What shapes media management education in the US and Europe? A comparison of curricula in times of digital transformation

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Castulus Kolo, Bozena Mierzejewska, Florian Haumer, Anran Luo, Christopher Schmidt & Axel Roepnack

Macromedia University, Fordham University (Gabelli School of Business), Macromedia University, University of Florida, Macromedia University, Fordham University (Gabelli School of Business)

Zusammenfassung

Neue Wege der Erstellung und Verbreitung von Inhalten sowie neue Mediennutzungsgewohnheiten, die mit der noch immer andauernden digitalen Transformation einhergehen, sind ständige Triebfedern für Veränderungen in Medienunternehmen und Studiengängen, die sich mit den Erfordernissen des modernen Medienmanagements befassen. Dieser Beitrag soll zu einem besseren Verständnis der Art und Weise führen, wie Medienmanagement-Curricula in verschiedenen Ländern mit den letztgenannten Herausforderungen umgehen. Zu diesem Zweck wurde ein Forschungsdesign entwickelt, das die Identifizierung von Hochschulen bzw. Universitäten mit vergleichbarem Ranking aus fünf Ländern und die Abbildung ihrer Gesamtcurricula auf Kursebene durch quantitative Inhaltsanalyse ermöglicht. Die Ergebnisse zeigen, dass die Ausbildung im Bereich Medienmanagement in erster Linie eine Aktivität von geistes- oder sozialwissenschaftlichen Fakultäten ist, die recht weit verbreitet ist und meist auf Master-Ebene angeboten wird. Die Curricula unterscheiden sich erheblich, bilden aber Cluster mit einer ähnlichen Zusammensetzung von allgemeinen Perspektiven oder Kompetenzen. Die Cluster sind länderübergreifend und gehen oft nicht auf die dringendsten Bedürfnisse der Industrie ein.

Keywords: Medienmanagement; Hochschulbildung; Curricula, Medienwirtschaft; Digitale Transformation

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Summary

New ways of creating and distributing content, as well as new media consumption habits paralleled by still ongoing digital transformation, are constant drivers of change in media businesses and study programs, addressing the needs of contemporary media management. This contribution shall lead to a better understanding of how media management curricula in different countries address the latter challenges. To this end a research design was developed that allows identification of higher education institutions with comparable ranking from five countries and mapping their overall 68 curricula on the course level by quantitative content analysis. The results show that media management education is predominantly a humanities departments' activity being quite widespread and mostly offered at the graduate level. Curricula differ substantially, but form clusters with a similar composition of general perspectives or competencies taught. Clusters run across countries and often do not address most urgent industry needs.

Keywords: media management; higher education; curricula; media industries; digital transformation

Introduction

University level educational programs related to media and more generally to creative industries (Hartley, 2021) have seen significant growth over the last decade (e.g., Flew, 2019) – in terms of numbers of students enrolled, programs offered across universities, as well as in diversity of curriculum designs. Or as Deuze and Prenger put it: "(…) students around the world flock to media degrees like bees to honey, expecting a perfect gateway to what seems like a highly attractive industry. Simultaneously, institutions for higher education worldwide provide a wide range of (skills-based) media production tracks and degrees, offering the promise of an employment in an exciting, dynamic, and high-profile field." (2019, p. 17)

Media management, one of the trending programs for students enrolling in universities evolved from being mainly focused on legacy media organizations and their specific processes to a much broader field with respect to industries addressed as well as to management functions covered (e.g., Noam, 2019; Rohn & Evens, 2020; von Rimscha, 2020). Along with more technology companies getting involved in the media industry and shaping the new environment, media industries at large now require media professionals equipped with a different emphasis on skills (e.g., on more numerical skills) than the more traditional ones. Technological developments like artificial intelligence, virtual and augmented reality or the internet of things are supposed to further upend the media and communication sector (Kolo & Haumer, 2021). Media companies, regardless of size, are facing new challenges by digital transformation and thus having to adopt to the new normal increasingly relying on (digital) technologies in practically all aspects of everyday life.

