

Characterization of Publications that Discuss the Bauman's Theory of Liquidity and its Relationship with Management Aspects

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Abstract— This study aims at characterizing the publications that discuss the Bauman's theory of liquidity and investigating its relationship with management aspects. To this end, a systematic review was used with meta-analysis involving a type of exploratory research and a mixed data analysis approach, i.e., qualitative and quantitative. The PSPP, Ucinet® and Nvivo® softwares were used as support. Data collection was through the bibliographic review of articles, dissertations and theses selected in the Web of Science, SCOPUS and CAPES Thesis and Dissertations Database. The results show that most of the studies researched used Bauman's theory of liquidity as a background to contextualize the phenomenon studied and are, also in their majority, theoretical. The empirical studies found do not corroborate the theory of liquidity and are also unrelated to management.

Keywords— Theory of liquidity. Bauman. Empiricism. Meta-analysis. Management.

I. INTRODUCTION

Bauman's theory of liquidity has been widely discussed in the academic world in the most diverse fields of professional training. This theory, which began to be discussed from the end of the 1990s, deals with the fluidity and lightness of the actions, attitudes, behaviors and decisions of individuals living in a society that is considered liquid. Contrary to what is solid, which has clear spatial dimensions, liquids undergo constant shape change when they are subjected to any tension.

This is because the changes that occur nowadays are highly rapid, as pointed out (Leal, 2002) when stating that this era is marked by the confusion of concepts, and that relativism is a striking feature, thus, with the loss or abandonment of theoretical references there is little possibility of deepening the reflection on the problems and by implication, generate equally rapid consequences and responsibilities. In the same way, these actions, attitudes and behavior are replaced by others with the same or faster frequency. And, an important point is that it is not a matter of mere ephemerality, but of a set of values that leads 'humanity' to paths that are often unknown, and with obscure destinies.

To melt the solid, according to Bauman (2001), implies in changing the stagnant and too resistant society to mold the new wills and ambitions of the individual, since the 'communist Manifesto,' about 150 years ago. In this period, melting the solid meant the "[...] repudiation and dethronement of the past [...] the crushing of the forged

armor of beliefs and loyalties that allowed the solids to resist 'liquefaction'." (Bauman, 2001, p. 10). However, the melted solid was remade and re-molded into another form, but now into a liquid configuration that under pressure adapts and changes form again. As Bauman (2001, p. 14) writes, "[...] people were freed from their old cages only to be admonished and censored if they could not reallocate themselves, through their own dedicated, continuous and truly endless efforts [...]." The author further indicates that "[...] the task of free individuals was to use their new freedom to find the appropriate niche and there to settle and adapt: faithfully following the rules and modes of conduct identified as appropriate [...]." Thus, one realizes that the liquid obtained from the solid is shaped in order to solidify again, that is, it causes individuals to have to adapt to new beliefs and loyalties, and thus, new cages.

Another crucial point in modern society is that time is more important than space. In solidity, the territorial space was synonymous with power, in liquidity, the headquarters space the importance for time. As Bauman (2001) points out, the contemporary global elite is formed by 'absent lords.' This implies that they can dominate economic, social and technological aspects without taking care of business administration, the well-being of employees or even the socioeconomic development of the place. Thus, liquid modernity implies that power is also fluid, mobile and increasingly slippery.

Bauman (2001) points out that the advent of liquid modernity has produced profound changes in the human

condition in aspects such as emancipation, individuality, time and space, work and community. Thus, the liquid society increasingly instigates that individuals seek freedom. Freedom to be, to have, to act beyond others the other possibilities of nuances that freedom can have. However, in order there is freedom, the emancipation of man is necessary.

To emancipate, you have to free yourself from society. However, Bauman is based on Marcuse in raising a problem faced for emancipation, which is that “[...] few people wanted to be liberated, even less were willing to act for it, and virtually nobody was sure how the ‘liberation of society’ could be distinguished from the state in which it was found” (Bauman, 2001, p. 26).

This concern refers to Plato (2012) when discussing what became known as the myth of the cave: people who lived in a cave, trapped with their faces facing the bottom only knew the world through shadows that were projected into this cave. When freed, they would feel afraid to leave and see the world ‘just like it is.’

Therefore, as Marcuse (1967, s. p.) points out, “We are dealing with the dialectics of liberation (in fact, a redundant phrase, because I believe that all dialectics is liberation) and not only liberation in the intellectual sense, but liberation involving the mind and the body, liberation that involves all human existence.” The author continues with the following question: In what sense, which aspect treats dialectical liberation? Would it be the liberation of an organic system (regardless of being a social, mental or intellectual system), which is repressive, false or bad? Understanding this is a decisive point in search for freedom.

Marcuse (1967) also indicates that today, in fact since 1967, there is a different historical context for freedom, since, in general, one no longer lives in an oppressive society, but on the contrary, one lives in a relatively functional, rich and powerful society, that is, one seeks the liberation of an affluent society. This implies that the problem facing us now is the need for liberation, not from a poor, disintegrating society, nor from a terrorist society in most cases, but from a society that, in a generalized way, supplies the material and cultural needs of man. In this way, individuals are facing the liberation of a society where liberation is apparently without a mass base. Marcuse's reflections lead us to understand that freedom today is not free, that is, freedom is imposed, but, if the individual is free, what will he/she do with that freedom?

But, in order to answer this question, it is necessary to clarify, what is freedom? To be or to feel free, according to Bauman (2001, p. 26) is, “[...] not to experience difficulty, obstacle, resistance or any other impediment to the

intended or conceivable movements.” The author also points out that “in the land of individual freedom to choose, the option of escaping individualization and refusing to participate in the game of individualization is decidedly out of play” (2001, p. 47). And he adds that “[...] both in the light and fluid stage of modernity and in the solid and heavy, individualization is a fatality and not a choice” (2001, p. 47).

Individualization, although it has always existed, in liquid modernity is more eloquent. As Bauman (2001) points out, it (individualization) elevates the ever-increasing number of people to an unprecedented freedom, but it also brings the unprecedented task of facing the consequences.

