

Role of Academic Autonomy in Achieving Optimal Learning Environment: A Systematic Literature Review

Snehal Hirve^{1,a)} and Netra Neelam^{2,b)*}

^{1,2}*Symbiosis Centre for Human Resource and Development, Symbiosis International (Deemed University),
Hinjewadi, Pune, Maharashtra, India*

^{b)}Corresponding author: netra_neelam@scmhrd.edu

Abstract. Higher education is at the center of India's ambition towards building a more robust education system and knowledge society to become a sustainable and leading world economy. To achieve this, the draft of the National Education Policy, India (2019) lays onus on the transformation of the education system in response to requirements of fast-changing, knowledge-based societies and strongly recommends "Autonomy" as a key player; the study, therefore, aims to critically review the existing examination sampling Higher Education Institutes across the globe to understand from their views, commentary and experiences of academic autonomy and its role in achieving optimal learning environment. This systemic literature review constitutes a comprehensive search for studies and articles in the Scopus database with case studies, empirical and theoretical models focusing on autonomy in higher education institutes. A thorough analysis of relevant papers is done to build a typology and provide macro and micro factors in assessing the role of academic autonomy in achieving the optimal learning environment in higher educational institutes. The study aims to aid education policy research. For researchers, policymakers, educators, and Higher Educational Institutes (H.E.I.s.), the Distribution of the articles based on the study as mentioned earlier and the sources which published the research is presented in tabular form.

Keywords: Autonomy, Autonomous, Academic Autonomy, Higher Educational Institutes, Higher Education, Educational Policy, Optimal learning, students, Pedagogy.

INTRODUCTION

"What advances a nation or a community is not so much to prop up its weakest and most helpless members but to lift the best and the most gifted, to make them of the most incredible service to the country"... JN TATA, (The capability and dedication of teachers given for the educational process will ensure dissemination of high-quality education (Report of Observer Research Foundation, 2014) [1].

The Sustainable Development Goals (S.D.G.) 2030 of the United Nations envisions Quality Education which guarantees comprehensive, fair quality education and aiding new and broader scope for long-lasting learning for all by focusing on the following...

"By 2030, there will be a significant rise in the number of young people and adults with appropriate skills, such as technical and vocational skills, for employment, suitable occupations, and entrepreneurship."

"By 2030, ensure that all learners have the knowledge and skills necessary to promote sustainable development, including, for example, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, appreciation of cultural diversity and culture's contribution to sustainable development, and global citizenship education."

The right to receive an education teaches and conduct research can only be exercised and savored in an environment where higher educational institutes have academic freedom. This opens the links and discoveries, assumptions, and points of view at the heart of higher education, ensuring the most grounded assurance of the precision and objectivity of scholarships, grants, and exploration (Preamble of UNESCO, 1997). Simply defined, "academic autonomy" refers to a university's freedom to make internal decisions and conduct its affairs independently." (Orosz, Kata, 2018) [2].

The globe's political, social, and economic landscapes, particularly the emerging countries of the Asian and African continents, are undergoing seismic upheavals. This has proven to be a two-edged sword. On the one hand, this change has resulted in the emergence of a new middle class from which many intellectual minds and the new educated working class have emerged, as well as the need for research and studies in more unknown subjects, as well as increased research funding and government investment in education and educational institutes. However, this exact change has also been advanced by Government, policymakers, or political powers. Research and education funding has been directed at study areas that are important to the major stakeholders; some countries have

seen radical curtailing of some subjects, intellectual philosophies, and sometimes entire research studies altogether. The topic of academic autonomy no more remains of conversational or policy level importance. It's having practical effects on the institutes and students, West J, (2018) [3].

Academic autonomy-related consensus and the discussion about intellectual autonomy in India are preliminary and need more attention. To successfully implement the concept of academic autonomy, there needs to be an active consensus and effort from all the members of the educational stream, including teachers, students, parents, and policymakers (CABE, 2005; Ritzen, 2016) [4].

