

CONSUMER DIFFERENCES BETWEEN GENERATION Y (MILLENNIALS) AND GENERATION Z: A BIBLIOMETRIC REVIEW

*DIFERENÇAS DOS CONSUMIDORES ENTRE A GERAÇÃO Y (MILLENNIALS) E A GERAÇÃO
Z: UMA REVISÃO BIBLIOMÉTRICA*

Mariana Augusta de SOUZA
Universidade Estadual de Maringá
marianags92@hotmail.com

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Resumo

A segmentação de mercado por geração é chamada de Generational Cohort. Os estudos envolvem análise do perfil de consumidores que compartilham a época de nascimento, comparando suas preferências com as de outras gerações. Embora possua compradores já adultos, a Geração Z ainda é pouco explorada. Assim, indaga-se: quais as diferenças entre as preferências dos consumidores da Geração Y e da Geração Z? Realizou-se uma revisão sistemática comparando os estudos dos últimos dez anos sobre o comportamento destas duas gerações, separadamente. Os artigos foram obtidos na base de dados do WOS e analisados bibliometricamente. Observou-se que a Geração Z tem se mostrado um hot topic, apresentando um crescimento exponencial de pesquisas. O estudo também mapeia as principais teorias utilizadas, principais autores, journals e artigos, os quais podem ser utilizados como referência para futuras pesquisas. Por fim, são apresentados dois gráficos referentes aos domínios (subtemas) de pesquisa da Geração Y e Z.

Palavras-chaves: Recorte Geracional; Análise Bibliométrica; Análise de Rede.

Abstract

Segmentation by generation is called Generational Cohort. These studies involve the analysis of the profile of consumers who share the same time of birth, comparing their preferences with those of other generations. Although it has adult buyers, Generation Z is still underexplored. Thus, one asks: what are the differences between the preferences of Generation Y and Generation Z consumers? A systematic review was carried out comparing the studies of the last ten years on the behavior of these two generations, separately. The articles were obtained from the WOS database and analyzed bibliometrically. It was observed that Generation Z has been a hot topic, showing an exponential growth of searches. The study also maps the main theories used, main authors, journals and articles, which can be used as a reference for future research. Finally, two graphs are presented referring to the research domains (subtopics) of Generation Y and Z.

Keywords: Generational Section; Bibliometric Analysis; Network Analysis.

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1. Introduction

There are different ways of classifying and analyzing consumer behavior. Variables such as age, gender and demographics are traditionally used in this type of investigation. The objective of this segmentation is to facilitate the identification of particular characteristics of a group, providing a better understanding of its habits, desires and needs.

A prominent segmentation approach that has been used in recent years is that of the Generational Cohort, which classifies and observes behaviors according to the consumer's generation. In this type of analysis, the habits of consumers of a given generation are compared within the spectrum of current generations. This approach has been shown to be relevant for understanding buyers' preferences as it highlights key purchasing characteristics of generational groups (PETZER, DE MEYER, 2011; GABRIELOVA, BUCHKO, 2021; THANGAVEL, PATHAK, CHANDRA, 2021; ISHAK et al., 2020; IVANOVA et al., 2019; REISENWITZ, FOWLER, 2019; ZHANG et al., 2017; KRALJEVIĆ, FILIPOVIĆ, 2017; ORDUN, 2015). Currently, the world has populations of the following generations: Baby Boomers, Generation X, Generation Y (Millennials) and Generation Z, with Y being the one with the largest number of people so far (STATISTA, 2022). For this reason, Generation Y has been the most explored in recent times and is mainly related to their previous generations, such as Baby Boomers and Generation X (GABRIELOVA, BUCHKO, 2021; THANGAVEL, PATHAK, CHANDRA, 2021).

However, little has been researched on Generation Z. This group, besides growing, influences their family's consumption, have very specific characteristics regarding their consumption habits. Moreover, the early ones of this group are already active in the labor market, that is, they already have some financial independence (GABRIELOVA, BUCHKO, 2021; KYMÄLÄINEN, SEISTO, MALILA, 2021; SILVA, MACHADO, CRUZ, 2017). For Silva, Machado and Cruz (2017), identifying the particularities of the most recent generations is the first step to develop knowledge about young consumers. Thus, this paper aims to do a bibliometric review comparing the main research domains related to consumers of Generation Y (Millennials) and Generation Z.