However, it is far from consensus how exactly media management curricula should be designed, what kind of skills should be taught, and which topics should be emphasized. Up to now, there is limited research investigating media management curricula (e.g., Foust & Bradshaw, 2020) and to our knowledge no studies systematically compare the latter nationally and internationally on a content level.

In the following, we will first summarize our underlying concept of media management as a subject in higher education and the current views on its challenges or what should be taught on it respectively. Furthermore, extant research shall be reviewed on the process of curriculum development in general as well as more specifically on media management education in order to specify research questions. Following that we will depict the research design including the dedicated analytical approach derived for this study. A documentation of the results will be concluded by a summary of answers to the research questions in the light of their theoretical embedding as well as practical implications, limitations of this study, and in our view rewarding further research.

Extant Research on Media Management Education and Research Questions

Media management was traditionally defined referring to managerial aspects of media companies or media industries (Albarran, 2010; Wirtz, 2020). The concept has extended to a broader perspective as the management of information and creative or cultural goods (Mierzejewska & Kolo, 2019). As an interdisciplinary subject, media management evolved along with the expansion and change of the "media" and "management." The terrain of media management has further developed to include entrepreneurship and technology to cover the emerging forms of production and consumption (Ferrier, 2013; Förster & Rohn, 2015). Research on communication or media-related curricula tended to apply qualitative research methodology such as interviews, desk research (website visits), and observation (e.g., Ferrier, 2013; Flew, 2019) to specific aspects of a curriculum.

Based on the existing research and its resulting research gaps with media management education and its curricula respectively, we specify the following research questions:

(1) How prevalent are stand-alone media management programs on undergraduate and graduate level and which departments operate them?

(2) Which recurrent patterns (e.g., clusters of similar curricula) as well as differences can be observed and along which dimensions of content or competencies?

Tackling these questions obviously incurs several methodological challenges that were not addressed to our knowledge by preceding studies – at least not in media management. Hence, we had to develop an approach for (1) identifying media management programs in a given country as well as making a relevant selection for further analysis, and (2) for mapping media management curricula in an efficient, systematic, and encompassing way to analyze them in international comparison and with regards to industry needs.

Methods

Methodologically we could tap into a body of research on curricula as well as on their development in diverse academic and professional areas. Among other they had been investigated in one of the earliest curriculum study reports at all on social welfare (Seipel 1986) and more recently on data science curricula (Tang & Sae-Lim, 2016), accounting (Issa, Sun, & Vasarhelyi, 2016) or sports management (Zimmer, Keiper, 2021). Thereby many curriculum studies adopt content analysis as the research tool (e.g., Crittenden & Wilson, 2005; Crittenden & Crittenden, 2006), which generally is considered an applicable method that reduces data, potentially covers the full scope of a subject, and provides granular detail (Brocato et al., 2015).

Scholars such as Crittenden and Wilson (2005) noted syllabi as symbols or representations of content to expect in a course. Therefore, the course titles were frequently used to indicate the teaching /learning content in the research design. We build on this research tradition and expand our approach to include methodological aspects that make programs internationally comparable and allow them to be qualitatively assessed against the presumed needs of the industry. However, we acknowledge that this approach has its limitations as terms used in a syllabus to denote a certain focus of a course could be interpreted in different ways (even more so across countries). Furthermore, syllabi are not always regularly updated and the actual teaching might differ from its outline in the syllabus.

Not all higher education programs preparing for a career in media and related areas may be explicitly labeled "media management" but more indirectly referring to it via the topics of "media and innovation," "media and technology," "media and entrepreneurship," or similar. Furthermore, "media" may not be used in the program's name at all. Alternatives include "communications", "creative industries" or the "creative economy", and "journalism." After all, media management is an interdisciplinary discipline and thus comprises diverse perspectives from different academic backgrounds like media economics, political economy, media studies, mass communication, or journalism (Küng, 2007).