Placing India in the context of studying the educational reforms is efficacious. India has a mature higher education system with institutes dating from 1857 and more seasoned collegiate institutions. Also, being the most prominent academic system, India has been making continuous endeavors to bring reformatory changes in its higher education system for more than a half-century, Altbach, (1993). According to the Indian Government's draught National Education Policy (N.E.P.) for 2019, "India aims to overtake the United States and China as the world's third-biggest economy by 2030-2032." We need a knowledge society based on a robust education system, with all the requisites in the context of changes in knowledge demands, technologies, and the way humanity lives and works, to take its place alongside the United States and China as the world's top three largest economies and be confident of maintaining it in the coming years." High suggestions are made in the draught to enable Higher Education Institutes (H.E.I.s) to achieve higher academic excellence by providing an ideal teaching-learning environment by giving autonomy to H.E.I.s [5]. "Any educational activity has an enormous effect on society, and vice versa," it adds. At the individual, institutional, and systemic levels, it's critical not to neglect society response and to consider various factors such as experiences, mentality, attitudes, and culture." As a result, the paper will include comprehensive research that quickly introduces the idea, concerns about academic autonomy, and its function in enabling Higher Educational Institutions (H.E.I.s) to create an optimal learning environment [6].

Organization of Paper

Although studies recommending autonomy to higher educational institutes exist, to our knowledge, a little literature review of this nature focusing on assessing the fundamental role and its impact in enabling an optimal teaching and learning ecosystem isn't available. We've enumerated systematically the process of this literature review and the criteria we used to select and shortlist relevant research papers. Next, we have included the typology, list of research papers and journals, country-wise Distribution followed by the themes. Every theme displays a brief commentary and relevant findings from fellow researchers to inform better and support our readers and other stakeholders in assessing academic autonomy's importance and pain points for optimal learning. We end by furnishing the limitations of this study and conclusions. This literature review aims to aid education policy research and for researchers, policymakers and educators, and Higher Education Institutions (H.E.I.s) [7].

RESEARCH METHODOLOGY

We evaluated research studies and articles focusing on Higher education institutes and pre or post-implementation views, experiences, or assessment of academic autonomy and its role in optimal learning.

We compiled the literature data set using the Scopus database since it is comprehensive, standardized, and widely utilized by the academic community, Gao, C. et al. (, 2016). Scopus is the "largest abstract and citation database of literature including peer-reviewed research in many areas" and is a product of 'Elsevier publishing (Fahimnia, B., Sarkis, J., & Davarzani, H, 2015). While incorporating the research papers and reviews from peer-reviewed journals that are indexed in the Scopus database in our study, we've also studied some reports of committees set by the Indian Government, which formally and strongly recommended academic autonomy for higher Education Institutes to enable quality enhancement [8].

We conducted a comprehensive search using the keywords- "Academic autonomy" and Higher education," "Academic autonomy and Innovation," Academic autonomy and Pedagogy," "Academic autonomy and Stakeholders," "Academic autonomy and accountability," Academic autonomy and preparedness" "Academic Autonomy and Optimal environment." The keywords obtained complete references and matched them with the article title, abstracts, and keywords in the Scopus database search. The preliminary search results were amplified by meticulously reviewing the articles published for the keywords up to the year 2020. No limitation was set to get a better context of the topic and work done over it. The initial search resulted in 950 document results obtained in the Scopus database search. Filters applied were articles and reviews as the document type, journal as the chosen source, and English language. We compiled all the data in an excel sheet in descending order of the document E.I.D. Numbers and cleaned the record, took off duplicate papers and blank abstracts if any. We read through the titles and abstracts to segregate the relevant and non-relevant documents, with relevant documents focusing on Higher education institutes. We found a total of 760 papers to be appropriate based on the broader focus of the topic [9].

We then read through the titles and abstracts to group the papers into buckets based on broader themes like Innovations, Student growth, accountability, genders, performance, pedagogy, Stakeholders, preparedness, Accreditation, financial autonomy, autonomy in primary, secondary education, autonomy in jobs, independent MOOCs, etc. We refined the search criteria and themes further to obtain a narrower, more relevant set of papers. We excluded the articles and pieces that did not fit this study's context, like gender, primary and secondary education institutes, etc. We preserved the papers that focused on the themes affecting or affected by academic autonomy and thus were the most relevant [10]. We narrowed down about 135 articles of interest and used them in this study, and used 50 of the most notable papers for discussion and analysis on the following seven themes.

- Innovation
- Accountability
- Preparedness
- Stakeholders
- Quality Assessment
- Predicting Optimal learning
- Social factors

DATA ANALYSIS

Table 1 gives the Distribution of important papers based on the above themes obtained from the Scopus database. While Table 2 and Table 3 provide the distributions of the documents based on sources of the documents/articles and major countries significantly contributing to the research area.

