

## **The adoption of open access journals for publishing management research: A review of the literature and the experience of The University of the West Indies**

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### **ABSTRACT**

The article reviews the literature in the field of academic journal publishing highlighting the phenomenon of the recent entry of Internet-driven open access journals into a field dominated by the traditional subscription journals. The article has a twofold purpose of gaining an understanding of the main features and characteristics of the open access journal system through a review of the literature; and assessing the extent of adoption of open access by researchers in the management discipline through a review of the management publications by the University of the West Indies (UWI) researchers. A sequential exploratory strategy of two phases was used. The first phase focused on the collection of secondary data on journal publishing and the second involved reviewing the publishing record of The UWI with particular reference to management research. The main finding is that open access was not fully embraced as a publishing outlet because of academic resistance derived from questions of acceptability, and the existence of a system that assigns greater recognition to the established subscription journals. The article concludes that open access journals have grown in respectability and quality and are a good option for publishing management research by authors located in developing regions, provided the operational characteristics of this mode of publishing are understood and caution in journal selection is exercised.

**Keywords:** *Academic publishing; subscription journals; open access journals; business and management journals; the University of the West Indies publications.*

### **INTRODUCTION AND BACKGROUND**

Researchers based in developing countries, face major challenges in having their research on business and management related topics published in reputable journals. The reasons are the lack of knowledge and information about the publishing industry, the options available, and the existence of an unbalanced publishing ecosystem (Beverungen et al., 2012; Cope & Phillips, 2014). This review article provides a perspective from the Anglo-Caribbean region which, as part of the Global South, was systematically denied access to major management journals because “the domination of Western scholarship is part of an overall neo-colonial political economy” (Murphy & Zhu, 2012, p. 923). The field of academic publishing dates back to more than 300 years based on the publication of journals by academic societies, financed by members’ subscriptions, and this mode of publishing remains dominant to the present, through the existence of large commercial publishers (Forgues & Liarte, 2013). This article argues that researchers in the management discipline face a tough assignment of being accepted by one of the top-ranked subscription journals. This is particularly the case if the researcher is writing from a Caribbean perspective because academic publishing is in its infancy in that region hence the learning curve is steep; business practices are not well documented; data sets are small

and the scope and content are not significant to the major audiences resident in the developed countries of North America and Europe; and a bias exists against research articles from the Global South (Beverungen et al., 2012; Murphy & Zhu, 2012; Cope & Phillips, 2014; Burchardt, 2014). In this context, a study of the publication of articles on entrepreneurship revealed that, from a total of 317 articles published in seven leading journals over the period 2000-2015, fifty one percent were written by a group of 25 established authors (Gupta et al., 2016).

The birth of the Internet and the spread of ICT led to the creation of open access journals (OAJ) which facilitate the easy dissemination of knowledge across borders. In this context, the purpose of this article is to review the phenomenon of open access with a view to identifying the main features of the mode of journal publishing and the implications for publishing management research; and to also review the extent of adoption of OAJ by researchers of management topics located within the University of the West Indies (UWI) system. The UWI is a multi-campus university serving the Anglo-Caribbean region of seven million citizens and is the premier institution of higher education in the region. The intention is that, armed with this information, researchers will be motivated to increase the volume of management articles thus contributing to filling the knowledge gap in that discipline (Iton & Iton, 2015), and to extending knowledge sharing within the academy. Thus, the major issue addressed in this article is whether OAJs represent a sound option for publishing management research articles.

Several theories and conceptual frameworks were applied to academic publishing over time but such theories focused mainly on the knowledge management process, with emphasis on knowledge creation within a business organization setting. The early proponents of the theory of knowledge creation built a model based on the concepts of socialization, externalization, combination, and internalization (SECI). This model involved converting new tacit knowledge, sharing the knowledge, processing the knowledge, and converting the knowledge from explicit to tacit for sharing (Nonaka, 1994; Nonaka & Takeuchi, 1995). The SECI model was later revised as a 'new knowledge-based theory' by incorporating dialectical thinking for synthesizing contradictions through interaction among individuals, organizations, and the wider environment (Nonaka & Toyama, 2003). Against this background, this article is underpinned by the theory of knowledge as a public good that is supported by the entry of OAJ as an option for researchers; and the theory of knowledge dissemination which is a core objective of the institution of higher education examined in this paper.

