A Bibliometric Study on Liminality in Higher Education Literature (1997-2017)

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Abstract

This bibliometric study aimed to quantitatively analyze higher education publication outputs anchored on liminality or rites of passage model. The literature search employed eight electronic databases and only those articles published from January 1997 to April 2017 utilizing the concept of liminality, liminal space, or rites of passage in describing higher education students' experiences were extracted. Out of 5,494 search items screened, only 52 full-length articles met the eligibility criteria. Additional relevant literature(n=17) were also obtained resulting to 69 included papers. Thirteen articles were printed in 2009 and 'Innovations in Education and Teaching International' and 'Nurse Education in Practice' journals have issued seven and five papers, respectively. An average of 2.5 authors per article was present and 55 authors were affiliated to institutions in United Kingdom. Publications were mostly empirical (n=55) and employed qualitative approach (n=42). Findings of this research can provide trends on liminality publication output highlighting its impact in the field of higher education.

Keywords:

bibliometrics, higher education, liminality, rites of passage

Introduction

Liminality (from the Latin *'limen'*, signifying 'threshold') is a transition phase in Arnold van Gennep's (1960) rites of passage in between separation (preliminal) and incorporation (postliminal) stages. Van Gennep described rites of passage as the 'rites which accompany every change of place, state, and social position and age' (Turner, 1969, p. 94). The preliminal and postliminal phases denote the detachment from a previous situation and the completion of the passage, respectively (Turner, 1969). According to van Gennep (1960), an individual 'cannot pass

from one to the other without going through an intermediate stage'(p. 1). This intermediate or liminal stage, as further investigated by Victor Turner (1969), represents the period where the initiands or ritual subjects are 'neither here nor there', 'betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial' (p. 95), and may be characterized as possessing nothing. Additionally, the attributes of these liminal personae (threshold people) were described as ambiguous and in the state of anonymity, submissiveness and silence, and *tabula rasa* – a blank state (Turner, 1969). As the individual traverses this liminal period, he may possess few traits of the past or none at all.

In an educational context, crossing the liminal space has been depicted as a transformative state and involves a change of status, oscillation, or even mimicry (Meyer & Land, 2005). This concept of liminal space has been progressively explored in higher education and extant literature has revealed a number of studies anchored on Turner's liminality, van Gennep's rites of passage, or have utilized the concept of liminal experience or transition. These include articles describing students' liminal experiences in undergraduate programs in the fields of arts (Moffat & McKim, 2015), business (Hawkins & Edwards, 2015; Vidal, Smith, & Spetic, 2015), engineering (Harlow, Scott, Peter, & Cowie, 2011; Kabo & Baillie, 2009; McCartney et al., 2009), marketing (Palmer, O'Kane, & Owens, 2009), nursing (Lyneham & Levett-Jones, 2016; Evans & Kevern, 2015; Wieland, Altmiller, Dorr, & Wolf, 2007; Barton 2007; Holland, 1999), occupational therapy (Tanner, 2011), social work (Hurlock et al., 2008), and teacher education (Wood, 2012; Cook-Sather, 2006), among others. Additionally, transitional experiences of students enrolled in the master (Yip & Raelin, 2011; Kelan & Jones, 2009; Simpson, Sturges, & Weight, 2009) and doctorate programs (Keefer, 2015; Kiley, 2015; Li, 2012; Humphrey & Simpson, 2012; Amran & Ibrahim, 2009; Trafford & Leshem, 2009; Wisker & Robinson, 2009) were also explored..

While there have been prevailing studies on liminality or review of literature related to it, a bibliometric analysis of written publications in higher education literature anchored on liminality or rites of passage model remains under-researched. Bibliometrics, a term coined by Alan Pritchard in 1969, focuses on the 'quantitative analyses of publication data' (Carpenter, Cone, & Sarli, 2014, p. 1161). Bibliometric studies may deal with components such as objects and representatives of information, creation and content, and users and uses (Pao, 1989, as cited in Norton, 2010). Taking into account the different quantitative evaluative techniques in analyzing research contributions, this approach also presents 'more advanced quantitative relational techniques' (Benckendorff, 2009, p. 4) such as citation, co-citation, co-author, and social network analyses. Due to its practical applications, it has been extensively used in various disciplines such as library and information science (Jabeen, Yun, Rafiq, & Jabeen, 2015), medicine (Shuaib, Khan, Shahid, Valdes, & Alweis, 2015), nursing (Blazun, Kokol, & Vosner, 2015; Ball, McLoughin, & Darvill, 2011), pharmacy (Babar, Scahill, Akhlaq, & Garg, 2013), physical therapy (Coronado, Riddle, Wurtzel, & George, 2011), psychology (Schui & Krampen, 2010), and tourism (Evren & Kozak, 2014; Benckendorff, 2009), among others.