TABLE 1.Theme wise distribution of the most significant papers

Typology	Prominent Papers	Author/s of the paper	Citation in Scopus
Innovation (6)	“Industry 4.0 – organizing routines or innovations?”	Wilkesmann M., Wilkesmann U, 2018	21
	“Challenges to academic freedom: Some empirical evidence.”	Rostan M, 2010	11
	“Determinants of students’ innovation in Higher Education”	Martin P et al., 2017	10
	“To stay alive in academics, you must engage in collective practice at work.”	Smith T et al., 2010	8
	“In a constructivist learning setting, the use of Twitter to encourage interaction and reflection.”	Desselle SP, 2017	7
	“In engineering education, a novel evaluation paradigm is being used to improve student learning.”	El Maaddawy T, 2017	2
Accountability (9)	“Evidence from Europe and the United States on university governance and performance”	Aghion P et al., 2010	146
	“Issues of trust, control, professional autonomy, and responsibility in higher education in the United Kingdom”	Hoechst A, 2006	118
	“The connection between quality control, assurance, and evaluation and continuous improvement”	Colling C et al., 1995	10
	“Autonomy justified and accounted for in the context of institutional autonomy.”	Moses I.	10

	“Trends in higher education centralization: Israel's Planning and Grants Committee.”	Iram Y, 1992	6
	“Accountability and Inspection in Higher Education”	Perry P, 1987	5
	“Political governance and accountability of private universities in developing countries”	Nurunnabi M, 2016	2
	“Factors that will determine whether or not next-generation technical education institutes succeed.”	Kashiramka S et al., 2019	1
	“Concerns about autonomy and academic freedom in higher education institutions”	Prakash V, 2011	1

Typology	Prominent Papers	Author/s of the paper	Citation in Scopus
Preparedness (6)	“Academics or business leaders? Continuity and change in pro-vice-chancellors' roles.”	Smith D et al., 2008	25
	“Reforming the pre-medical curriculum: The Bologna Process and Beyond.”	Michaud P.-A., 2012	14
	“Using cyber-tasks, hyperlinks, and web-surfing to promote autonomy and creativity in second language acquisition.”	Akinwamide T.K. et al., 2012	3
	“Remaking the elite university: An experiment in widening participation in the U.K.”	McLellan J et al., 2016	2
	“Strategic planning in Ireland's technological institutions”	Elwood L., 2012	2
	“India's New Education Policy Faces Challenges”	Kumar A, 2015	1
Stakeholders (13)	“Addressing the rising difficulties of summative student evaluation of teaching.”	Surgenor P et al., 2013	16
	“In a mostly teaching-focused university, a qualitative research of the U.K. academic role: good characteristics, bad elements, and associated stresses were conducted.”	Darabi M et al., 2017	15
	“Academia's organizational environment determinants”	McMurray A et al., 2013	15
	“In Portuguese higher education, values and standards are shifting.”	Magalhães A.M. et al., 2007	15
	“In educator preparation programs, accountability, autonomy, and academic freedom are all important.”	Pullin D, 2004	8

	“Lecturers’ attitudes and values: tradition, creativity, and change.”	Falchikov N, 1993	5
	“Ambivalent Articulations at a Post-1992 University: Academic Identities in Transition”	Garratt D et al., 2009	4

Typology	Prominent Papers	Author/s of the paper	Citation in Scopus
	“Assignment of responsibility for evaluation to students: A teaching method tailored to the European higher education environment [La cesión de responsabilidad en la evaluación: Una estrategia adaptada al espacio Europeo de educación superior]”	Moreno-Murcia J.A. et al., 2013	4
	“Intergenerational entrepreneurship education: Older entrepreneurs help young people become more socially and professionally engaged.”	Baschiera B et al., 2018	3
	“Identifying indicators of university autonomy based on the interests of stakeholders.”	Choi S, 2019	2
	“Roles and variables affecting external stakeholders' engagement in building generic skills for Vietnamese university students”	Nghia T.L.H., 2018	2
	“Academic effects of the use of flipped learning in physical education”	Lucena F.J.H et al., 2020	1
	“Factors influencing the recruitment of excellent early-career academics in South African universities”	Lesenyeho D.L. et al., 2018	1
Quality Assessment (5)	“Managing Change-Engaging faculty in assessment Opportunities.”	Andrade M. S, 2011	12
	“Control, responsibility, and freedom in Chinese higher education quality assurance”	Wang L, 2014	6
	“The quality regime and its impact on the university teaching environment are changing the nature of the institution.”	Buckley F et al., 2001	6
	“Higher education governance under neoliberalism”	Shin J.C, 2014	2
	“An evaluation of early developments in higher education quality management”	Lomas L, 1996	2