The theory of knowledge as a public good has its roots in the economic theory of production that described a good as non-rivalrous in that it is not diminished through use, and non-excludable when available to the general public (Suber, 2009). In terms of the publishing industry, it was argued that the dissemination of academic knowledge was the *raison d'être* of academic publishing, but subscription journals excluded readers because of relatively expensive access to the content, commonly called pay-walls (Ren, 2015). This exclusion was mitigated by universities through the acquisition of journal licenses in order to facilitate access by the academic community. The emergence of open access was considered as the best means of achieving a global knowledge commons and viewed as a "quintessential global public good that should be freely available" (Chan & Costa, 2005, p. 149). Further, the creation of such public goods contributed to the provision of equitable access to developing countries that addressed the poverty of information issue (Chan & Costa, 2005; Verschraegen, and Schiltz, 2007). The theory of knowledge dissemination was considered the most important element of the knowledge management process, and a key component of the global knowledge supply chain (Wang & Noe, 2010; Li et al., 2015; Sazvar et al. 2017; Alshamsi et al., 2017).

The research method followed a sequential exploratory strategy conducted over two phases. The first phase focused on the collection of secondary documentary data on the publishing industry with emphasis on journal publishing. The secondary data were sourced from: relevant peer reviewed journals downloaded from the ABI/INFORM-ProQuest and EBSCOhost full-text aggregator databases; searches of Google Scholar and the Directory of Open Access Journals (DOAJ), both major sources for accessing open access management journals; and Internet searches for industry reports using the key words identified. Subsequently, a thematic analysis considered “a foundational method for qualitative analysis” (Braun & Clarke, 2006, p. 4), was undertaken to identify patterns across the research data and the critical issues through a process of data familiarization, coding, searching for themes, reviewing the themes, identifying and refining the specifics of each theme, and writing up the text (Braun and Clarke, 2006). This process facilitated the achievement of a deeper understanding of the dynamics of the phenomenon of academic publishing and related themes, and is considered a transparent and systematic research process which allows for researcher creativity and subjectivity in the theme development process (Vaismoradi et al., 2016). This first phase provided a deeper insight into the publishing industry and the emergence of OAJ, the details of which are set out in the subsequent section on the review of journal publishing.

The second research phase involved a review of the publishing record of The UWI with particular reference to management research in a university setting where knowledge sharing targets academic researchers (Bernius, 2010). Empirical data were obtained from the websites and archives of The UWIs faculties of social sciences, management studies departments, and its three business schools. Some of the data on articles published by faculty and graduate students were not available in a consolidated document, therefore, the authors examined the raw data obtained from the websites, departmental reports, indigenous publishing outlets, and business schools’ reports. The analysis of the primary data was based on descriptions of the general characteristics and relations that emerged (Yin, 2003), and provided the context for determining the publishing preferences of UWI researchers and whether OAJ were an option. This analysis was informed by the authors’ status as ‘insiders’ utilizing an insider action research approach that produced contextual insights into the preferred modes for sharing management research (Coglan & Brannick, 2005), and permitted access to operational information and practices that were not available to outsiders because of privacy and sensitivity issues (Ollila & Williams-Middleton, 2011).

Consistent with acknowledged qualitative procedures, the process involved: the researchers as the key instruments for conducting the research; multiple sources of data; a theoretical lens which sought to identify the social and political context of the issues studied; and a holistic account to better reflect the complex picture of the study elements (Creswell, 2009). Further, qualitative reliability was established through consistency of approach with other researchers reviewing notes and manuscripts. Qualitative validity was pursued through checking for accuracy of the findings, and using rich, thick narrative and qualitative particularity, rather than generalizability. This was achieved through the descriptions and themes developed for the particular research setting (Creswell, 2009; Saunders et al., 2009).

## **REVIEW OF THE LANDSCAPE OF JOURNAL PUBLISHING**

### **The Traditional Subscriptions Model**

The early years of scholarly journal publishing were traced to 1665 based on the initiative of the Royal Society of London whose objective was to promote knowledge dissemination among

research colleagues (Larivière et al., 2015). An industry developed based on the traditional model dating back three centuries with support from learned societies (Correia & Teixeira, 2005), while, more recently, the OAJ, driven by the spread of Internet technology is emerging as a publishing option (Solomon, 2012). The growth of subscription journals was spurred by the expansion of commercial publishers who acquired society journals and created an oligopoly among the big commercial publishers (Larivière et al., 2015). The large publishing companies dominated the industry by accounting for more than 50% of journal output (Larivière et al., 2015; Peters et al., 2016), and were described as exploitative (Beverungen et al., 2012). With the growth of commercial publishers of subscription journals, the model became dominant which continues to the present as measured by income and profits earned (Forgues & Liarte, 2013). However, current investigation of the publishing industry indicated that the industry is in transition from being content providers to a data analytics business that is focused on

*“research assessment systems, productivity tools, online learning management systems ... critical to conducting the end-to-end business of the university” (Aspesi, Allen, Crow et al., 2019, p. 5).*

In this context, the authors found that publishers' revenue growth from subscriptions had declined by 1-2%, while open access revenue growth was between 3-4% which is lower than 10 years ago.