This bibliometric study is aimed at analyzing quantitatively published papers which utilized the concept of liminality, liminal space, or rites of passage model in describing or discussing the liminal experiences of higher education students. Results of this research purport to map out trends on liminality publication output highlighting its impact in the field of higher education. Additionally, this initiative can provide baseline information to faculty researchers involved in understanding the dynamics of liminality as a fertile area in curriculum with a view of helping curriculum experts and scholars in enhancing curricular elements affecting students' liminal experiences and highlighting the role of educators in facilitating the students in their transition.

Methodology

The literature search utilized the following electronic databases: EBSCO-provided (Academic Search Complete, Academic Search Ultimate, Business Source Complete, Education Resources Information Center, Psychology & Behavioral Sciences Collection),

Table 1 Search Results from Electronic Databases

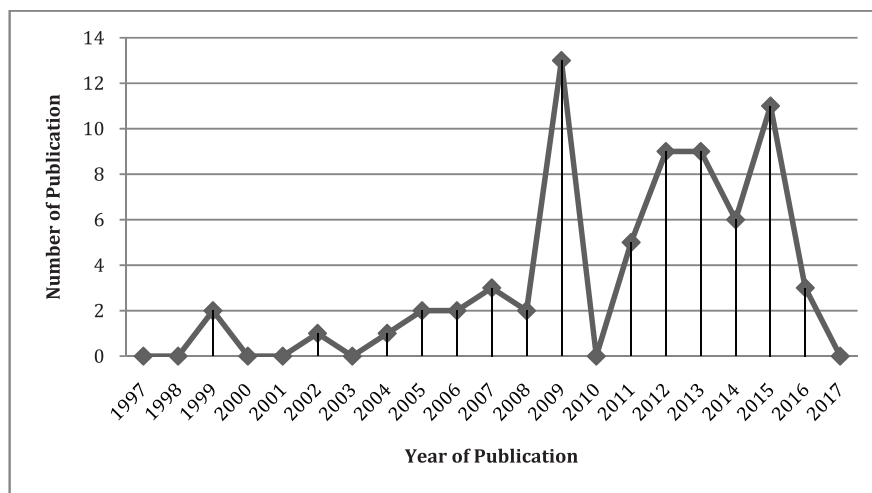| Electronic databases	Search results
EBSCO-provided	
Academic Search Complete	842
Academic Search Ultimate	837
Business Source Complete	157
Education Resources Information Center	131
Psychology & Behavioral Sciences Collection	41
Emerald Insight	1,167
Proquest Health & Medical Complete	2,174
ScienceDirect	145
TOTAL	**5,494**

Figure 1. Distribution of Publications by Year.

Emerald Insight, Proquest Health & Medical Complete, and ScienceDirect. Other internet sources were also utilized to search for additional literature. The search terms used with Boolean operators were "liminality" OR "liminal experience" OR "liminal space" OR "rites of passage" AND "higher education."The search items were limited to peer-reviewed articles, within the publication date of January 1997 to April 2017, and written in the English language. The titles and abstracts were manually screened and those articles using Victor Turner's liminality or Arnold van Gennep's rites of passage model in higher education or the concept of liminal space in describing higher education students' experiences were extracted. Those articles utilizing liminality or liminal state as part of the discussion of the results were also considered. Only those articles with full-text copies were included in the analysis. Papers were excluded if the main focus is on the transitional experiences of basic education students and professionals and if the types of publication are editorials, reports, letters, and chapters.

Retrieved articles were analyzed based on the trends of publication (distribution by publication year), journal sources (distribution by journal source, publisher, citation index), authors (number of authors, country of affiliation), and research approach (quantitative, qualitative, or mixed-methods). Data were encoded in Microsoft Excel and analyzed using descriptive statistics.