Another relevant point when it comes to individualization is that there are two types of individuals: *De jure* and *De facto*. *De jure* individual is born from compulsive self-criticism, that is, he/she is the one who has no one to blame for his/her own misery, that is, who does not seek out (from himself/herself) the reasons for his/her own defeat but in his/her own laziness and there is no other solution but to continue trying with greater determination. Coexisting with the risk of self-reproach on a daily basis is no easy task. And the consequence of this is to focus on one's own performance, which leads to divert attention from the social space where the contradictions of the individual's existence are collectively produced, thus forgetting about political life. *De facto* individual, on the other hand, is the one who controls the resources indispensable to genuine self-determination, that is, the one who takes control over his/her destiny and makes decisions that he/she truly desires (Bauman, 2001).

In this sense, the great question that Bauman points out in this reflection is that the evolution of the individual cannot exist without this look at the social space, at political life. “The *jure* individual cannot become a *De facto* individual without first becoming a citizen. There are no autonomous individuals without an autonomous society, and the autonomy of society requires a deliberate and perpetual self-constitution, something that can only be a shared achievement of its members” (Bauman, 2001, p. 55).

Freedom and autonomy are intimately linked to thought, and refers once again to Plato, when he pointed out that perhaps there was no communication between those who “left the cave” and those who “stayed in the cave,” since those who stayed would not listen to those who left.

About this, Adorno (1951, p. 14) points out that “[...] no thought is immune to its communication, and it is enough to express it in a false place and in a false agreement to undermine its truth.” Complementing on the importance of thought and communication Kant (1783, p. 1) points out that:

Enlightenment is the departure of the human being from its self-incurred minority, of which he himself is guilty. Minority is the inability to make use of one's understanding without the direction of another individual. The human being is guilty of this minority himself if the cause is not the lack of understanding, but the lack of decision and courage to use himself without the direction of another. *Sapere aude!* Have the courage to make use of your own understanding, this is the motto of enlightenment.

Adding, Adorno (1951, p. 35) indicates that "The problem, almost insoluble, consists here in not allowing oneself to get imbecile either by the power of others or by one's own impotence."

Thus, it is clear that knowledge is an essential element for the individual's autonomy, i.e., to be able to manage himself/herself by taking his/her own decisions. Another important point about knowledge is pointed out by Adorno and Horkheimer (1969, p. 5), who state that "power and knowledge are synonyms." And that "Between knowledge and power there exists not only a relationship of servility, but also of truth. Much knowledge, although formally true, is null outside of all proportion with the distribution of powers" (Adorno, 1951, p. 34).

Still, on knowledge and power, Bauman (2001) points out that the union between these two elements that was only imaginative in Plato's time, became a premise of philosophy and a commonly repeated statement of politics. However, the author also highlights that emancipating and liberating ambitions face an obstacle: how to limit the corrupting impact of power and domination to those who are indifferent or resistant to change?

Anyway, as Bauman (2001) says, it is in this liquid society that we find the opportunities and threats of individual autonomy, autonomy that cannot exist except in an autonomous society, that which does not let knowledge be corrupted by power.

Thus, in this context, one has as research question: Which areas and themes corroborate Bauman's theory of liquidity, and what is its relationship with management aspects? Therefore, the objective of this study is to characterize the publications that discuss Bauman's theory of liquidity, and as specific objectives, to list which areas corroborate Bauman's theory and to investigate its relationship with management aspects.

II. MATERIALS AND METHODS

The systematic review implies a series of actions to achieve the proposed objective, thus, the type of exploratory research will be used, and, according to

Lakatos and Marconi (2010), it is the one that allows the researcher to have greater contact with the phenomenon studied. As for the data analysis, this will happen through the mixed nature. The research of quantitative nature, according to Fachin (2006), is the one where the data are quantified and measured. As for the qualitative approach, Richardson et al. (2008) cite that this differs from the quantitative since it does not use statistical instruments in its analysis. Thus, some data are not proven with numbers. According to (Sampaio & Mancini, 2007) the systematic review is a verification that investigates secondary data in search of evidence on a given theme. These are useful to integrate the information from a grouping of studies conducted separately on a given theme, which may present contradictory or coincident results, as well as identify themes that require evidence, helping in the direction of future research. The steps of the systematic review are presented in the sequence.

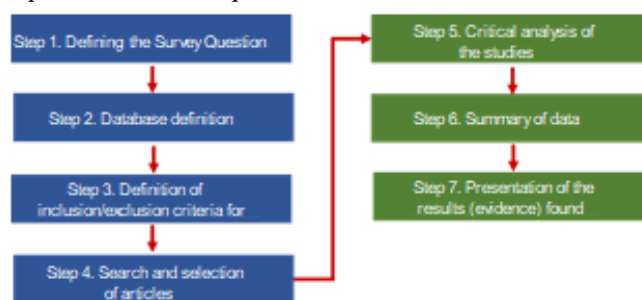


Fig.1: Steps of the systematic review

Source: Adapted from Sampaio and Mancini (2007)

Publications on Bauman's Theory of Liquidity available in the Web of Science and SCOPUS databases were analyzed, as well as the CAPES Thesis Catalogue to identify if the theory is being discussed within the Stricto Sensu programs. The research clipping is cross-sectional, and the collection took place on March 4 in the CAPES Thesis Catalogue and March 23, 2019 in the index bases.

The inclusion/exclusion parameters for the selection of articles were as follows: with the descriptors we used Liquidity; liquid*; Bauman, without period limitation, and without restriction of type of document. The Web of Science resulted in 17 documents, 13 of which were published, 3 articles in process, and 1 editorial material. The search in the SCOPUS database resulted in 152 documents that were articles and interviews, totaling 169 documents in both databases. The inclusion/description criteria were expanded with the items, language, type of document and accessibility (the article being free or paid for), in addition to the main one, dealing with Bauman's theory of liquidity. Although Qualis recognizes and classifies the best researches in Brazil, as indicated by Soeiro and Wanderley (2019), only journals of graduate

programs are classified, and as the purpose of this research was to identify the use/discussion of a theory, it was chosen not to put it in the parameters and inclusion/exclusion.

The survey in the Capes Catalogue of Theses had as inclusion/exclusion criteria the area of Applied Social Sciences, discuss Bauman's theory of liquidity and be between the period 2016 and 2019, in addition to access to the full work. Figure 2 shows the process adopted.