Subscriptions paid by universities and libraries sustained the operations of the traditional model, but more recently, concerns were raised as to whether this model blocks access to research, and whether its cost structure will threaten its viability in the medium to long-term (Chang, 2006; Wellen, 2013). Market leadership was achieved through a strategy of packaging a mix of journals of varying impacts into bundles as 'Big Deals'. These bundles were sold to universities and major public libraries at rates that were considered high (Cope & Kalantzis, 2009; Wellen, 2013). Although libraries are the main customers and sources of income for the subscription journals, several libraries were forced to cancel subscriptions because of increasing costs, but such action imposed a major negotiation burden on librarians (Larivière et al., 2015). Although journal publishing was considered a small market in the overall realm of the publishing industry, it was judged to be highly profitable amounting, in 2015, to \$9 billion in earnings representing a return of 20% to 30% (Fecher & Wagner, 2016).

### **The Open Access Movement and the OAJ Model**

The modern world of academic publishing was transformed in the 1990s reflected in the birth of the open access movement and the introduction of open access publishing that was driven by Internet technology, which technology was viewed as a “learning and business tool for information dissemination” (Mapuva, 2009, p. 101). The open access movement developed in the early 2000s based on support from declarations and statements agreed by reputable organizations at Budapest, Bethesda, Berlin, and by the International Federation of Library Associations and Institutions; and the formal adoption of open access policies by several major governments. This support was further strengthened in 2018 by the formation of cOAlition S, an international consortium of research foundations. This consortium introduced 'Plan S' which stipulated that from 2021, scientific publications that result from research funded by public grants must be published in compliant OAJ or on open access platforms (Schiltz, 2018; Science Europe, 2018). However, it was suggested that caution be exercised by researchers because Plan S can pose a threat to researchers in the Global South through the creation of greater inequality and exclusivity (Mudditt, 2019). While Plan S is contentious, it points to the actions

credible organizations and governments are prepared to take in promoting openness. However, as indicated by Solomon (2012), the academic publishing industry is still in a state of flux with system stability yet to be achieved. The evolution of the OAJ model and strategies adopted by the subscription publishers to meet any challenges are monitored regularly by The Society for Scholarly Publishing through its blog, The Scholarly Kitchen; and Delta Think which exists to assist organizations in managing change, and also monitors the open access market growth.

However, Willinsky (2006) argued that open access contributed to global knowledge sharing, facilitating greater access to information and academic output, and supported knowledge as a public good. Further, because OAJ publishing was in its infancy, acceptance of this option as a publishing outlet for academic articles experienced slow acceptance by universities faced with powerful competition from established subscription journals, and negative publicity surrounding publishing practices (Solomon, 2013). The development of an open access movement and publication of OAJ created a new focus on openness as a feature of academic publishing and as a potentially disruptive force (Björk & Solomon, 2012; Allahar, 2018). However, despite the present growth of OAJ publishing, literature which addresses the situation of developing countries, especially small developing countries like those of the Caribbean, is very limited because the main audiences are located in the more developed countries (Iton & Iton, 2015; Olavarietta, 2016).

### **Types of OAJ**

An OAJ was defined by Laasko et al. (2011) as one that can be read or downloaded, at no charge, however, this is somewhat misleading because of different degrees of openness. The application of the OAJ model resulted in the creation of several variations. For example, the diamond version of open access is fully free to authors and readers because publication is generally subsidized by universities and societies. However, the dominant OAJ is gold open access which is fully accessible, except that, readers may be required to pay a fee, if not previously met by a university or the author. Hybrid OAJ are essentially subscription print journals which offer authors an open access option for a fee. The other main version is the green OAJ which is also a subscription journal but allows an author to deposit an article in a repository after an embargo period thus delaying immediate access (Burchardt, 2014). Globally, the distribution of journal publishing was recorded as: gold open access (17%) of which half are diamond; hybrid (49%); green open access (2.4%); and subscription only (31.7%). These results revealed an overall picture of 65.8 % of all journals providing an immediate open access option, while 34.2% are pure subscription journals (Universities UK, 2015). A recent update to these statistics by Universities UK (2017) over the period 2012-2016, showed that hybrid journals lead the distribution profile with 45% of articles, with subscription journals at 37%, and fully-OAJ 18% on a global scale.

The entry of OAJ fueled an increase in academic publishing but mainly in the science disciplines with much less attention to management articles (Solomon, 2013). However, resistance to publishing in OAJ by established academics persists because of questions of credibility and the precise concept of free access (Osborne, 2013; Ren, 2015). It was argued that concern among academics about the quality of OAJ led to “significant levels of disinterest, suspicion and skepticism of open access among researchers” (Pinfield, 2015, pp. 612-613; Ren, 2015). This situation is likely to change in the near future as studies of fully-OAJ found that the percentage increase of quality for the period 2011 to 2017, measured by the three leading impact factors, exceeded the subscription and hybrid journals (Delta Think, 2018). With the advent of OAJ publishing, there was also initial concern that a challenge would be mounted against subscription journals, but this did not materialize with subscription-based articles

comprising 83.4% of articles globally, compared with 16.6 % for immediate OAJ (Universities UK, 2015). However, in the dynamic journal publishing arena, the picture is changing significantly. More recent data, derived from an analysis of the publishing models of 40 major publishers for the years 2015 and 2017, revealed that hybrid journals represented 73%, full-OAJ 18%, and subscription journals 9% (Universities UK, 2017). Based on an extensive study of OAJ listed in the Directory of Open Access Journals (DOAJ) database, Frantsvag (2010) found that little attention was paid to small open access publishers which left a gap in the research on journal output.