To address the research questions, a quantitative content analysis of media management curricula in five different countries (Germany, Austria, Switzerland, Great Britain, USA) was conducted. These countries have been selected in order to compare the content of media management programs according to a) type of media systems, b) absolute size of media markets, c) freedom of the press and d) GNI per capita. In each of these countries, a relevant set of *universities* has been selected. This selection took place from national databases of university rankings (e.g. U Multirank in Europe, US News Rankings in the United States) in order to achieve a similar level of academic quality in each of the respective programs. In a next step, a keyword search to identify universities that offer media management programs has been run. To do so, a google search for each of the selected universities was combined with different keywords (boolean logic) related to *management* ("management", "economics", "innovation", "technology", "business" and "entrepreneur") and *media* ("media", "communication", "creative" and "journalism". With this approach, 68 media management programs have been identified (Germany n=9, Austria n=7, Switzerland n=3, Great Britain n=12, USA n=37) as units of examination for this study.

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The labels of a course or class within a program has been identified as a unit of analysis within a full unit of investigation (the program). A codebook has been created and applied to each unit of analysis in the step of data collection. The codebook consisted of 52 content categories (e.g., content procurement, project management, see also table 1) and 10 formal categories (e.g., institutional affiliation of the program or degree). The captured content (course labels) was later reorganized and allocated to six broader competency-oriented categories, "general perspectives" in short, (e.g., applied management, academic disciplines, etc., see table 1), and several specific topical clusters (e.g., ICT, research methods, etc., see also table 1) based on combinations of course labels being more or less and potentially for different reasons related to them.

Table 1. General perspectives (columns) and specific topics (see footnotes) based on content labels on course level.

Applied management	Academic disciplines	Media industries	General competencies	Unspec. projects & practical exp.
general value creation in media	general academic methodologies	general creative industries[c]	project management	practice oriented / industry project
product/business innovation[e]	general (media) management	print media[c]	language proficiency	research / thesis / capstone project
content procurement, production, curation & bundling[c][i]	(media) business models[e]	film & television[c]	intercultural sensitivity	student / social initiatives
content syndication & content rights handling[c]	(media) organization & strategy	telecommunication	communication skills	other open projects/activities
marketing, distribution/sales[a]	(creative) leadership	general digital/online media[i]	scientific writing	
HR & creative talent management	(media) entrepreneurship[e]	social media & platforms[c]	coding & application development[i]	
finance, accounting & controlling	general communication science	games & esports[i]	data visualization[n]	
IT, emerging technologies & data[i]	journalism studies[j]	e-commerce[i]	other general skills & competencies	
	critical studies[s]	sports & leisure[c]		
	(media) psychology[a]	music & performing arts[c]		
	(media) sociology[a][s]	out-of-home advertising		
	(media) economics	theme parks[c]		
	(media) politics[s]			
	political economy[s]			
	(media) ethics			
	(media) law			
	global media[s]			
	statistics/data analytics/mathematics[n]			
	computer science[i]			

Information: Overarching Topical clusters entrepreneurship & innovation[e], ICT[i], numerical skills[n], content creation [c], journalism[j], critical studies[s], audience research [a]

The units of analysis were assessed and categorized based on their literal meaning. These units were allowed to be assigned to a maximum of two general perspectives and a maximum of three content labels. The coding rules were set to enable the coders to capture the possible content of the course and to reduce the interpretation bias when judging only by course names. For example, the "Media communication" class has been assigned to "general communication science" while "Elective topics in informatics I & II" was assigned to the categories "statistics, data analytics, mathematics", "computer science", and "coding and application development".

Three coders (two from Germany and one from the US) executed the coding process. Ten programs were randomly selected from the dataset and recoded by coders to test intercoder reliability (KALPHA = .87). None of the coded variables stood out in terms of intercoder reliability, therefore the coding process was considered as satisfactory.