Typology	Prominent Papers	Author/s of the paper	Citation in Scopus
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Predicting Optimal learning (6)	“Applying self-determination theory to educational practice: Autonomy, competence, and relatedness in the classroom.”	Niemiec C.P et al., 2009	622
	“Autonomy and control experiences among Chinese students: energizing or immobilizing?”	Vansteenkiste M et al., 2005	346
	“A comprehensive assessment of the research on creative learning settings in education”	Davies D et al., 2013	166
	“Smoothing transitions: How pedagogy affects medical students' ability to attain self-regulated learning goals.”	White C.B, 2007	61
	“In an academic context, increasing research output.”	Conn V.S. et al., 2005	27
	“Governance of Higher Education Institutions”	Pandey I.M., 2004	3
Social factors (5)	“The global concept of university autonomy, as well as the revision of Finland's university law”	Piironen O., 2013	10
	“The governance in the development of public universities in China”	Liu X, 2017	7
	“Academic Freedom, Intellectual Diversity, and Politics' Role in Geography”	Orzeck R, 2012	6
	“Academic independence and institutional autonomy: a view from the American continent”	Romo de la Rosa A, 2007	4
	“Hong Kong's higher education governance and hybridization.”	Lo W.Y.W., 2018	3
Data fetched from http://www.scopus.com (on 29th April 2020)			

TABLE 2. Distribution of the most significant papers based on the sources

Name of the Source	No. of Documents published
European Journal of Engineering Education	1
Currents in Pharmacy Teaching and Learning	1
Pedagogy, Culture, and Society	1
Studies in Higher Education	1
European Review	1
VINE Journal of Information and Knowledge Management Systems	1
Economic Policy	1
Higher Education	3
Higher Education Quarterly	2
Quality Assurance in Education	1
International Journal of Public Sector Management	1
Benchmarking	1
Economic and Political Weekly	2
English Language Teaching	1
Power and Education	2

Higher Education Policy	4
Assessment and Evaluation in Higher Education	1
Journal of Further and Higher Education	1
Higher Education Research and Development	1
Journal of Teacher Education	1
Education XX1	1
Problems of Education in the 21st Century	1
Tertiary Education and Management	1
Journal of Education and Work	1
International Journal of Environmental Research and Public Health	1
S.A. Journal of Human Resource Management	1
Innovative Higher Education	1
Policy and Society	1
Social Science Information	1
Higher Education Forum	1
Journal of Further and Higher Education	1
Theory and Research in Education	1
Journal of Educational Psychology	1
Thinking Skills and Creativity	1
Advances in Health Sciences Education	1
Nursing Outlook	1
Vikalpa	1
Journal of Higher Education Policy and Management	1
Antipode	1
Higher Education Policy	1
Journal of Asian Public Policy	1
Swiss Medical Weekly	1
Data fetched from http://www.scopus.com (on 29th April 2020)	

TABLE 3. Distribution of the most significant papers based on the countries

Names of the prominent Countries	No. Documents contributed.
The U.S.A.	9
China	3
Hong Kong	1
The U.K.	13
Germany	1
Australia	4
Portugal	1
Switzerland	2
Italy	2
Spain	2
Finland	1
Israel	1
Nigeria	1
India	4
South Korea	1
U.A.E.	2
Japan	1
South Africa	1
Data fetched from http://www.scopus.com (on 29th April 2020)	

RESULTS AND DISCUSSIONS

The Concept of Academic Autonomy is shown in Figure 1.