### Author Processing Charges

The creation of OAJ is linked to the introduction of article processing charges (APC) or author fees imposed by publishers for publishing articles in their journals. Such an imposition has been criticized by researchers and other stakeholders and was associated with low quality journals that provided no or poor article-content reviews, and which existed mainly for income generation, not knowledge sharing. The requirement for authors or their universities to pay APC for publishing in some OAJ became standard practice which behavior was subsequently adopted by some subscription journals through the hybrid or pay-to-read approaches. Many academics view this practice as unacceptable and disquieting with an implied bias against the humanities and social sciences, and discriminatory against researcher output from developing countries in the Global South (Burchardt, 2014; Kember, 2016; Crotty, 2019).

There is lack of clarity about the payment of APC because of the wide variation in charges imposed by journals which ranged from \$8 to \$4,114 with average APC moving between \$178 and \$964 (Shen & Björk, 2015). Some researchers claim that APC are in a transitional phase which is showing signs of decline while the author-pay system seems to be at a dead end (Russell, 2019; Crotty, 2019). The imposition of author fees by journals constitutes a major obstacle to journal publishing by authors based in developing countries where foreign exchange for paying credit card fees is difficult. Nevertheless, the application of APC has been embraced by publishers of major journals with authors paying for the facility of having their articles as open access, or with readers having to pay for access on a per article basis. This funding model is considered to have flaws and benefits. A major flaw is that it discriminates against authors who have limited institutional support such as those from developing countries and this can create publisher conflicts (Michael, 2019). The main benefit is that it permits the development of scalable and sustainable models at the individual journal level (Michael, 2019). The general conclusion is that APCs are not expected to disappear because there is no solution that will fit all circumstances.

Critics of open access questioned whether digitalization of publishing was a blessing or curse because of: the explosion of new journals; quality and intellectual property issues; the risk of a reputational deficit; and low esteem in the eyes of research funders and university officials (Rohrer, 2014; Ren, 2015). In this regard, Peters et al. (2016) pointed out that researchers are

*“operating in a fluid, and potentially exciting new landscape, one in which the traditional western audience is changing, and in which non-traditional scholars are coming to play a role as both readers and contributors”* (p. 1420).

Overall, the benefits of open access were viewed as: promoting research discovery and providing an impetus for scholarship; documenting social benefits; improving education and access to the most current research which facilitates wider learning; reducing production costs; reducing entry barriers; and stimulating competition in publishing (Ray, 2016). Further, in

relation to the theory of knowledge as a public good, OAJ were seen as supporting democracy-based notions through facilitating greater public participation; and socio-political impacts through levelling of the publishing playing field by reducing information poverty (Herb, 2010).

### **Peer Review Process and Predatory Publishing**

The peer review system was developed as the standard for establishing the quality of any article submitted for publication. The process normally includes an initial assessment of the article's content using plagiarism software, and an editorial check for relevance to the particular journal's scope and policies. If the article passes the initial screening, the editor refers the article for blind review by independent academic reviewers who are expected to possess the relevant knowledge and expertise to be able to comment on its quality, rigor, and acceptability (Ali & Watson, 2016). This argument was challenged by Brewis (2018) who suggested that peer review of management and organization studies articles suffered from "excessive reviewer and editor tampering" that contributed little to quality improvement (p. 23). The peer review system was also faced with other challenges including reliability, observance of high standards, fair and unbiased comment, workload management, fraud detection, and, most importantly, timely feedback from reviewers (Guthrie et al., 2015). As a result of these challenges, authors have suggested the need to devise alternative peer review practices that are more consistent with the capabilities of modern ICT (Peters et al., 2016). Examples of such alternatives include: Cornell University's arXiv science articles archive; post-publication reviews (Tattersall, 2015); the utilization of independent paid reviewers (Wellen, 2013; Peters et al, 2016); and adoption of a process that focuses on rigor of the arguments rather than results which should be the domain of readers (Shen & Björk, 2015).

It is argued that open access led to the rise of 'predatory publishers' which Ray (2016) described as

*"an exploitative open access publishing business model that charges authors without providing the editorial and publishing services associated with legitimate journals"* (p. 311).