Each course as unit of analysis was weighted with relation to the total credit points required in a respective program. The ratio of the course credit points to the total credit points required by a program were used to quantify the contribution of each class to the entire program, which later was used in the analysis and comparison of programs between countries and degree levels. As the numbers for individual German-speaking countries, was quite small to yield also statistically significant results their programs and higher education institutions respectively were put together into one data set, denoted "GSA" (for Germany, Switzerland, Austria).

Results

The comparison of curricula for different countries is a challenge due to different academic traditions. Universities in some countries (e.g., US) tend to offer multifarious elective classes to students while universities in other countries (e.g., German speaking countries) offer less individualized courses. Also, the introduction of

the Bachelor and Master degrees to European countries beyond the UK was anticipated with more or less compliance to its framework defined by the so-called Bologna process within the European Union (European Union, 2018).

Different institutional contexts of media management related programs

Research question 1 guided the exploration of how prevalent the media management programs were in the studied countries. The overall sample composition and the affiliations for each program within its university is summarized in table 2. In total, there were 37 (70% graduate programs) media management programs in the USA, 19 (47% graduate programs), and 12 (83% graduate programs) media management programs in the GSA area and the UK, respectively. Among all the studied countries, most media management programs were hosted by humanity departments, and a few were situated in business or IT departments.

The finding that most media management programs conducted activities within a humanities department echoes Lowe's and Picard's (2020) argument that most media management scholars practice in primarily media-related schools with an own original academic background in communication science or journalism studies and little interdisciplinary training (Lowe & Picard, 2020) or more specifically training in genuinely management-related subjects. Besides, it is treated as a norm (albeit often contested) and widespread that the program mainly addresses a specific industry (i.e., news media) with only to a minor extent courses on management topics based on a scholarly foundation in contemporary management or business studies. As a result, most of the programs were naturally created in the humanity departments and rarely would be affiliated as management programs to business schools.

Table 2. Overall sample composition and program affiliation.

	All programs					Graduate programs					Undergraduate programs		
	Total	Humanities	Busi-ness	IT	*Sum*	Humanities	Busi-ness	IT	*Sum*	Humanities	Busi-ness	IT
					(tot.)				*(tot.)*			
GSA	*19* (100%)	17 (90%)	2 (10%)	0 (0%)	*9* (47%)	8 (89%)	1 (11%)	0 (0%)	*10* (53%)	9 (90%)	1 (10%)	0 (0%)
USA	*37* (100%)	35 (95%)	2 (5%)	0 (0%)	*26* (70%)	24 (92%)	2 (8%)	0 (0%)	*11* (30%)	11 (100%)	0 (0%)	0 (0%)
UK	*12** (100%)	7 (58%)	3 (25%)	1 (8%)	*10** (83%)	6 (60%)	2 (20%)	1 (10%)	*2* (17%)	1 (50%)	1 (50%)	0 (0%)
All	*68** (100%)	59 (87%)	7 (10%)	1 (1%)	*45** (66%)	38 (84%)	5 (11%)	1 (2%)	*23* (17%)	21 (91%)	2 (9%)	0 (0%)

One more graduate program analyzed for the UK could not clearly be assigned to one of the three categories of affiliations (see appendix)

Towards a typology of clusters of similar programs

The analysis of media management programs on the basis of the average contribution of general perspectives within a country and academic level as well as on the basis of the occurrences of certain topics therein in the preceding subsections revealed differences between the two academic levels as well as between countries.

According to the Bologna process (European Union, 2018), a European Union's initiative that defined undergraduate and graduate programs in a consistent way among all European Union member countries a clear distinction is to be made between employability-oriented and hence practice-oriented undergraduate programs and graduate programs that prepare also on a more theoretical level for a further academic career or leadership in industry, public administration, or NGOs.

