integration in higher education, blended learning, and andragogy versus pedagogy.

DEBBIA BROWN-ROSE graduated with a BSc in Business Administration from the University

of Commonwealth Caribbean.

ANGELA JOHNSON graduated with a BSc in Business Administration from the University of Commonwealth Caribbean.

ELIZABETH KING graduated with a BSc in Business Administration from the University of Commonwealth Caribbean.

SHEMAR LAWRENCE graduated with a BSc in Business Administration from the University of Commonwealth Caribbean.

SUBMISSION GUIDELINES

The Caribbean Journal of Applied Innovation & Research is published bi-annually in March and October by the University of the Commonwealth Caribbean.

Manuscript Submission Guidelines

The Caribbean Journal of Applied Innovation & Research (CJAIR) is an international, multidisciplinary, peer-reviewed journal aiming to promote and enhance research and innovation in diverse fields of knowledge, including arts, business studies, entrepreneurship, finance, hospitality, humanities, information technology, law, occupational studies, management, and technology. CJAIR is published by the University of the Commonwealth Caribbean and is intended for readers in the scholarly community and for professionals in industry.

A range of papers is encouraged, including evidence-based research papers (empirical, replication, literature review, theoretical, or methodological articles) and personal reflections. In addition to academic research papers, CJAIR welcomes scholarly book reviews, commentaries, practitioner articles, summaries, and works-in-progress. Any academic referencing style (APA, MLA, Chicago, etc.) may be used based on the Author(s) discipline. Author(s) should use Calibri, Arial or Times New Roman, double spacing in MS Word document, 12-point font, and left align.

Title page: The front page of the paper should include the title of the paper plus the name, affiliation, contact information, and email for each author.

Abstract: This should be no longer than 250 words, summarising the research problem and its significance, the methodology used, key findings, analysis and interpretation of the findings, and conclusion.

Keywords: Three to five words, phrases, or acronyms.

Introduction: Background, rationale, purpose of the study, research objectives, research questions and/or hypotheses, review of relevant research.

Body of Paper

- **Method:** This section should cover the following as relevant: research design, inclusion and exclusion criteria of participants, sampling procedures, data collection, procedures, data analysis, reliability and validity, ethical issues considered, etcetera
- **Results/Findings:** Discuss major findings in relation to the research questions/objectives. Include: discuss major findings according to research questions/objectives with the literature, support or refute findings, alternative interpretations, study limitations, implications, etc.
- **Conclusion:** Summarize major findings and provide recommendations, if applicable.

References in discipline-appropriate style.

Acknowledgments (optional).

Appendix (optional).

Each author should submit with their paper a brief profile indicating the highest qualifications, academic base, and research interests.

Note:

Journal articles should not exceed 6,000 words.

Industry Notes should be at least 600 words.

Papers should be submitted electronically to uccjournal@ucc.edu.jm.



**UNIVERSITY OF THE
COMMONWEALTH
CARIBBEAN**
Fostering Leadership & Innovation

Published by
University of the Commonwealth Caribbean
17 Worthington Avenue
Kingston 5,
Jamaica W.I