Peters et al. (2016) argued that the 'publish or perish' syndrome has driven new researchers to publish in low quality or disreputable journals, and the proliferation of predatory behavior works against the progress of the open access movement while supporting 'vanity' publishing. This argument was supported by Ray (2016) who suggested that publishing in predatory journals can damage the reputations of authors, their institutions, and academic scholarship. In fact, Shen and Björk (2015) attributed the negativity around OAJ to publicity generated by predatory behavior, to which researchers in developing countries were more vulnerable because of poor access to the major journals. A debatable position was also taken by Shen and Björk (2015) that predatory journals were not a source of major problems, because the practice was limited and regional, and was likely to disappear in the future. This argument was supported by Forgues and Liarte (2013) who calculated that predatory journals amounted to 3% of an estimated 10,000 journals studied. Nevertheless, predatory publishing raises serious ethical questions for authors and academia Ray (2016), while the negative consequences of publishing in low quality journals can frustrate promotion efforts within the university system (Al-Khatib, 2016).

## Journal Indexing and Impact Factors

The concept of 'abstracting and indexing' of journals or articles has been broadly interpreted and applied to actions such as: entered in a full-text aggregation database such as ABI/INFORM ProQuest and EBSCOhost; listed in a reputable directory such as DOAJ; catalogued in a university library; included in a major reference management system such as Mendeley; archived in an institutional repository; or uploaded to an academic social network such as Academia.edu or ResearchGate. Journals generally utilize the services of indexing and abstracting agencies as an indicator of quality, and new authors need to become familiar with the reputable indexing services which include Scopus, and Thomson Reuters-Web of Science. The impact of journals is traditionally measured by citation rates which are compiled as impact factors by agencies such as Thomson Reuters, such factors providing a gross indication of a journal's prestige. Using citation rates for the measurement of impact factors was challenged by researchers who suggested the following: The judgment of what is important should be left to the reader after publication (Pinfield, 2015); the greatest impact derives from the topic and author, not the reputation of the specific journal (Harzing, 2017); and went on to suggest the introduction of an alternative impact factor such as the percentage of highly cited articles in a specific journal (González-Betancor & Dorta-González, 2017). With the growth of OAJ, the emergence of agencies providing fake impact factors have surfaced so their validity should be checked thoroughly before selecting a journal for publication.

## Journal Selection

The top subscription journals that publish management research continue to be represented by a relatively small collection of publishers who have created a tight circle of researchers whose works get published (Gupta et al., 2016). This practice was described as "the domination of management scholarship by networks of academics primarily located in the Anglo-American cultural and intellectual universe" (Murphy & Zhu, 2012, p. 923). Fortunately, because of the increasing number of journals available, researchers have many alternatives such as publications by universities and educational societies which generally absorb all fees, and are notable publishers of management journals. Caribbean-based researchers can access Latin American and Caribbean journals, such as the JECS and the Latin American university-based journals that welcome articles in English and frequently use the diamond model of no fees for authors nor readers which facilitates knowledge exchange within the region consistent with the theory of the public good. Publishing in OAJ was viewed as the best prospect for researchers from developing countries (Björk & Solomon, 2012), however caution in journal selection is recommended because of the existence of low-quality publishing that can negatively impact researchers' careers (Allahar, 2017). A major obstacle to journal publishing is lack of awareness of OAJ within the research community especially in relation to the humanities and social sciences (Russell, 2019), as well as poor understanding of and information on the characteristics and operation of OAJ, and lack of training of researchers on broad publishing issues (Meadows, 2016).

A more difficult challenge is the mindset of academia, because, according to Wellen (2013)

*"university elites and researchers fear that open access mandates may threaten academic freedom and institutional autonomy, and therefore prefer to see slower and more nuanced change" (p. 11).*

The resistance to open access by some university academics was countered by researchers who argued that: the quality of authors' contributions is more important than where published, and open access publishing can be fully meritorious (Rohrer, 2014); the journal debate amounted to a distraction because the issue was not the cost of access to publications, but ensuring good writing and increased accessibility (Osborne, 2015); and any argument against publishing in an OAJ should not influence an author's decision, provided a quality check on the journal's standards was completed (Björk & Solomon 2012). According to Iton and Iton (2015), OAJ provide

*“wider availability of information for scholars to advance socio-economic development within the region and increase the global visibility of their work and their institutions”* (p. 26).

It was further suggested that The UWI should pursue, not only publishing in international journals, but creating indigenous OAJ along with providing support for open access publishing among its researchers which will require a mindset change (Iton & Iton, 2015).