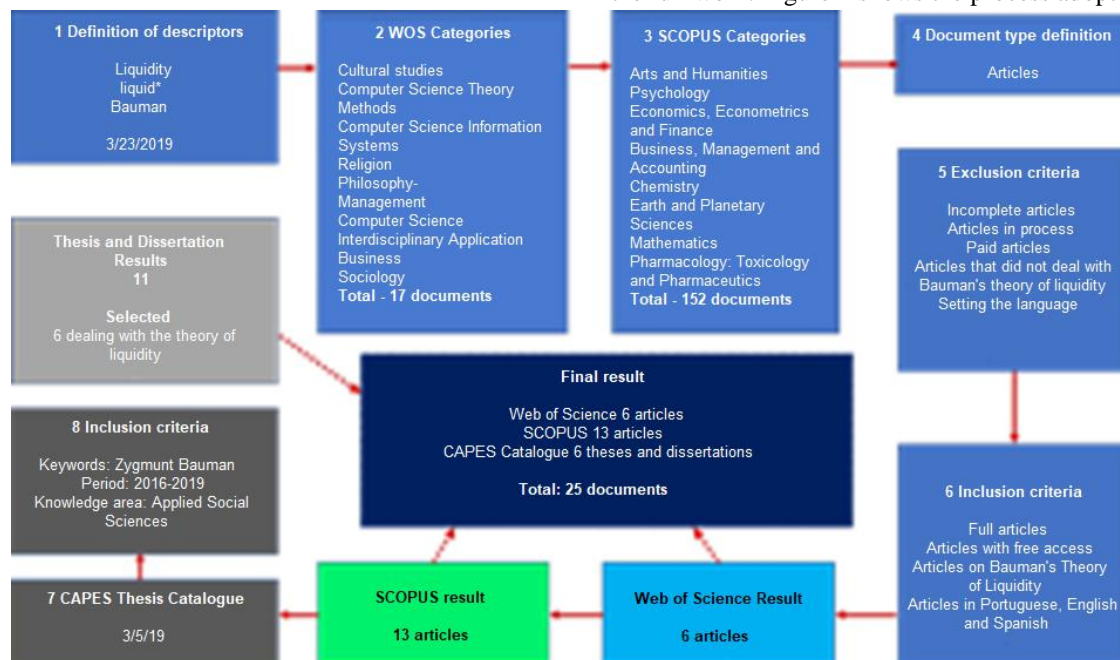


Fig.2: Inclusion and exclusion criteria for the selection of materials

Source: Prepared by the authors, 2019.

As it can be seen, a total of 25 documents were selected, 19 were full articles, with free access in Portuguese, English and Spanish, and 6 theses and dissertations from the Applied Social Sciences area that addressed Bauman's theory of liquidity in their programs. Among the documents excluded from the SCOPUS and Web of Science databases there are articles in Romanian and Croatian, abstract, critical essay on the theory, discussion on Bauman, biographical interview, presentation of the itinerary and reception of Bauman in France, paid articles, editorial material and duplicate articles.

In the analysis approach will be carried out the meta-analysis that according to Rodrigues and Ziegelmann (2010, p. 436), "[...] it is an appropriate statistical technique to combine results from different studies producing, thus, estimates that summarize the whole, called metanalytic estimates." Corroborating, Sampaio and Mancini (2007) point out that systematic reviews with meta-analysis is the most current and appropriate method to synthesize evidence on a given theme.

For this purpose, the software PSPP, UCINET® and NVIVO® were used as data analysis tools. The PSPP is a free software of analysis for statistical analysis.

III. RESULTS AND DISCUSSION

The 19 articles and 6 theses and dissertations are presented below. These will be analyzed in order to answer the research question: Which areas and themes corroborate Bauman's theory of liquidity, and what is its relationship with management aspects?

As it can be seen in Chart 1, the articles selected for this research are distributed in several journals, most of them international. It is also possible to observe the selected theses and dissertations were developed in 4 universities with programs with scores between 4 and 5 in the MEC's evaluation.

Chart 1: Data from the selected documents

N	AUTHORS	TITLE	JOURNAL	COUNTRY
WEB OF SCIENCE				
1	(Lee, 2011)	Modernity, solidity and agency: liquidity reconsidered	Sociology -The Journal of the British Sociological Association	Malaysia
2	(Kociatkiewicz & Kostera, 2018)	After Retrotopia? The future of organizing and the thought of Zygmunt Bauman	Scandinavian Journal of	United Kingdom and

Management		Poland
3	(Ali, 2013)	Secularism: from solidity to liquidity
Cultura - International Journal of Philosophy of Culture and Axiology		Germany
4	(S. Costa, 2016)	Liturgiaem “tempos líquidos”
Revista de CulturaTeológica		Brazil
5	(Jay, 2010)	Liquidity crisis: Zygmunt Bauman and the incredible lightness of modernity
Theory Culture & Society		USA
6	(Perkiss & Handley, 2017)	Making sense of contemporary disasters: a liquid development perspective
International Journal of Sociology and Social Policy		United Kingdom
SCOPUS		
7	(Joubert, 2018)	“Flowing” under the radar in a multifaceted liquid reality: the ekerk narrative
HTS Theologiese Studies		South Africa
8	(Sigahi & Saltorato, 2018)	A emergência da universidade operacional: redes, liquidez e capitalismo acadêmico
Educação e Sociedade		Brazil
9	(Chávez, 2018)	Informaciónlíquidaen la era de la posverdad
Revista General de Informacion y Documentacion		Spain
10	(DeLuca, Ligia, Grisci, Domingas, & Lazzarotto, 2018)	Trabalhar e tatuar-se: estratégia de inventar a vida
Psicologia e Sociedade		Brazil
11	(López, 2017)	De refugiados a parias, en la modernidadlíquida
Revista Mexicana de CienciasPolíticas y Sociales		Mexico
12	(Gevehr, 2016)	A crise dos lugares de memória e dos espaçosidentitários no contexto da modernidade: questões para o ensino de história
RevistaBrasileira de Educação		Brazil
13	(R. B. Silva, Mendes, & Alves, 2015)	O conceito de líquidoem Zygmunt Bauman: contemporaneidade e produção de subjetividade
Athenea Digital		Spain
14	(V. S. Costa, 2015)	“Tempos líquidos”: desafio para a nova evangelização
Theologica Xaveriana		Colombia
15	(Shahghasemi, Masoumi, Akhavan, & Tafazzoli, 2015)	Liquid love in Iran: a mixed method approach
Mediterranean Journal of Social Sciences		Italy
16	(Rossoni, 2015)	Residêncianaatenção básica à saúdeem tempos líquidos
Physis: Revista de SaúdeColetiva		Brazil