Segmenting groups of consumers with homogeneous characteristics is one of the main objectives of Marketing, especially for managers (SCHEWE, MEREDITH, 2004). Upon finding the key group of consumers, "marketers can offer the same (or very similar) product, distribution and/or communications programs to a large number of potential customers who are more likely to respond in the way desired" (SCHEWE, MEREDITH, 2004, p. 51). Such segmentation groups individuals who were born during the same period and experience(d) similar external events, mainly in the late adolescence and early adulthood, contributing to a similar formation regarding preferences, attitudes and consumption habits (SCHEWE, MEREDITH, 2004). Thus, the generational cohort analysis goes beyond segmentation by age, gender and demographics, proving to be an important tool for Marketing purposes (THANGAVEL, PATHAK, CHANDRA, 2021).

Considering that generation Z is the most recent, but still the least explored by researchers, and that it is often considered as homogeneous to the previous generation (Millennials) (THANGAVEL, PATHAK, CHANDRA, 2021) we pose the following question:

what are the differences in consumer preferences between generation Y and Z? So far, only research has been found that compares generational cohorts in specific markets such as: Tourism (ISHAK et al., 2020); Sustainable Consumption (IVANOVA et al., 2019); Use of Technological Services (PETZER, DE MEYER, 2011); Use of Information (REISENWITZ, FOWLER, 2019), among others. Furthermore, there are no review studies comparing the Y and Z generations. Therefore, the proposed study seeks to map the literature on the “generational Y and Z consumption preferences” and then show the “state of the art” of this domain of study.

To answer the research question, we carry out a systematic review comparing the studies of the last ten years on consumer behavior of Generation Y (Millennials) and Z separately. The articles were obtained from the Web of Science database and analyzed based on a comparison between descriptive data and network graphs designed by frequency of keyword co-occurrence of the documents. The review contributes to the existing literature in several ways. First, the descriptive data maps the main journals, authors and articles that discuss the topic under analysis, serving as a guide for researchers who wish to explore this research subject. Second, the graphs reveal research domains that present the most discussed themes about each generation (and their buyer behavior) and also shows the subjects that are not so explored yet, which can also serve as a reference for academics to carry out future research. Third, it brings light to the interests of the studied generations, also serving as information for managers and marketing professionals to understand their consumers. Fourth, this study complements prior literature over the consumer preferences of generation Y and Z, corroborating (or not) their findings so far.

1.1. Basic Terminology

First of all, it is necessary to conceptualize the Y (Millennial) and Z generations and the theoretical approach that this division involves. Generation Y (Millennial) has different birth dates depending on the authors who write about it. In this study, this generation is considered to be those born between 1981-1996, as proposed by the Pew Research Center (2019). This generation is characterized by its growth along with the evolution of technology, being involved in adapting to these in their routine, also impacting their values, life experiences, motivations and, of course, purchasing behavior (Moreno, et al., 2017). Furthermore, they are seen as ambitious, globalized, more tolerant of diversity and more community-minded (SCHEWE et al., 2013).

Generation Z is born between the years 1997-onward (PEW RESEARCH CENTER, 2019) and is the most recent to date. Due to their young age, most are still at the student stage, but they greatly influence their relatives' purchasing decisions (THANGAVEL, PATHAK, CHANDRA, 2021). Born in a context where technology was already advanced, they are used to technological processes and are highly adept at shopping online instead of physical stores (PERLSTEIN, 2017). In addition, this generation was born amidst environmental disasters and major climate discussions around the world, making its surroundings and social circle very oriented towards sustainable and healthy choices (SU et al., 2019a.b.).

The grouping of people according to their generation is called Generational Cohort and represents the segmentation of groups of individuals who were born in similar periods, sharing the same events, experiences and values (at a macro level, of course), which contributes to a similar formation with regard to preferences, attitudes and consumption habits (SCHEWE, MEREDITH, 2004). Thus, the Generational Cohort Theory, also found in the literature as Generational Theory or Generational Approach, is related to the analysis of groups or people based on their generational classification (THANGAVEL, PATHAK, CHANDRA, 2021).

2. Methodological design of the bibliometric analysis

Data were obtained from the Web of Science database with a time frame of the last 10 years to enable an interpretation of the current state of research on generations Y and Z. We used the search by topic which considers the information about the title, abstract and keywords of each paper (Web of Science, 2021). Due to the use of the terms “millennials” and “generation Y” as the same generational referent, the search was carried out with the two terms and then the results were overlapped, eliminating the repeated studies. The same was done with generation Z database which also had its base overlapped with the final base of generation Y to eliminate repeated studies (i.e. studies covering both generations).