In order to improve their publishing opportunity, authors located in developing regions, are advised to: ensure that the writing is clear and understandable while targeting a specific readership (Osborne, 2015); check for sound manuscript preparation guidelines and templates; conduct a thorough selection process for identifying journals most relevant to the topic; assess journal indexing services and impact metrics; be alert for predatory behavior such as poor review, and quick acceptance; and consider whether the journal was hijacked by using a similar name of a reputable publisher (Dadkah & Borchardt, 2016). In summary, there are a number of factors that influence the choice of journal by authors including: journal reputation; impact factor; service quality; coverage by abstracting and indexing services; delivery mechanism; availability online; author fees; fit with the scope; quality based on impact; speedy review and publication; type of readership targeted; whether an OAJ; and likelihood of acceptance (Chang, 2006; Kennan & Wilson, 2006).

### **Repositories and Academic Social Networks**

Repositories emerged in the 1990s as sites where authors could deposit or upload articles that were accessible to researchers or readers at no charge, and considered as a response to the scholarly publications crisis. The establishment of repositories experienced dramatic growth from a total of 128 in 2005 to 2,253 by 2012, leading to the development of global networks of open access repositories (Pinfield, 2015). Repositories were classified as: 'institutional' or university-based; 'departmental' such as a business school; 'subject' such as business and management studies; 'national' where established by a particular country; and 'topic-based' such as newspaper collections (Brown, 2010). The ecosystem of open access academic repository directories has become significant with the establishment of directories, registries, and a global network lobby. University repositories constitute the largest number worldwide with the US, UK, Germany, Japan, and Brazil accounting for the majority, with a mere three in the Caribbean (Brown, 2010).

In a recent study of the Tanzanian higher education sector, it was concluded that low awareness by students of the services offered by institutional repositories and their potential for enhancing communication, retarded their adoption (Nunda & Elia, 2019). In the context of Latin America and the Caribbean region, researchers have additional options such as the Scientific Electronic Library Online (SciELO) - A model for cooperative electronic publishing integrated into the Web of Science platform (SciELO, n.d.; Chan & Costa, 2005); and Redalyc - A network of scientific journals of Latin America, Caribbean, Spain, and Portugal, coordinated

by the Autonomous University of Mexico (Redalyc.org, 2017). However, with the growing use of university-based repositories in developed countries, it was projected that, by 2034, researchers will publish mainly through repositories, in response to the increasing focus on article and data content, rather than journal ranking (Chadwell & Sutton, 2014). Recent data from the UK showed that the number of full-text articles in institutional repositories grew by 60% between the years 2014-2016 with the number of downloads by researchers doubling in the same period (Universities UK, 2017).

An increasingly used alternative to depositing articles in repositories, is the option of joining academic social networks, such as Academia.edu and ResearchGate, for uploading published articles with content free to all researchers (Laasko et al., 2017). This practice was considered by some publishers as a violation of copyright agreements, and legal challenges were mounted by publishers mainly targeting ResearchGate with its science-based research portfolio. Further, top publishers are exploring other strategies to contend with the academic social networks. For example, Springer Nature, a leading science publication, employed a strategy of direct syndication of journal content to platforms while by-passing the top aggregator databases (Hincliffe & Schonfeld, 2019). Additionally, five top publishers of subscription journals announced that, a service (Get Full Text Research) which facilitates access to their journal content, will be pilot-tested in the first quarter of 2020 (Schonfeld, 2019). Interestingly, it was observed that while the top subscription journals carry prestige, “academic social networks make researcher behavior far more transparent to publishers” and can promote a higher level of performance monitoring by the academic community (Wellen, 2013, p. 9). However, journal prestige remains a determining factor in selection of publishing outlets by researchers, because academics consider publication in prestige journals as payment, and this creates a prestige multiplier effect which open access publishing has not changed (de Zeptenek & Jia, 2014).

### **OAJ and Knowledge Sharing**

With the advent of the Internet and the development of new ICT media for knowledge sharing, the business of publishing faced potentially disruptive forces which were highlighted as: spread of technology that fueled an information revolution and the digitization of text; subsidized structure of publishing which impacts the economics of production through lower costs; distributed knowledge production which extends beyond the walls of academia; geopolitical inequities which disadvantage developing countries; increases in multidisciplinary publications which challenge the discipline-bound journals; and growing impacts on the social processes involved in knowledge production (Cope & Kalantzis, 2009). The identification of these disruptive forces led to a subsequent delineation of a future agenda for knowledge dissemination. These included: formulation of a sustainable model of publishing which is not dependent on payment of fees or subscriptions; achievement of a balance between the interests of academics for intellectual autonomy and universities’ concern with copyright; broadening the scope of article reviews to focus on “experiential, empirical, theoretical, analytical, critical, applicable, and innovative qualities” adopting an approach of more collaborative and integrated knowledge futures that promote equity in the global knowledge system, and eliminating the bias in the journals system dominated by the Anglophone world (Cope & Phillips, 2014, p. 72), and which accord with the theories of knowledge dissemination and social exchange.