17	(Grisci, Bitencourt, & Fleck, 2012)	Trabalhoimaterial, medo, solidão: "amigos de aluguel" nasociedade líquido-moderna	
PsicologiaemEstudo		Brazil	
18	(Moreira & Pessoa, 2012)	De lo solido a lo líquido: las nuevasalfabetizaciones ante los cambiosculturales de la WEB 2.0	
Comunicar		Spain	
19	(Redmond, 2010)	Avatar Obama in the age of liquid celebrity	
Celebrity Studies		United Kingdom	
CATÁLOGO DE TESES DA CAPES			
	AUTOR	TÍTULO	PROGRAM A
1	(Pinho, 2018)	Ódiolíquido: Confrontos entre o bem e o mal namídiaparaense	Comunicação, Cultura e Amazônia
T	Dissertação	IES	UFPA
Keywords		Amazônia Paraense; Direitos Humanos; ÓdioLíquido; Midiatização; Grupo RBA.	
2	(Olbermann, 2017)	Captura à vida de alto executivo: dispositivosemcenascotidianas	Administratio n
T	Dissertation	IES	UFRGS
Keywords		Vida Líquida; TrabalhoImaterial; Dispositivo; Alto Executivo.	
3	(Deus, 2017)	Embelezamentofísico: requisito da gestão gerencialista para o exercício do trabalhoimaterial	Administratio n
T	Thesis	IES	UFRGS
Keywords		EmbelezamentoFísico; Gestão Gerencialista; TrabalhoImaterial; CirurgiaPlásticaEstética.	
4	(R. C. Silva, 2017)	Corpo e contemporaneidade: umaabordagemcríticasobrepadrões de beleza e consumoestético da mulherveiculadospelas mídias	Social Communicati on
T	Dissertation	IES	UMESP
Keywords		Corpo;Mídia;Consumo;Mulher;Comunicação;Cu ltura;Contemporaneidade.	
5	(B. A. Silva, 2017)	Reencantamento via consumo: Intersecções entre religião e consumonas redes sociaisdigitais	Communicati on
T	Dissertation	IES	UFPE
Keywords		Consumo;Discurso; Redes sociaisdigitais; Reencantamento do mundo;Religião.	
6	(Arruda, 2018)	Contemplação assíncrona: a estratégia	Administratio n

		de viver a vida pós-pedido de demissão de trabalhadores do setor bancário	
T	Dissertação	IES	UFRGS
Keywords	Sociedade líquida-moderna; Estratégia de Viver a Vida; Pedido de demissão; Setor Bancário.		

Source: Prepared by the authors, 2019.

As shown, 5 dissertations and 1 thesis from the Federal University of Pará, Federal University of Rio Grande do Sul (2 dissertations and 1 thesis), Federal University of Pernambuco and Methodist University of São Paulo were selected. The programs that studied Bauman's theory of liquidity were Administration and Communication, 3 works each.

Although the dissertations and thesis address the theory of liquidity, the keywords do not present much relationship among the works, as it can be seen in chart 2.

Chart 2: Keywords

1ª Dissertation
Amazônia paraense, Direitos humanos, Ódio líquido , Mídia, Grupo RBA
2ª Dissertation
Vida líquida , Trabalho imaterial , Dispositivo, Alto executivo
3ª Thesis
Embelezamento físico, Gestão gerencialista, Trabalho imaterial , Cirurgia plástica estética

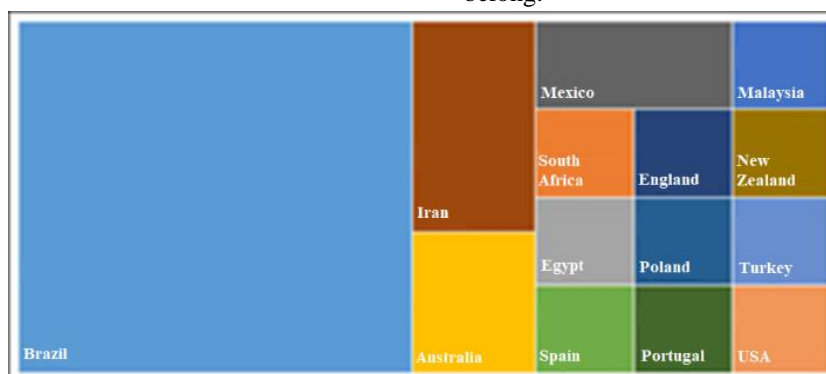


Fig. 3: Countries

Source: Prepared by the authors, 2019.

As pointed out, most of the authors are Brazilian, corresponding to 48.48% of the total of 33 authors in 19 articles from 14 different countries. In the sequence, the Iranians with 9.09% participation, Australia and Mexico with 6.06% each, other countries had only one author in the selected delimitation.

The articles were analyzed for CAPES classification and SRJ Impact. According to CAPES (Coordination for the

4ª Dissertation
Corpo, Mídia, Consumo, Mulher, Comunicação, Cultura
5ª Dissertation
Sociedade líquida-moderna , Estratégia de viver a vida, Pedido de demissão, Setor bancário
6ª Dissertation
Consumo, Discurso, Redes sociais digitais, Reencantamento do mundo, Religião

Source: Prepared by the authors, 2019.

The works that show in their keywords terms that refer to the Theory of Liquidity are dissertation 1 with the term '*Ódio líquido*,' dissertation 2 with the terms '*Vida líquida*' and '*Trabalho imaterial*,' thesis '3' also with the term '*Trabalho imaterial*' and dissertation 5 with the term '*Sociedade líquida-moderna*.' It is worth noting that thesis '3' and dissertation '4' deal with a similar subject '*CORPO*.' In the thesis, the physical beautification is a requirement or prerequisite for the women who develop the management activity, and the dissertation that treats the body and contemporaneity regarding the standards of beauty and aesthetic consumption of women conveyed by the media.