Hence, we would expect differences here also with regards to the contribution of corresponding general perspectives what we do for the UK and the US programs. In GSA area, the former five years programs ("Diplom" or "Magister") had to be reorganized into BA plus MA programs to synchronize with the Bologna process. It seems as if the 5-years programs were more or less cut into these two parts without a reshuffling of courses and the different emphasis on practice-orientation or industry exposure versus theory-orientation along traditional disciplines. These differences seem to have nothing to do with different situations of the media in the GSA are versus the US or the UK or with a different posture of what should be taught with regards to media

management, but rather reflect an incomplete transition from the traditional Master and Diploma scheme in the GSA area to the Bachelor and Master scheme established in Anglo-Saxon countries.

Despite the industry perspective and the perspective from academic disciplines, stark differences can also be seen with regards to unspecified projects and practice. In the UK the latter perspective is emphasized mostly on a graduate level whereas in the GSA area it is addressed quite substantially by both, graduate programs and undergraduate programs. In the US, unspecified projects get rather little attention. Lastly, the applied management perspective plays a minor role in all three regions which is consistent with the humanities affiliation of most programs.

In addition to the contribution of different general perspectives, an analysis of media management education across different countries and programs was conducted with regards to the specific topics to make further comparisons between the academic levels and between the studied countries. We find that programs on the graduate level are more similar than on the undergraduate level. This is not surprising as many of the graduate programs even in GSA countries are taught in English and with more mobile students on this level there is more international competition as well as presumably also more comparison and alignment. Furthermore, we obeserve that on the one hand that several of the topics highly required by industry are not covered at all by a significant share of programs on the graduate nor on the undergraduate level. Namely this are courses devoted to ICT, to numerical skills or audience research as well as to entrepreneurship. On the other hand, a relatively high share of programs has courses devoted to journalism or to a critical studies tradition. The latter – also not specifically required by industry - is not necessarily a disadvantage from a more holistic perspective if industries' most urgent requirements are met. Inviting critical reflection on collateral effects of managing media or the political framework conditions it is exposed to is then certainly a valuable competency in media management education.
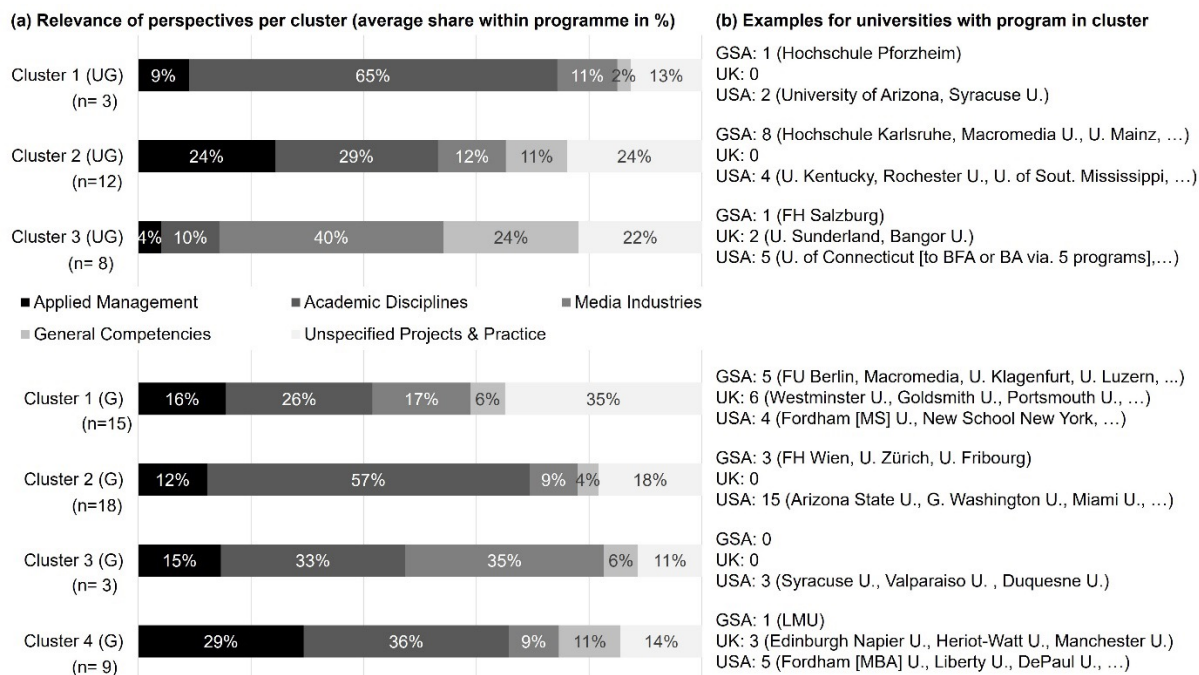
In the next analytical step, we proceed from averages to individual programs and apply a cluster analysis based on contributions of general perspectives and separately for undergraduate as well as graduate programs.