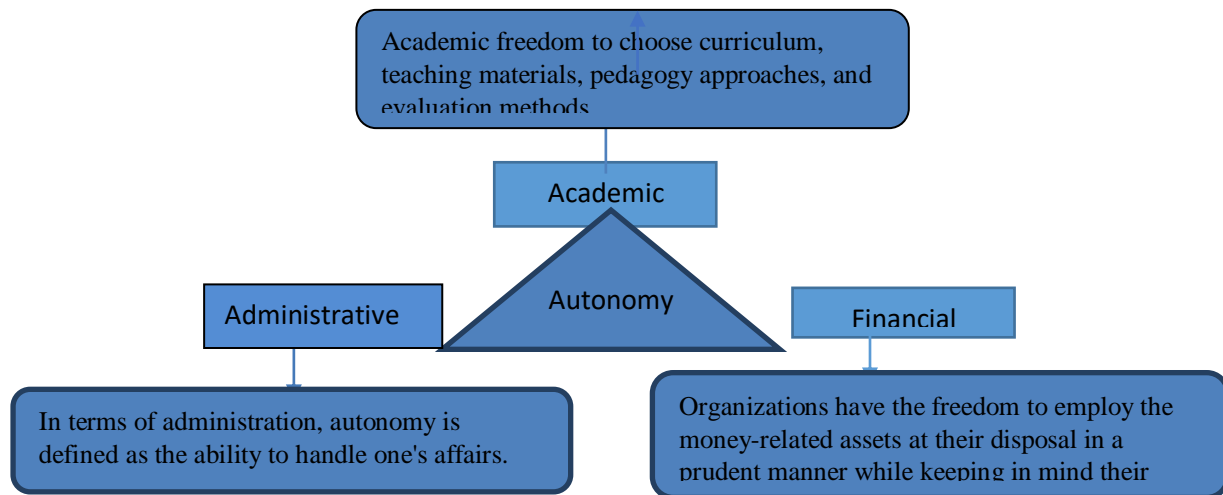


FIGURE 1. Types of Autonomy (Adopted from CAFE-2005)

Academic Autonomy

"It's an umbrella concept, denoting the autonomy or self-governance of a university under its academic role and status. Sometimes academic autonomy is taken in a narrower sense. It then refers to the specific freedom to design and define academic programs and curricula, and to select (categories of) students." Noorda, (2013) [11].

Scope of Academic Autonomy

"Academic autonomy is inseparable from administrative and financial autonomy, but the concept of academic autonomy is operationalized as freedom in the classroom," are according to a CAFE report from 2005:

- Admission of Students
- Courses and Syllabi are being revised.
- Course Regulations
- Choosing Appropriate Pedagogies
- Students' Evaluations
- Opening of New Programs and Closure of Older Programs
- Without fear or favor, the pursuit of truth.

Theme Discussion

Innovation

Academic autonomy has long been recognized for encouraging creativity among engineering students and in other areas. The spirit of autonomy is well captured in the following statement from the 'Central Advisory Board of Education' (CAEB, 2005) Committee of Government of India's report on Autonomy of Higher Education Institutions: "An honest exercise in autonomy – academic, administrative, and financial – will contribute to making universities and colleges into centers of innovation, excellence, and development.". Martín P et al. (2017) states that innovation being the key to success; higher education institutes have immense power to harness innovative behavior in Students [12]. In a longitudinal study on university students, the authors found that positive levels of curricular autonomy and cognitive demands were positively related to the Innovative behaviors in students. Smith T et al.

(2010) point out that innovation and a good learning environment function academic autonomy and freedom. Any threat to the results negatively impacts intellectual engagement and innovation in the student's and academics' lives. Desselle S.P. (2017), through a study on pharmacy students, stresses the fact that innovation in course designing and curriculum, which is a clear function of academic autonomy, brings out a constructivist learning environment and not only improves engagement but also urges students to think out of the box [13]. El-Maaddawy T (2017) studied the implementation of newer and innovative assessment methods in Engineering students, among other experiments in learning design, found the direct impact of the innovations on the student performance, judgment, and learning potential was also corroborated through the students' feedback. Wilkesmann M et al. (2018) comments that the new Industrial revolution of this generation and the innovation leading to it's at the early stages and the key to success is the joint ventures and efforts by industry, academia, and students with all three coming up with innovative courses and curriculum, a factor immensely affected by academic autonomy [14]. Rostan M (2010) has an interesting take on this matter. The author argues that innovation and need are undeniably key for the success of our society and economy. Still, the pressure of innovation and teaching the same in the students on the academics and faculty impinges on academic autonomy and negatively affects it. In the 21st century, where society is the emerging knowledge hub, higher education turns out to be the essential catalyst of progress, and the universities became the nerve center for generating knowledge [15]. University is the place where information isn't just granted; it's additionally sought through exploration. As a result, research, along with university education, is viewed as the pivot. However, to apply research-based information for the improvement of society, it must be not only novel but also valid. As a result, advancement, innovation, academic integrity, and uprightness should be valued highly in university institutions and actively promoted on universities and colleges' campuses. This demands the "freedom" to have an opposing viewpoint to the system, express oneself, and be free of all forms of fear. As a result, "demur freedom," which is the actual meaning of academic autonomy, should be a cornerstone of the university system." (CABE 2005) [16].