As for the articles, out of 19 selected, 8 are written by Brazilians. The number of authors per article varied from 1 to 4, and the nationalities per article varied from authors of the same nationality and mixed nationalities. The following figure shows the countries to which the authors belong.

Improvement of Higher Education Personnel, 2014), the Qualis-journals is a system used to classify the scientific production of graduate programs regarding articles published in scientific journals. The process is based on the information obtained through the Data Collection app, and the results are made available through a list with the classification of the vehicles used by the graduate programs. Still, according to CAPES (2014, s. p.), this

classification is made “[...] by the **committees of consultants of each evaluation area following criteria previously defined by the area and approved by CTC-ES**, which seek to reflect the relative importance of different journals for a given area” (emphasis of the author). The text also points out that the ‘Qualification’ has the function of evaluating, only, the scientific production of graduate programs, i.e., any other journal outside the graduate programs is not considered by CAPES. This evaluation is updated annually, and the vehicles are framed in strata indicative of quality where, A1 is the highest; A2; B1; B2; B3; B4; B5; and C with lower level.

Another way of qualification in scientific journals is the SRJ (SCImago Journal Rank). This is a “[...] bibliometric indicator that measures the influence of a given journal by the average number of citations received in the last 3 years preceding the year under analysis and that are weighted depending on the area of knowledge and the prestige of the journal” (BCIJO, 2018, s. p.). Also, according to the author, this indicator shows the visibility of the journals contained in the SCOPUS database since 1996, and it is dedicated to the analysis, representation and retrieval of information by means of visualization techniques, thus, the SJR indicator provides an ordered list of scientific journals according to the citations received. Another important information is that it is possible to search for the SJR indicator, only journals that publish in open access, and that are indexed in Scielo or in the Web of Science. This analysis and formation of indicators are attributed by SCImago, it is formed by the research group of the Superior Council for Scientific Research (CSIC) which has as components the universities of Granada, Extremadura, Carlos III and Alcalá de Henares. In addition, the web platform has 34,100 journal titles from more than 5,000 international publishers. It also has metrics from 239 countries. (BCIJO, 2018). The results are shown below.

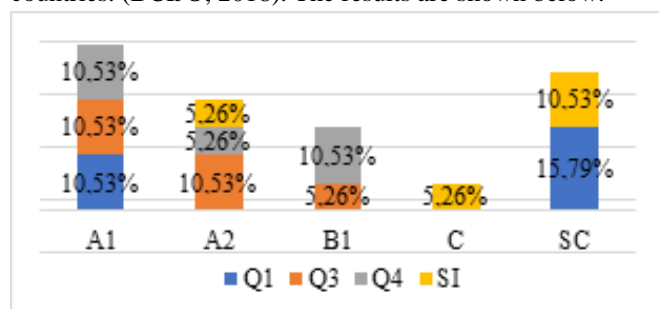


Fig.4: Qualifications of journals

Source: Prepared by the authors, 2019.

Although 31% of the journals analyzed are A1, only 10.53% are in Quartile 1, which is the best quartile, the rest in Quartiles 3 and 4, since none of the selected papers

were classified as Impact SRJ Q2. Still, 21% of the selected journals are classified as A2, and from these, none belong to Quartile 1. As it can be seen, 10.53% belong to Quartile 3, 5.26% to Quartile 4, and 5.26% are not classified by the SJR system. In addition, 26.32% of the selected articles are not ‘Qualified’ and 21.05% have no impact factor.

The qualifications by database are shown below.

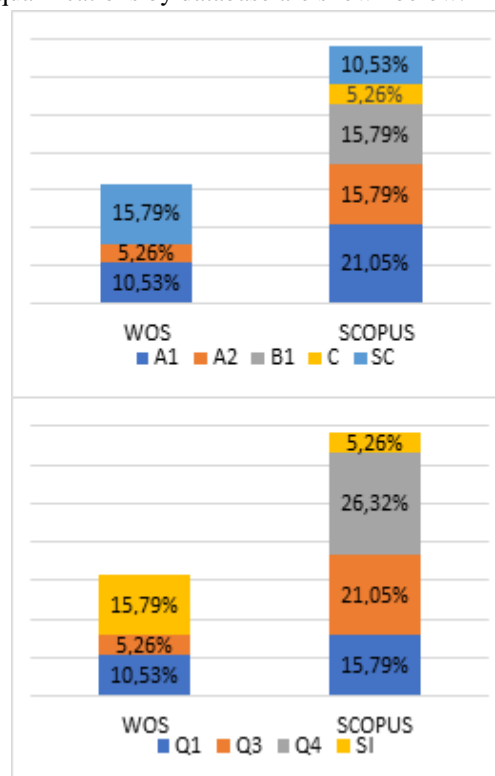


Fig.5: Qualifications per database

Source: Prepared by the authors, 2019.

It is possible to see that there is no significant difference between the databases and the SRJ classifications and indicators, since both indexers have journals that are not ‘Qualified’ or have no impact factor. It is worth mentioning that these are in significant quantity and 26.32% have no Qualis and 21.05% have no JRS indicator. The correlation between periods with Qualis and with the JRS Indicator is weak, showing a correlation coefficient of 0.2354.

The journals were also analyzed according to the language that was published, combined with the language and the database Qualis.