Interestingly, the programs do not cluster according to their regional origin, but we derive three clusters on the undergraduate level and four clusters on the graduate level all of them running across countries (figure 1). This means that overall, programs differ at least as much within a country as they do across them. Hence, the regional context is not a relevant predictor for similarities (or differences). It seems that differences are rather found between different strands of scholarship that are existing albeit certainly to varying extent in all the countries.

The clusters identified on the undergraduate level distinguish programs either because they (1) are strongly (to about two thirds) based on traditional academic disciplines (cluster 1 – the "humanities academics") with relatively minor contributions from all other discerned perspectives, (2) particularly emphasize rather generic management challenges along the value chain (cluster 2 – the "business administrators") with still about a third of the credit points devoted to academic disciplines and also a comparatively high share to unspecified projects (24%), or (3) dedicate a relatively large fraction of credit points (40%) to specific media industries (cluster 3 – the "media makers") and to general competencies (24%) as well as still a substantial share to unspecified projects (20%). (4) On the graduate level, a fourth dimension of differentiation (not showing up on the undergraduate level) can be observed with a relatively high contribution (35%) of unspecified projects and open industry practice (cluster 1 – the "hands-on leaders").

For graduate programs, cluster 2 corresponds to cluster 1 for the undergraduate programs, cluster 3 to cluster 3, and cluster 4 to cluster 2. On the undergraduate level the "business administrators" programs are the most proliferated ones (52%), followed by the "media makers" (35%), and "humanities academics" (13%). On the graduate level, most programs belong to the "humanities academics" (40%) and the "hands-on leaders" (33%) with only a minority from the clusters "business administrators" (20%) or "media makers" (7%). We don't know whether ths was the rational in the program design, but on a graduate level it makes sense to either prepare for a further academic career or for leadership in industry. Reversely, on the undergraduate level the emphasis on educating for a first job in either business administration or in media production has a certain logic.

Figure 1. Clusters of undergraduate (UG) and graduate (G) programs based on the contribution of general perspectives (a) and examples for universities with a program in cluster (b).

(a) Relevance of perspectives per cluster (average share within programme in %)

Cluster 1 (UG) (n= 3): 9% | 65% | 11% | 2% | 13%
Cluster 2 (UG) (n=12): 24% | 29% | 12% | 11% | 24%
Cluster 3 (UG) (n= 8): 4% | 10% | 40% | 24% | 22%

■ Applied Management   ■ Academic Disciplines   ■ Media Industries
■ General Competencies   □ Unspecified Projects & Practice

Cluster 1 (G) (n=15): 16% | 26% | 17% | 6% | 35%
Cluster 2 (G) (n=18): 12% | 57% | 9% | 4% | 18%
Cluster 3 (G) (n= 3): 15% | 33% | 35% | 6% | 11%
Cluster 4 (G) (n= 9): 29% | 36% | 9% | 11% | 14%

(b) Examples for universities with program in cluster

GSA: 1 (Hochschule Pforzheim)
UK: 0
USA: 2 (University of Arizona, Syracuse U.)