Table 2 Distribution of Publications
by Journal Source

Journal Source	n (%)
Affilia: Journal of Women and Social Work	1 (1.4)
Anthropology & Education Quarterly	2 (2.9)
Art, Design and Communication in Higher Education	1 (1.4)
Arts and Humanities in Higher Education	2 (2.9)
Asia Pacific Journal of Social Work and Development	1 (1.4)
Assessment and Evaluation in Higher Education	1 (1.4)
Australian Occupational Therapy Journal	1 (1.4)
British Educational Research Journal	1 (1.4)
British Journal of Occupational Therapy	1 (1.4)
Career Development International	1 (1.4)
Composition Forum	1 (1.4)
Computer Science Education	1 (1.4)
Critical Perspectives on Accounting	1 (1.4)
European Journal of Engineering Education	3 (4.3)
Higher Education	4 (5.8)
Higher Education Research and Development	1 (1.4)
Innovations in Education & Teaching International	7 (10.1)
International Journal of Education Through Art	1 (1.4)
International Journal of Mathematical Education in Science and Technology	1 (1.4)
International Journal of Teaching and Learning in Higher Education	1 (1.4)
International Social Work	1 (1.4)
Journal of Advanced Nursing	1 (1.4)
Journal of Education for Business	1 (1.4)
Journal of Education for Library and Information Science	1 (1.4)
Journal of Geography in Higher Education	3 (4.3)
Journal of Learning Design	1 (1.4)
Journal of Management Education	4 (5.8)
Journal of Nursing Education	1 (1.4)
Journal of Research in International Education	1 (1.4)
London Review of Education	2 (2.9)
Management Learning	4 (5.8)
Medical Education Online	1 (1.4)
Nurse Education in Practice	5 (7.2)
Nursing Education Perspectives	1 (1.4)
Procedia - Social and Behavioral Sciences	1 (1.4)
Social Work Education	2 (2.9)
Studies in Higher Education	2 (2.9)
Teaching in Higher Education	3 (4.3)
Technology, Pedagogy and Education	1 (1.4)

Table 3 Publishers

Publisher
Association for Library and Information Science Education *Journal of Education for Library and Information Science*
Association of Teachers of Advanced Composition *Composition Forum*
Co-Action Publishing *Medical Education Online*
Elsevier *Critical Perspectives on Accounting* *Nurse Education in Practice* *Procedia - Social and Behavioral Sciences*
Emerald Group Publishing Ltd *Career Development International*
Intellect Ltd *Art, Design and Communication in Higher Education* *International Journal of Education Through Art*
International Society for Exploring Teaching and Learning *International Journal of Teaching and Learning in Higher Education*
National League for Nursing, Inc. *Nursing Education Perspectives*
Queensland University of Technology *Journal of Learning Design*
SAGE Publications *Affilia: Journal of Women and Social Work* *Arts and Humanities in Higher Education* *British Journal of Occupational Therapy* *International Social Work* *Journal of Management Education* *Journal of Research in International Education* *Management Learning* SLACK Inc. *Journal of Nursing Education*
Springer Science & Business Media B.V. *Higher Education*
Taylor and Francis *Asia Pacific Journal of Social Work and Development* *Assessment and Evaluation in Higher Education* *Computer Science Education* *European Journal of Engineering Education* *Higher Education Research and Development* *Innovations in Education & Teaching International* *International Journal of Mathematical Education in Science and Technology* *Journal of Education for Business* *Journal of Geography in Higher Education* *London Review of Education* *Social Work Education* *Studies in Higher Education* *Teaching in Higher Education* *Technology, Pedagogy and Education*
Wiley *Anthropology & Education Quarterly* *Australian Occupational Therapy Journal* *British Educational Research Journal* *Journal of Advanced Nursing*

Results

This study systematically analyzed written published articles describing the liminal experiences of higher education students. A total of 5,494 abstracts were retrieved using the electronic databases (Table 1) and only 52 items met the inclusion criteria. Additional relevant articles (n=17) were obtained by means of other internet sources, hence, resulting to a quantity of 69 included papers.