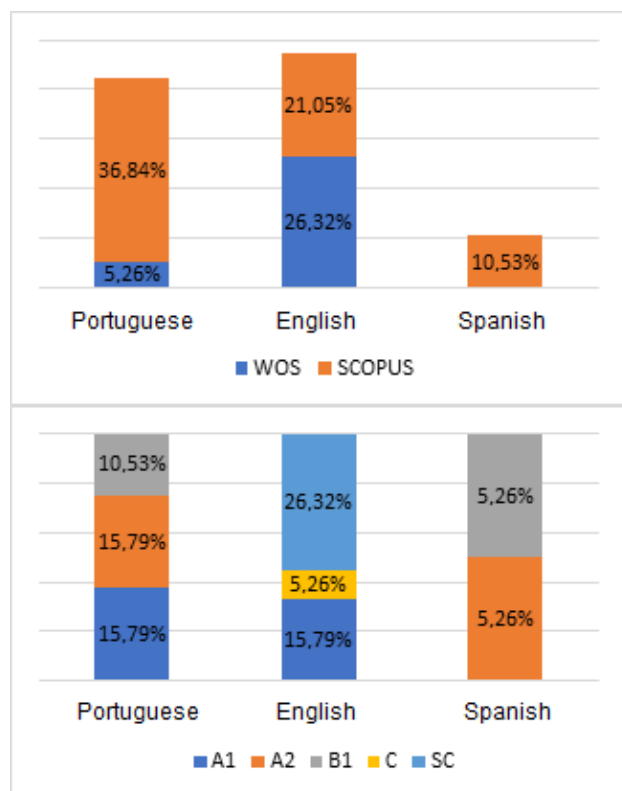


Fig.6: Database language and Qualis

Source: Prepared by the authors, 2019.

Most of the publications are in English, followed by Portuguese (42.11%) and to a lesser extent in Spanish. There is a weak correlation (0.3266) between the language and the Qualis of the index base, just as there is a weak correlation between JRS and the language (0.3340), although there is a considerable number of journals without Qualis (26.32%) and/or without JRS Indicator (21.05%), as already commented.

As for the years of publication, these do not change much over time. The following figure shows the years of the publications of the articles that comprise the analysis of this study.

Despite the higher number of publications in 2015, 2016 and 2018, there was a significant drop in the number of publications in 2017. There is no relationship between the year of publication and the Qualis of the journal, as well as the year of publication and the non-Qualification or impact factor of the journal. These two variables have as correlation coefficient - 0.1167, which implies a very weak correlation. Also, it is noted that there is no relationship between the year of publication and the JRS factor, despite presenting a moderate correlation coefficient of 0.4559.

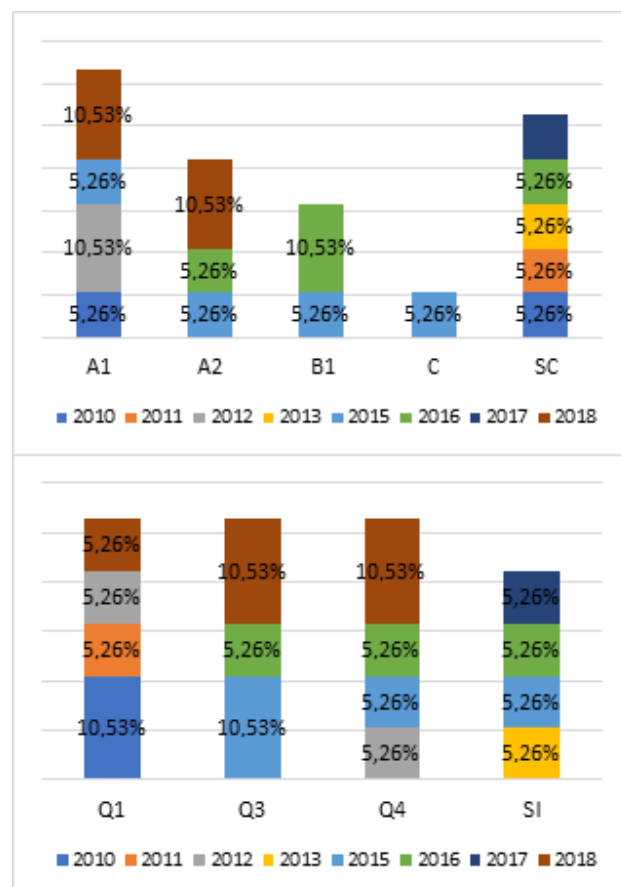


Fig.7: Years of publications and classifications

Source: Prepared by the authors, 2019.

As for the areas that used Bauman's theory of liquidity in their discussions, these vary greatly, totaling 10 different areas. In the following, all the areas are shown.

The area that most used Bauman's Theory of Liquidity was Education, corresponding to 21.05% of the publications, followed by Religion with 15.79%, Communication, Economics and Business, Psychology and Philosophy representing 10.53% each of the total. The other areas have only one publication.

An interesting issue arises when analyzing the relationship between area and language. In Portuguese, the most published area was Education with 37.5% of the total number of articles in Portuguese, which represents 15.79% of the total number of articles. In English, the most published area was Economics and Business with 10.73% of the total number of articles published in English, and in Spanish, the areas they published were Communication and Philosophy, representing 5.26% each of the total number of articles. The correlation coefficient was - 0.4514, which indicates a moderate negative correlation between language and area of study. As it can be seen in the figure below.

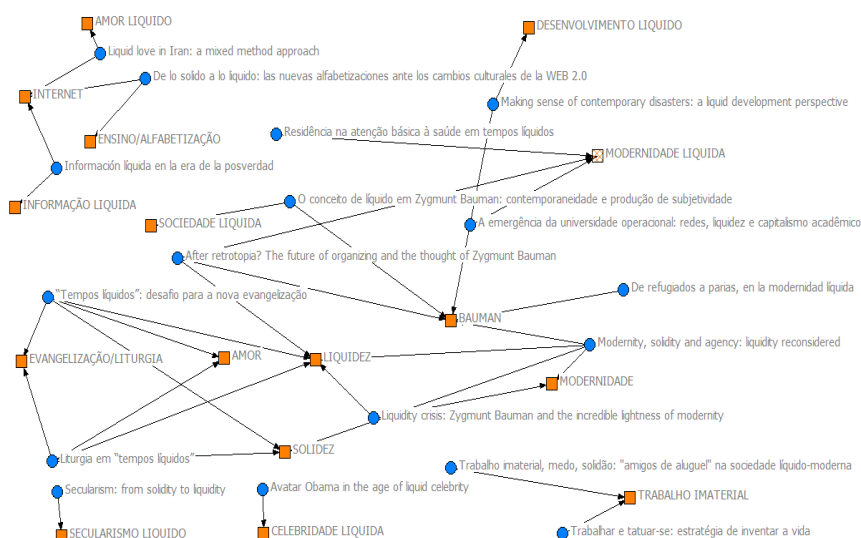


Fig.8: Areas that discussed Bauman's Liquidity

Source: Prepared by the authors, 2019

Complementing afterwards with the use of UCINET® by Borgatti, Everett and Freeman (2002), the relationship

between the titles and areas studied in the articles is shown.