GSA: 8 (Hochschule Karlsruhe, Macromedia U., U. Mainz, …)
UK: 0
USA: 4 (U. Kentucky, Rochester U., U. of Sout. Mississippi, …)

GSA: 1 (FH Salzburg)
UK: 2 (U. Sunderland, Bangor U.)
USA: 5 (U. of Connecticut [to BFA or BA via. 5 programs],…)

GSA: 5 (FU Berlin, Macromedia, U. Klagenfurt, U. Luzern, ...)
UK: 6 (Westminster U., Goldsmith U., Portsmouth U., …)
USA: 4 (Fordham [MS] U., New School New York, …)

GSA: 3 (FH Wien, U. Zürich, U. Fribourg)
UK: 0
USA: 15 (Arizona State U., G. Washington U., Miami U., …)

GSA: 0
UK: 0
USA: 3 (Syracuse U., Valparaiso U. , Duquesne U.)

GSA: 1 (LMU)
UK: 3 (Edinburgh Napier U., Heriot-Watt U., Manchester U.)
USA: 5 (Fordham [MBA] U., Liberty U., DePaul U., …)

Conclusions and Implications

This study has shown that content analysis is a fruitful methodological approach in order to capture and analyze data about academic curricula. Obviously, most of the relevant data is publicly available from the websites of academic institutions and presented in a way that makes it processable alongside the categories of a codebook.

Overall, the results of this study reveal that traditional academic disciplines and applied management perspectives dominate most of the programs, whilst numerical and interpersonal skills are underrepresented. In terms of topical clusters, this study finds that there seem to be some structural differences across undergraduate and graduate programs, when those are compared between the US and GSA countries. US universities tend to move away from more practical oriented content in their undergraduate programs (media industries) towards more academic-oriented content in their graduate programs. In GSA countries, no shift into this direction could be observed. On the contrary, German graduate programs in this sample actually reduced the relative weight of academic content compared to undergraduate programs and extended classes about practical topics. This might come as a result of the Bologna process in Europe at the beginning of the century which might not have led to a differentiated and complementary design of undergraduate and graduate programs due to a resistance for change of the responsible institutions.

Even though this study revealed a quite encompassing picture of how media management was taught in the United States and GSA countries, some limitations are taken into account and can be improved in future studies. Considering the size of the database and making the research go smoothly, information related to each sample program that the coders collected was narrowed down to mandatory courses and mandatory-elective courses. Some programs that offer courses in other subjects as electives were not considered in this study. This process may be oversimplifying the complexity of the sample programs. Instead of analyzing the syllabi that show the course structure, content, and teaching materials, analyzing only each course's name in this research may obscure some of the details and insights of how each sample program teaches media management. Besides, this study had

not spent time interpreting how each program names "media management" within and between the U.S. and Germany and the connotation behind different names for academia and the media industry. There is a significant difference between the numbers of samples that were collected in Germany and the United States (9 vs. 34). In collecting the samples, the researchers found that Germany and the United States had different naming habits and different credit systems within higher education organizations. Researchers made adjustments to make the sample programs of both countries comparable. A similar situation may occur in future studies that compare media management education in other countries if using the same method as this research.

Subsequent studies should take the results of this study and analyze them together with additional data about long-term employability in order to derive conclusions about the effectiveness of different content in respect to employability. Moreover, since media management is evolving from a creative discipline into a field of management that also demands skills and competencies from technology, coding, data science and rational decision making, other programs like information technology, economics, coding or computer science that crate graduates that might also compete with media management graduates for jobs in the media and creative industries should also be taken into consideration in further comparison of academic curricula and their benefits for employability.

Finally, future research should try to contribute to a better understanding of the causes for the findings of the current study. Whilst the cluster analysis showed that there seem to be scholarly traditions that spread across countries, there are still many differences on a country level that might interact with such traditions. One could think of different historical and epistemological backgrounds, cultural legacies or differences in media and political systems. In fact, those parameters may create very different situations in respect to mindsets of creators of academic curricula and practical circumstances that set the rules and perspectives of future developments of academic curricula.

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