## **A CRITICAL REVIEW OF THE ADOPTION OF OPEN ACCESS BY UWI MANAGEMENT FACULTY AND RESEARCHERS**

### **Profile of The UWI**

The UWI, established in 1948, is the premier institution of higher education in the Caribbean. Its mission is

*“to advance education and create knowledge through excellence in teaching, research, innovation, public service, intellectual leadership and outreach in order to support the inclusive (social, economic, political, cultural, environmental) development of the Caribbean and beyond”* (UWI Council, 2012, p. 2).

This responsibility which involves conducting research, generating and disseminating knowledge to societies within the Caribbean region, was considered a critical driver of national and regional development, and is consistent with the theory of knowledge as a public good, even a global public good, which allows developing countries to access the global knowledge pool (Verschraegen & Schiltz, 2007). The UWI operates in four physical campus territories located in Mona, Jamaica; Cave Hill, Barbados; Five Islands, Antigua and St. Augustine, Trinidad and Tobago as well as an Open Campus which offers online and blended programmes. The university offers the traditional programmes of medicine, engineering, law, humanities and social sciences, agriculture, and natural sciences, with management studies added in the early 1990s. Thereafter, three business schools were established with an emphasis on MBA studies and graduate management education which included an entrepreneurship curriculum (Allahar & Brathwaite, 2017). Several of the management courses now employ a blended learning approach which combine classroom attendance with online applications with some courses, such as small business development, delivered online exclusively.

This article critically reviews the record of the publishing of management research by faculty members within The UWIs Departments of Management Studies and business schools, to assess the extent of adoption of OAJ as a mode of knowledge sharing. Among the strategic objectives of The UWI is increasing the number of peer-reviewed publications, while, under the goal of increasing post-graduate research output, mechanisms for disseminating research were proposed (UWI Council, 2012). However, no progress reports on the attainment of these objectives were available. Many higher education institutions and universities globally, developed policies on the publishing of academic articles by faculty and students, invariably subsidizing the costs of publications through direct payments to publishers, or indirect mechanisms such as institutional repositories. In the case of the Arthur Lok Jack Global School of Business (ALJGSB) located in Trinidad, a policy was introduced of providing a financial incentive for articles published in recognized journals from the Australian Business Deans Council (ABDC) ranking system. This policy was extended to the recent creation of a faculty publication site for promoting the published works of staff and researchers which has enhanced the sharing of knowledge.

## Review and Analysis of Data on Management Publishing

### *Sources and Analysis of Data*

The data on the publishing of management research were sourced from The UWI records available at:

- 1) Sir Arthur Lewis Institute of Social and Economic Studies (SALISES, n.d.) the main repository on broad-based social science academic publishing
- 2) Journal of Eastern Caribbean Studies (JECS, 2017), which covers a wide range of social science, management and humanities topics
- 3) Faculties of Social Sciences and their Departments of Management Studies of the university (UWI Mona, n.d.; UWI Cavehill, 2019). No reports are available from the department at St. Augustine, Trinidad and Tobago
- 4) Business schools (ALJGSB), 2019; Cave Hill School of Business and Management, 2019; Mona School of Business and Management, n.d.)

The databases supported by these UWI institutions did not present an organized, consolidated source of information, and in some instances there were data gaps. However, based on the data retrieved from the listed sources, the records on publishing of management research within the academy were analyzed and presented below.

- SALISES is the long standing outlet for social science research which publishes data on research activities, working papers, and occasional papers, and a total of 166 publications covering the last 20 years were examined. The finding was that the published research was dedicated to socioeconomic topics such as economic development, poverty, health, education, crime, and financial instruments; with approximately 3% dealing with management issues but not clear whether otherwise published in journals (SALISES, n.d.).
- The JECS published 296 articles over the period 1997-2016, but 89% of the articles were focused on broad socioeconomic areas similar to SALISES, while only 34 journal articles (11%) were management related covering topics such as small business, corporate turnaround, HRM, firm competitiveness, management accounting, tourism management, and entrepreneurship and innovation (JECS, 2017).
- The reports of the Faculties of Social Sciences/Departments of Management Studies were collected for available years, Jamaica (2013 and 2017), Barbados (2008-2013), while the department in Trinidad and Tobago did not post departmental reports on publishing activity. From the reports available, a total of 38 management related papers were published over the six years studied, but the results were available only internally and not published in journals.
- Researchers from the business schools were more prolific in generating research, but opted, overwhelmingly, to use the channels of conference papers and presentations, public lectures, case studies, book chapters, technical reports, and business magazines and newspaper columns. The publication of articles in management journals totaled 106 over the 15 year period of 2004 to 2019. This result was at odds with the contention that business schools were well situated to generate data from students, faculty, and curricula that could be translated into quality research outcomes (Ranjan, 2011).