Figure 9: Relationship title and area of study

Source: Prepared by the authors, 2019

The titles address very diverse themes ranging from basic health care to celebrities. And although only two articles have been categorized as Economics and Business, the texts in the areas of communication and psychology also deal with issues that are addressed by administration.

The correlation between the area of study and the classification of journals was also analyzed. The

correlation between the area and the Qualis is weak, showing a negative correlation index of -0.2747. The relationship between area and JRS is even weaker, with a positive correlation of 0.2637.

In order to verify the relationship between titles and keywords, the UCINET® was used again.

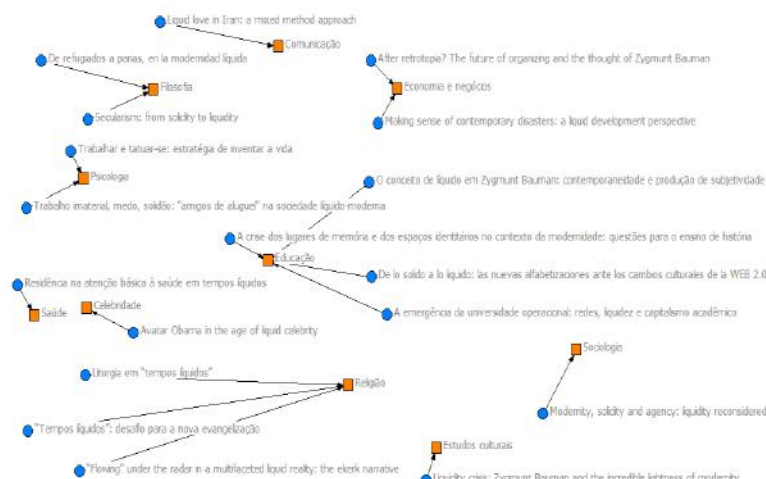


Fig.10: Relationship between titles and keywords

Source: Prepared by the authors, 2019.

Out of the 19 selected articles, two did not show the key terms. The others had between 3 and 6 keywords, and in total, 85 keywords were listed by the authors. Figure 10 shows 17 articles and their relationships with 16 keywords. These were selected for having been used by more than one author, or for having the word liquidity, which directly refers to the theory studied.

'Bauman' and 'liquidity' are the terms that appear the most, being used by 5 authors, followed by the terms 'solidity' and 'internet,' being mentioned by four authors. The other terms that have appeared the most are love, modernity, liquid modernity and immaterial work.

Through the Nvivo® software, we analyzed the higher incidence of words that are cited in the selected articles. The delimited parameters were: 25 most mentioned words, minimum size of 6 letters. As for the grouping, we opted for exact matching terms, with derived words and synonyms.

Terms considered random such as ‘context,’ ‘person(s),’ ‘process(es)’ and also, terms directly related to the theory such as, Bauman, Zygmunt, liquid/liquidity and their variations were excluded from the analysis, since, as they deal with the analyzed subject, they would have greater indecency of citations. The result is shown below.



Fig.11: Word cloud

Source: Prepared by the authors, 2019.

The terms *Modernidade*, Modernity, modern and their synonyms and terms in other languages are cited 568 times. Followed by the terms *Social*, *Sociedade* with derivatives, synonyms and other languages, which are mentioned 466 times. The most used area of Bauman's theory of liquidity was Education, and the terms associated with this area of knowledge are declared 307 times, considering education, study, university and its derivatives, synonyms, and other languages.

Other terms that appeared significantly are related to the Internet, appearing 313 times, considering internet, digital, online and its derivatives, synonyms.

Another point that was raised in the selected articles was the method. It was noticed that the majority of the articles were of bibliographic review, which implies exploratory research of qualitative nature, although many studies do not clarify the type and nature of the research. Out of the

19 articles selected, only 2 pointed out that they are of a mixed nature, i.e., the approach to data analysis was qualitative and quantitative.

As for the data collection instruments, most of them were literature reviews, representing 73.91% of the total articles, followed by a combination of observation and interview with 8.70%, and the combinations interview and documentary analysis, interview and questionnaire, observation, interview and documentary analysis with 4.35% each. A low correlation between the instruments and the nature of the data analysis was observed, 0.3010.

As for the results of the selected articles, only 6 of them show empirical results that corroborate Bauman's theory of liquidity, the others only hold theoretical discussions. The following chart shows what was found.

Chart 3: Empirical studies

Author		Title	
(Perkiss & Handley, 2017)		Making sense of contemporary disasters: a liquid development perspective	
United Kingdom	Economy; business	International Journal of Sociology and Social Policy	
The case study and liquid development arguments support our position that the world is not really in a interregnum state, as suggested by Bauman. Instead, it has, and will continue to exhibit, the impacts of liquid development as long as current economic growth continues. Analyzing liquid development using a case study (environmental migration, mainly caused by climate change and rising sea levels in the Pacific Islands) provides an understanding of the social impacts experienced, which is an initial step towards informing the need for change and a social and political account. Using Bauman's understanding on liquidity enhanced by an understanding of the social challenges of development can help researchers understand why the consequences of disasters are amplified and help policy makers respond better to disasters.			
(Joubert, 2018)		“Flowing” under the radar in a multifaceted liquid reality: the ekerk narrative	
South Africa	Religion	HTS Teologiese Studies	
The Internet has changed the shape of church everywhere. An ‘electronic reform’ has occurred, one in which online faith is no longer a novelty; it is a normal part of liquid modernity. Mobile phones, tablets, and computers have opened up exciting new spaces for spiritual connection and expression. Cyberspace is also a sacred space now. The online community is never a substitute for the physical community of believers;thus,ekerk's ongoing involvement with local churches and academic learning places. The liquid church is not about an institution, but about relationship networks. It is not about religious communities hidden in			

safe havens, far from reality, but about followers of Jesus filling the ethical vacuum created by liquid modernity, incorporating its teachings in relevant ways. We need to provide the message of Jesus in ways and languages with which people in today's liquid world can resonate. We want to be so completely immersed in Jesus' message that temporal concerns are of less importance.