Trends of publication

Distribution by Publication Year

Among the 69 full-length papers included in the analysis, 13 items were published in the year 2009 and this revealed to be the highest in number from January 1997 to April 2017 (Figure 1). This was followed by 11 published output in 2015. From 1997 to 2008, the numbers of written articles were within the range of zero to three only. The frequency was noted to have a prompt increase in 2009, then none of the retrieved papers were published in 2010, and with a documented average of 7.2 publications from 2011 to 2016. None of the articles included in the analysis were published from January 2017 up to the date of literature search.

Journal Sources

Distribution by Journal Source

The articles included in the review were distributed in 39 journals (Table 2). The journal 'Innovations in Education and Teaching International' was noted to have the highest number of retrieved articles (n=7) among the selection. This was followed by 'Nurse Education in Practice' (n=5), 'Higher Education' (n=4), and 'Management Learning' (n=4). Majority of the journal sources (n=26) were documented to have one issued article each.

Publisher

A total of 14 publishers were recorded to issue different articles included in this study (Table 3). Fourteen journal sources were published by Taylor and Francis and seven from SAGE Publications.

Citation index

Slightly more than half of the journal sources (n=22; 56.4%) were included in the source publication list for Web of Science (Table 4). Twenty journal sources (51.3%) were part of the Social Science Citation Index (SSCI) 2017 and two journals (5.1%) in Science Citation Index Expanded (SCIE) 2017. None of the gathered journals were included in the Arts and Humanities Citation Index (AHCI) 2017.

Table 4 Distribution of Indexed Journal Sources

Indexed Journal Sources	n (%)
Science Citation Index Expanded	2 (5.1)
Social Science Citation Index	20 (51.3)
Other databases	17 (43.6)

Authors

Number of authors

A significant number of publications were co-authored (n=50) compared to those with single authors (n=19). Slightly more than half of the papers (n=36) have two to three authors and with an average number of 2.5 authors per article. Table 5 shows the distribution of publications based on the number of authors.

Table 5 Distribution of Publications based on the Number of Authors

Number of authors	n (%)
1	19 (27.5)
2 - 3	36 (52.2)
4 - 5	11 (15.9)
>5 authors	3 (4.3)

Country of Affiliation

The authors were affiliated to institutions in Asia, Australia, Europe, and North America (Table 6). Compared to other countries, a prominent number of authors were observed to have networks in the United Kingdom (n=55) and United States of America (n=41).

Table 6 Distribution of Authors
by Country of Affiliation

Country of Affiliation	n (%)
Australia	29 (17.1)
Canada	25 (14.7)
Israel	1 (0.6)
Japan	1 (0.6)
Malaysia	5 (2.9)
New Zealand	9 (5.3)
Norway	1 (0.6)
Sweden	3 (1.8)
United Kingdom	55 (32.4)
United States of America	41 (24.1)

Research Approach

A great deal of the empirical research papers (n=55) were found to have utilized the qualitative approach (n=42) and some employed mixed-methods in their analyses (n=11). Table 7 presents the distribution of empirical type of publications by research approach.

Table 7 Distribution of Empirical Type
of Publications by Research Approach

Country of affiliation	n (%)
Qualitative	42 (76.3)
Quantitative	2 (3.6)
Mixed Methods	11 (20.0)

Discussion

This bibliometric study aimed to quantitatively analyze written publications on liminality or rites of passage in higher education literature. Focused on students enrolled in higher education programs, only those articles describing or discussing the liminal or transitional experiences of these students were included in this paper. The total number of search items available during the literature search revealed that there were articles that could be retrieved once the search terms such as liminality or rites of passage were encoded.

The search results were dependent on the electronic databases and other internet sources accessible during the conduct of the study and the limiters set for this paper (such as Boolean operators, peer-reviewed articles, publication date, English language). The items varied from those utilizing liminality or rites of passage in the fields of health care, education, or social sciences and involving respondents such as professionals or students, to name a few. Since this research had a set of inclusion criteria, further screening resulted to 69 included papers. This number represented that there were published output in higher education literature regarding the liminal spaces of students particularly in undergraduate or graduate studies. There were a few written papers which were not directly anchored on liminality or rites of passage model but considered the applications of these frameworks, related it to students' learning process, and was part of the discussion of their results.