Accountability

To successfully implement the concept of academic autonomy, there needs to be a conscious effort from all members of the educational stream, including teachers, students, parents, and policymakers (CABE, 2005; Ritzen, 2016). "With great power comes great responsibility!" Aghion P et al. (2010), in proving their hypothesis that universities are more productive when they've autonomy, also note that this productivity is enhanced with the right balance of autonomy and accountability. Moses I (2007), in his study of Institutional autonomy and responsibility, explains how autonomy, whether institutional or academic, has to be accompanied by the organization's accountability and how Australian universities have been able to achieve that to a considerable extent. Colling C et al. (1995) proposed that an external scrutiny system needs to adopt an approach that ensures accountability to achieve excellence for Higher education institutes. Prakash V. (2011), in his essay on Higher education in India, states that the interplay between autonomy and accountability is imperative for success and that a governance structure across institutions that favors consensus making helps both academic autonomy and responsibility [17]. Perry P (1987) gave a view of regulatory authorities about the accountability of U.K. higher education institutes by saying, "too few attempts to measure the quality of teaching in the classroom have been made," stressing that no call for accountability had left institutions with an unchecked academic autonomy. Kashiramka S. (2019) When considering essential success criteria for higher education institutions, it is critical to note that "autonomy and responsibility, as well as the availability of sustainable funding, are driving forces for institution success." Nurunnabi M. (2016), in explaining poor governance & its root cause in private universities, states "autonomy and lack of coordination within academics as the cause of lowered accountability." Iram Y. (1992) gives us an insight into the unequal balance of accountability and autonomy, at least until a few years back, by stating the case of Israel's PGC and how it started as a regulatory body to maintain equilibrium and ended up curtailing on academic autonomy in many cases. Hoecht A (2006), in a study of 'trust, control, autonomy and accountability in Higher education institutes in the U.K.,' reaffirms that accountability is good and that academics should adopt it. Still, most accountability measures structured are 'one-sided' and end up having detrimental effects on trust, innovation, and the learning environment [18].

Preparedness

Akinwamide T.K. et al. (2012) states that "Students interact with technology to examine, build, analyze, and submit entries through autonomous, self-paced learning. It's worth noting that incorporating information and communication technology (I.C.T.) into language education creates new learning paradigms, which in turn redefines the role of the instructor while also repositioning learners' cognition levels." McLellan J et al. (2016) uses the University of Bristol Model to emphasize how academics can utilize their expertise in remaking system and push for

positive changes to fill gaps in areas like student recruitment, the inclusion of those with lower qualifications and in this manner utilize academic autonomy to bring in changes for institute being better prepared to derive benefits of independence for students. Elwood L et al. (2012) uses the case of "Ireland's Institute of technology sector" to emphasize the importance of making transformative changes like mainstreaming the practice of strategic planning and setting up organizational and managerial structure in higher education institutes [19]. At the same time, countering these Idea Smith D et al. (2008) cautions against adopting a single model of leadership and organizational structure and suggest understanding its needs and contours better before adopting it. Kumar A. (2015) means that policymakers in India should foresee political and institutional interference and prepares policies considering diverse opinions, encourage talent and innovation, meet all stakeholders' needs, and strengthen academic autonomy.

Stakeholders

Major stakeholders for optimal learning in higher education are Institute leadership, Government, policymakers, academic staff and faculty, and most importantly, students. Nghia T.L.H. (2018) conveys that Internal and external stakeholders both make a significant contribution to the system's success, but significantly, a positive University leadership enhances the quality of education and benefits of autonomy and the outlook of external stakeholders towards curriculum or institute. Students are significant beneficiaries and the most active stakeholders in the context of freedom in higher education institutes. Surgenor P.W.G. (2013) states that student assessment of teaching, and in effect, its outcome of academic autonomy at any given point is an inevitable part of the teaching process. Baschiera B. et al. (2018) uses the case of Italian graduates to note that despite schooling for more years and higher certification levels, the young generation is falling behind in employment leading us to question whether they're being trained right. Moreno-Murcia J. An et al.(2013), in their study of sports sciences degree students, found that when faculty used strategically planned assignment of responsibility on evaluation, students described it as a "good learning strategy, new and motivating," and it also improved their performance.