(DeLuca et al., 2018)

**Trabalhar e tatuar-
se: estratégia de inventar a vida**

Brazil

Psycology

Psychology and Society

Contextualized in a time and space considered as a modern and liquid (Bauman, 2007), which holds a type of immaterial work that invades lives, we problematize this scenario from the glimpse of individuals who transited with their works exposed on the skin. Therefore, we treat the tattoo as a conceptual character (Deleuze & Guattari, 1992) and analyze it in light of the methodological guidelines of cartography. Thus, it is through the tattoo that the subject 'makes sense' or 'invents' his/her work and life, reflecting on both, understanding them and expressing them. On the one hand, the tattoo marks the moment, the subject, the work, the life, fixing the movement and creating stopping points in this flow. On the other hand, the tattoo itself transits spatially and temporally, transforming itself and transforming the interactions in which it participates. Therefore, it can be a strategy of inventing life to make sense and 'brighten' the work itself, given the desire that arranges life (Guattari & Rolnik, 1986), as a 'materialization' of lifestyles - in this case, an immaterial work so imbricated to lives that it invades and overflows the skin, objectively.

(Shahghasemi et al., 2015)

Liquid love in Iran: a mixed method approach

Italy

Communication

Mediterranean Journal of Social Sciences

Over the past two decades, the introduction of new communication technologies has dramatically changed our communication landscape. A result of this new situation is the formation and dissemination of what Zygmunt Bauman called 'Liquid Love.' The first characteristic of liquid love is its possibility of escaping from human bonds. As our study shows, Iranians, as people who live in a traditional society with traditional ties, are eager to experience and even adopt online love. In addition, as zeal for heterosexual relationships increases, so does the amount of time spent on liquid love in cyberspace. We see how users and particularly bloggers have expressed the problems that liquid love creates to put users into despair, depression, loneliness, anxiety, and inability to fulfill their daily routines and tasks. Another intriguing finding in this study is that most of the 63% of Iranian bloggers who expressed pure and negative comments about online love, showed in their comments that they themselves experienced this and that they used to have positive comments about liquid love. We should not forget that, despite the many negative effects and consequences that liquid love has for Iranian users, there are positive

consequences that should not be neglected. People will find information about other people - possibly different - and therefore learn how to manage differences or, in the best word, fill the differences.		
(Rossoni, 2015)	Residência na atenção básica à saúde em tempos líquidos	
Brazil	Health	Physis: Revista de Saúde Coletiva
I emphasize that temporariness and uncertainty were remarkable characteristics of the 'space-time' observed, causing insecurity and difficulty in planning training and assistance activities. Despite suffering from temporariness, uncertainty and insecurity, workers and residents developed various forms of resistance and creativity in the daily lives of teams, which enabled them to learn in and from the collective. Thus, the pedagogical documents examined pointed to a training focusing on the user, although the liquid-modern conditions made it difficult to meet this requirement. The national recognition of Murialdo as a training center in primary care and its history did not account for sustaining the investment proposals in basic health units and in hiring and maintaining workers with the state management in that period. Memory seems useless in the 'liquid modernity,' in which a culture of disengagement, discontinuity and oblivion prevails.		
(Grisci et al., 2012)	Trabalho imaterial, medo, solidão: "amigos de aluguel" na sociedade líquido-moderna	
Brazil	Psychology	Psychology in Study
In proposing to discuss and point out indicators of loneliness and fear in the current inventory of lifestyles, this research inquired about the ways of existence that make up the current daily life and whether this would comport someone to the point of needing to pay for company. The results corroborate the studies of Bauman (2007a; 2007b; 2009a; 2009c) and Sennett (2007) regarding the liquid-modern society and the loosening of the solidarity ties that are visualized in it, as well as they allow pointing out the immaterial work of the 'Friends of Rent' as an indicator of fear and loneliness in the inventory of the current lifestyles. The immaterial work offered by the 'Friends of Rent' acquires prominence and propagates as an object of easy and fast consumption, within reach; however, it is constituted as a mode of subjectivation or production of lifestyles or ways of existence, by promoting sensations, impressions and perceptions that mask fear and loneliness in the liquid-modern society, as pointed out by Bauman (2007a).		

Source: Prepared by the authors, 2019.

Out of the 6 articles that show empirical results, only 1 of them is from the Web of Science. As for the areas, 2 papers are on Psychology, Economics and Business, Religion, Communication and Health had one work each. It was identified that, although most of the discussions were in the area of education, none of the empirical

studies were in this area. Other areas that only showed theoretical discussions were Sociology, Celebrity, Cultural Studies and Philosophy.

Analyzing the results showed by the authors, although the works corroborate Bauman's theory of liquidity, especially with regard to liquid modernity, the discussions did not reveal a deepening on the theory. It is possible to glimpse that the theory of liquid modernity was used as a background to contextualize the various aspects studied by the authors.

IV. CONCLUSIONS

In view of the information, Bauman's theory of liquidity, despite having been 'launched' around the year 2000, has only been used to support the discussions in the last 10 years.

Through this review, it was also identified that most of the works that discussed the theory are theoretical, which ends up not corroborating robustly with the theory. The empirical researches, although few, converged to consolidate the theory, even when it is used only as a background to analyze and/or justify the phenomena studied. As shown in Chart 3, the areas that developed empirical studies were, a) economy and business, b) religion, c) psychology, d) communication and, e) health. As for the dissertations and thesis, these also use more Bauman's theory as a scenario to contextualize the phenomenon studied.

Responding to the objective of investigating the Theory of Liquidity and its relationship with management aspects, it was noticed that only one work in the area of economics and business was found:

Making sense of contemporary disasters: a liquid development perspective, which aimed at "[...] it is to explore the economic conditions of contemporary society to provide information on the ways in which the consequences of disaster, including environmental migration, are accentuated." Thus, it was identified that no empirical study was actually performed in the area of management.

There are no studies focused on agriculture, administration or family farming. Thus, as a suggestion for future works, it is proposed to study the areas of administration focused on agribusiness in its most varied sizes in this liquid society.

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