It is interesting to note that in 2009, compared to other publication dates, a large number of issued articles were retrieved. These papers were not obtained from one journal only but from nine different sources, for example, 'Innovations in Education and Teaching International' and 'London Review of Education'. Moreover, from 2011 to 2016, there was an observed consistency that three or more journal articles related to liminality were written every year. Variations in publication patterns could also be suggestive of shifts in formats or interests (Norton, 2010). None of the retrieved articles were issued from January 2017 up to the date of literature search which suggests that liminality studies may still be in-progress or under review for publication consideration. The distribution of published output regarding liminality in the 39 journal sources ranged from one to seven articles each. The journal 'Innovations in Education and Teaching International' was observed to have the highest number of publications in the analysis conducted compared to other sources. This was followed by 'Nurse Education in Practice', 'Higher Education', and 'Management Learning'. In addition, the publishers were also taken into consideration. Remarkably, nearly half of the noted journals (n=14) were published by Taylor and Francis Group and this was followed by SAGE Journals with seven sources. As regards the citation index, the source publication lists for Web of Science

SCIE 2017 (Thomson Reuters, 2017a), SSCI 2017 (Thomson Reuters, 2017b), and AHCI 2017 (Thomson Reuters, 2017c) were used as references to identify which sources were included. Acceptance of coverage in these indexes has undergone extensive evaluation by Thomson Reuters (Morris, Barnas, LaFrenier, & Reich, 2013). It is noteworthy that 22 journals included in this study were part of the publication list.

Moreover, most of the publications were co-authored and with an average of 2.5 authors per article. Multiple-authored studies could be suggestive of collaboration, hence, this could be utilized in the progress of scholarly productivity (Carpenter et al., 2014). Additionally, the affiliations of the authors were analyzed based on the countries reflected in each journal article and it was noted that United Kingdom has produced the highest number of authors who have shown interest on liminality compared to other countries. Also, this study presented the distribution of publications by research approach. Empirically, it was found that majority of the research articles employed the qualitative approach. Qualitative research, with the aim of describing and clarifying a lived experience, takes into consideration certain features of human experience (Polkinghorne, 2005) and has continuously gained increased attention not only in the social sciences but also in the field of education (Cooley, 2013).

Overall, the resulting trend highlights the growing number of scholarly journal articles indicating a significant focus on the concept of liminal space in different higher education disciplines. It also suggests that more collaborative researchers have started exploring liminality as a framework in their investigations or found its usefulness in describing higher education students' transitional experiences. Likewise, the distribution of qualitative researches denotes that students' academic experiences were practically investigated qualitatively rather than through quantitative measurements so as to fully capture the richness of their transition in the university. Significantly, the results of this bibliometric analysis can provide baseline information to faculty researchers, particularly in the Southeast Asia region, in understanding liminality as a fertile area in the curriculum. Higher education students' accounts of their liminal experiences drawn from empirical investigations involved partial understanding of concepts (McCartney et al., 2009), learning the professional practice (Barton, 2007; Holland, 1999), dealing with new challenges (Kelan & Jones, 2009), becoming unstuck (Kiley, 2015), conquering inferiorities and having new viewpoints (Amran & Ibrahim, 2009), feeling of remoteness and uncertainty, and having an impostor syndrome (Keefer, 2015), among others. Hence, understanding these experiences can help curriculum experts and scholars in enhancing the curricular elements that can affect students' learning process as they come across the liminal space. This indicates the need to develop initiatives such as identifying troublesome concepts or stuck places in the curriculum, restating learning outcomes, and redesigning instructional objectives, sequences, events, and assessment. Further, this paper can afford insights in putting emphasis on the role of educators in facilitating students in their transitional period. Educators should support their students passing through the liminal space on how to adapt to new academic, social, or emotional challenges, guide them in their curricular activities and give appropriate feedbacks, and prepare them in becoming well-equipped professionals.

Conclusion

On the whole, this bibliometric analysis underscored the emergent research productivity in describing or discussing the process higher education students undergo in navigating the liminal state as evidenced by the trends of publication, journal sources, authors, and research approach in certain higher education literature. This paper can assist academic researchers in recognizing the liminal space as a crucial aspect in understanding the journey of higher education student. Likewise, this can provide insights in enhancing the curriculum and emphasizing the supportive role of educators essential in the learning process. Relevant results put forward the need to initiate strategies such as determining certain areas in the curriculum perceived to be difficult, redesigning teaching-learning activities and assessments, guiding students in their adjustments, and equipping them with the required professional attributes.

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