On the other hand, Magalhães A.M. et al. (2007) use the case of the Portuguese Polytechnic education system to stress that all stakeholders react in different, sometimes counterintuitive ways to transformative changes and changes in academic autonomy [20]. Sometimes students oppose changes in the traditional learning system, and academic staff has fragmented views on changes. IN THEIR STUDY OF ORGANIZATIONAL CLIMATE, McMurray A (2013) found state that academic staff's self-motivation, reliability of intellectual autonomy, support, pressure, recognition, etc., played a vital role in defining the environment in the organization. Falchikov N.(1993), in a study of a Scottish polytechnic institute, found that views and openness to academic autonomy varied in academic staff, even department-wise. IN THEIR DISCUSSION, Garratt D et al. (2008) state that intellectual freedom and allied notions are tied to the idea of power control, and with new assessment measures and accountability norms, academic staff feels that their academic autonomy is curtailed more and more. Pullin D (2004) and Darabi M et al. (2017) note that with rising regulations, assessments, and accountability needs, institutions and staff feel that it impinges on their academic autonomy and are under increased stress in their lives due to same. At the same time, Lesenyeho D.L. et al. (2018), in their study of the South African higher education system, found that academic staff and talents were more attracted to institutes with intellectual autonomy and innovation, among other things. Studies that give students and staff reactions to academic freedom over the period are still lacking.

Quality Assurance

There are two opposing views about quality assurance metrics. Lomas L. (1996) says that newer Quality assurance and management assessments are imperative for a more quality-based and consumer-oriented higher education system. The author agrees there are shortcomings to both quantitative and qualitative evaluation approaches. There needs to be a dialogue between all stakeholders about what assessment structures are more beneficial for all parties. Wang L. (2014) suggests with an example of Chinese Higher education Institutes that Q.A., which starts as a means of measuring the quality of education, is also a means of government control. Also, there is the fact that different stakeholders see quality differently. The author finally states that if Q.A. measures are successful, involving faculty and students is imperative. Buckley F et al. (2001) speaks on similar lines that quality assurance and measurement at its basis is a beneficial initiative, but applying crude metrics to a complex field like Higher education may be harmful and warns against using one standard structure for all. Shin J.C. (2014) states that quality assurance as a measure of modern changes and pro-academic autonomy measures are more controlling than previous legal regulations and have a counter-effect on academic autonomy. Andrade M S (2011) takes a different stand and emphasizes the importance of these measurements for accrediting bodies. The author acknowledges that implementing this across higher education is a challenge and has suggested a four-frame model for leading assessment projects, getting faculty and staff on board, and getting their collective support.

Predicting optimal learning

When discussing Self-determination theory (S.D.T.), Niemiec C.P et al. (2009) state that autonomy combined with intrinsic motivation of students is favorable to an ideal learning environment for students. It fulfills students' mental needs of autonomy, relatedness, competence, and wellbeing. According to Vansteenkiste M et al. (2005), contrary to many researchers' view that since autonomy isn't as appreciated in eastern cultures, it's not a good predictor of an optimal learning environment, in two studies conducted by them, they found that autonomy facilitated better learning outcome, wellbeing, and optimal educational premise compared. In a systematic survey of literature conducted by Davies D et al. (2013), the authors found substantial affirmation supporting the importance of autonomy, peer collaboration, and non-prescriptive planning, among other things, for optimal learning in students. In a study conducted by White C. B (2007), the author found that Medical students, who went through problem-based and creative learning curriculum with academic freedom, once comfortable with the idea of autonomy, found they more motivated to learning and could transfer the same motivation to transitioning into clerkship roles from being a student. Conn V.S. et al. (2005) Discusses a case study in which one academic nursing unit moved from getting no National Institute of Health money to being ranked in the top 20 by altering their curriculum, educational, and research structure, among other things, to become more independent and innovative. Pandey (2004) discusses the various forms of autonomy and their applications in the Indian higher education system. The author notes that academic autonomy is sure to bring intellectual wealth. Along with collaborations with other academics, we can create a good learning environment and improve educational standards.