- Faculty tenure and promotions were still largely based on publications in the subscription journals associated with high impact factors, limiting the use of OAJ as publication outlets and restricting the dissemination of management knowledge.
- Interestingly, preference and recognition of the traditional channels of publication were entrenched in The UWI system, while the indigenous journal, such as JECS, was less recognized compared to the established subscription journals (Iton & Iton, 2015), an experience consistent with academic publishing in India (Brotchie, 2014).
- The evidence was that OAJ were not embraced by researchers within The UWI, although Pinfield (2015) argued that universities, despite cost, technical challenges, policy gaps, and specific mandates, were central to the success of open access publishing. This argument was supported by Iton and Iton (2015) who felt strongly that OAJ were an option for UWI faculty once the lack of understanding and bias in promotions were removed. The UWI experience is consistent with the case of the University of Botswana in the adoption of technology innovation diffusion (Dintoe, 2019).

The critical observations from the investigation of The UWIs record, were that publishing of management research by UWI academics is at a low level. This was confirmed for the St. Augustine campus by senior lecturer N. Ramkissoon (personal communication, 6 November, 2017), and perhaps reflects the research priorities established for graduate studies exemplified by the Cave Hill campus' list of priorities: biotechnology; biodiversity; cultural studies; social, economic and legal studies; health and wellness; natural hazards management; alternative energy; management of natural resources and tourism; and education (UWI Cave Hill, n.d.). Further, the published evidence confirmed that the dominant publishing culture showed a preference for conference papers and newspapers business columns which provide greater individual exposure. The low level of the publishing of management articles can be attributed to the argument that promotions and rewards were based on the number of articles published in top ranked journals, and the perspective that 'top journals' were biased in favor of 'top authors' to the exclusion of researchers in the Global South (Murphy & Zhu, 2012). UWI applicants for promotion to tenured positions - senior lecturer or professor, are required to include the impact factors and citations indices for their publications and this is likely to exert the pressure to 'publish or perish' syndrome (De Rond & Miller, 2005; Miller et al., 2011; Iton & Iton, 2015).

Based on the low level of publication of journal articles, it follows that the dissemination of knowledge within the management area will also be low. This implies the need for greater policy support for openness from UWI administrators to offer an alternative option to researchers for knowledge sharing and wider communication within the UWI complex. There is a clear case for a fully developed policy on publishing, supported by an information and communication campaign detailing the options available to researchers to which this paper can be a major contributor. The policy must also embrace the opportunity to publish in OAJ, or by self-archiving in an institutional or subject repository, consistent with the new mantra of 'be visible or vanish' rather than publish or perish (Ren, 2015).

## CONCLUSIONS AND FUTURE TRENDS

This review article has the dual purpose of providing an understanding of the journal publishing industry, with special emphasis on the entry of OAJ as an Internet technology phenomenon; and of investigating the record of UWI researchers of publishing management articles in journals. The emphasis on studying OAJ was based on answering the question of whether OAJ were an acceptable option for researchers seeking to publish management articles. The inquiry into the UWIs publishing record was aimed at establishing the extent of publishing of management research and the preferences of authors for disseminating management knowledge. The results of these research approaches were eventually used to identify the key features of journal publishing and factors that influence the number of publications in the management discipline. The conclusions that emerge from the research and analyses are highlighted below.

The field of academic publishing is dynamic and the entry of OAJ increased that dynamism, but the traditional journals retained their dominant position, while there are signs that the OAJ are gaining respectability and validity. Authors must become intimately familiar with the influential determinants of journal publishing which comprise: the costs of funding APC; the operation of the peer review system; the threat posed by predatory journals to author reputation; the implications of impact factors and journal indexing; and the option of disseminating knowledge through repositories and academic social networks. Researchers within the UWI system exhibited a preference for conference papers and seminars as outlets for their contributions. As a result, the level of use of management journals for knowledge sharing was low, and a policy for stimulating increased publications was required for building a body of literature derived from studies of Caribbean business and organizational management experience. The overall response to whether OAJ can be a valid alternative publishing outlet to subscription journals for management research was established positively based on the evolving status of OAJ. In fact, it was suggested that with the emergence of OAJ as credible options for publishing in quality journals, they were viewed as the best prospect particularly for authors from developing countries, with the proviso that caution be exercised in journal selection.

Overall, the future of academic publishing is unclear but major changes are anticipated involving: scholarly associations reclaiming publishing with the removal of barriers and embargoes; greater transparency in article reviews through the advantages of online publishing; and moving to an assessment of articles based on intrinsic value rather than journal prestige for promotion purposes, and the promotion of Plan S. A common position was that the future of academic publishing will be based on wider acceptance of open access, but warned that the lack of effective open certification poses a threat to the goal of openness. The insights gained from this review and the case of The UWI are relevant to the institutions of higher education within the wider Caribbean tertiary education ecosystem, as well as similarly placed developing countries internationally.

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