Social Factors

The Higher education system is our society's building block and reflects our community and social factors. In assessing academic autonomy's role, it's impossible to see it without including the impact of social factors. Orzeck R. (2012), in his study examining the conservative critique of the U.S. higher education system, notes that political parties, more so traditional parties, try to disrupt academic autonomy in indirect ways by politicizing internal structuring. Liu X. (2017), in his study on Chinese governance of public universities, states how often overlooked is influence and control the Government exerts on any autonomous activities or thoughts in universities since most of it at all levels of autonomy is sponsored by the Government. Lo W.Y.W. (2018) discusses three social and political incidences in Hong Kong and how they directly had effects like relevant confrontations within university systems. Romo de la Rosa A. (2007) compares "the origin and development of institutional and academic autonomy" in the U.S.A. and Latin America. The author explains how ideologies and political climate across these countries make for a diverse university and Higher education system. To that extent, the author even describes how many social factors affect academic autonomy, sometimes so much that the meaning of concepts involved differs totally.

CONTRIBUTION OF THE STUDY

As aptly stated in the article by Åström, F et al., (2009), page no -26, studies related to humanities and social sciences are often reflected poorly in international databases. One reason for this is that the geographical scope of this type of study generally deals with fundamental local concerns, and the opinions expressed as findings or outcomes of the research are more rudimentary for a particular nation. These studies are less international as compared to the fundamentals, experiments, and other technical sciences. This infers that sources or journals used by social scientists to communicate the results of their research differ diametrically: The authorities are primarily national or local in the case of former research and are more often international in the case of the latter. And throughout the study, it was realized.

We reviewed different sets of research documents obtained after trying different keyword combinations; however, the construct of academic autonomy in kinds of literature related to higher education seems to lack explicit characterization of intellectual independence in context to perceptions of stakeholders, which voice up significant concerns, considering the increasing importance of the concept across higher education intuitions worldwide.

The current article, oriented to review and integrate theoretical and empirical literature across higher education in context with different themes, will add to the existing literature on Autonomy in Higher Education and encourage emerging researchers to investigate further.

The paper will enable readers to get quick and valuable insights into the nature and attributes of academic publishing related to "Autonomy in Higher Education." As a result, researchers will be able to further their research and innovation in the future.

RESTRICTION OF THE REVIEW AND FUTURE SCOPE

We conducted a Scopus database search for exploring documents. We restricted it to peer-reviewed articles published in English Journals only, representing only a part of the literature published in the said research area.

Also, reports of the Higher Education advisory committees of only the Indian Government are referred. The possibility that some critical publications and articles not available in the Scopus database or higher education advisory committee reports of the Governments of other countries may not have been incorporated in this study, therefore, are not ruled out.

Data, findings, or opinions from social media sources, etc., are excluded. Thus, some valuable insights, observations, and discussions have been excluded from the study, especially from government agencies.

The study pivoted on the impact of Academic Autonomy in a higher education setting and stakeholder perceptions. Therefore topics related to other autonomies, gender, independent MOOCs, etc., are not deliberated extensively here.

The study can be broadened using other databases like Web of Science, PubMed also by including conference proceeding papers, book chapters, or other sources. Referring to social media sources may give some valuable insights. Follow-up research can also focus on unattended topics in flow with Academic and other autonomies granted to H.E.I.s.

CONCLUSION

This literature review sets forth a typology of research papers focusing on macro and micro factors affecting interacting with academic autonomy and affecting the learning environment. Many articles focused on characteristics of thriving intellectual independence, while others described barriers to the same. We discussed literature talking about all significant stakeholders keeping students at the center of it. We evaluated qualitative and quantitative studies, empirical and non-empirical, and conducted across the globe in developed and developing countries. We went through many articles, reviews, and studies to gather and learn lessons as a whole and within the microcosm of Higher education Institutes and made this review comprehensive. As mentioned earlier, the research is an honest exercise-driven to bring new ideas into policy and provide a platform for its implementations at various levels. Answering our first research question about which dimensions can be identified while deepening the concepts of intelligent learning environments (S.L.E.) and smart classrooms, this study identifies characteristics that can be divided into two categories: those related to pedagogy and those related to that are more technical. As a result, the S.L.E. and smart classroom have three characteristics: educational technology, ambient physical circumstances, and executed procedures.

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