The final database was subjected to search for terms referring to other generations such as “baby boomers” and “generation x”, which led to the elimination of 16 more articles for the generation Y database and none for the generation Z. Then, the final base on Millennials was submitted to search for the terms “millennial”, “millennials”, “generation y”, “gen y” and “gen-y” in the title or keywords of the papers obtained. When not identified, the studies had their abstracts analyzed to assess their relevance, after all, the search for topic can generate studies that mention the search terms in their abstract, but that do not represent themes related to the scope of the research (consumer of the y and z generation). Thus, another 199 articles were eliminated, with a final result of 454 studies based on Generation Y. The same was done for generation Z which resulted in 92 studies.

Then, the final databases were descriptively analyzed to obtain bibliometric results. With the analysis of Key Words (KW), it was possible to identify some of the most used theories when approaching the subject “consumer of generation Y and Z” and also allowed the design of a network graph that allows the interpretation of research topics on the theme. The network analysis was performed using CorTexT Platform (IFRIS, 2021) to map the linkages between articles’ keywords.

As for the display of the network graph, it is composed of nodes (set of highly correlated keywords) and their links. The triangles represent the KWs. Their different sizes represent the frequency of that word. The larger the triangle, the more times that term was used as KW. The lines between the triangles represent the co-occurrence of terms as keywords in the same or different studies. The thicker the line, the more studies used those words concurrently in their KW lists. KW nodes with high co-occurrence density are clustered which are represented by colored circles. These clusters are interpreted

by the tool itself, but can be better explained based on a qualitative analysis of the terms and articles in the database that represents them. Thus, it is possible to interpret the graph as research domains around the topic “consumer of generation Y and Z”.

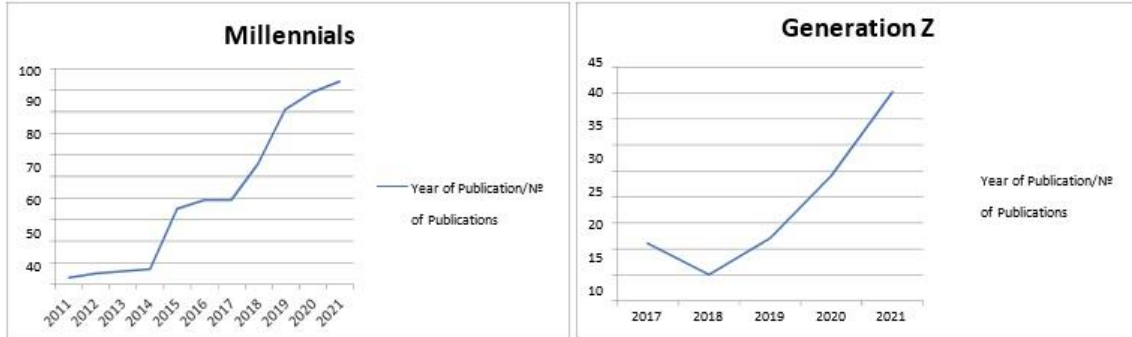
3. Scientific landscape of publications: temporal scale, journals, articles and authors

This section presents descriptive data on the basis obtained in order to demonstrate the main publication periods; journals that publish the most on the topic; most cited articles; main authors and the most used theories.

3.1. Year of Publication

As you can see, the theme has been growing in terms of publications over time, becoming a hot topic nowadays. Comparatively, studies on Generation Z are growing faster than those on Millennials, which may mean an area of research that is even more explored.

Figure 1 – Publications on “Gen Y (Millennials) Consumers” and “Gen Z Consumers” over time



Source: elaborated by the author based on the Gen Y (Millennials) and Gen Z database

3.2. Journals

The studies database on Millennials resulted in 454 articles from 215 different journals and for Generation Z, 92 articles referring to 72 different journals were selected. The list of Journals is similar for both generations. The following top journals account for 15% of publications on Millennials and 35% for Generation Z.

Table 1 – The top journals publishing on Gen Y (Millennials) and Generation Z consumers

Gen Y (Millennials)			Gen Z		
Ranking	Journal	Nº of Publ.	Ranking	Journal	Nº of Publ.
1	Sustainability	17	1	Sustainability	11
2	Young Consumers	16	2	Young Consumers	10
3	Journal of Retailing and Consumer Services	14	3	Journal of Asian Finance, Economics and Business	5
4	Journal of Fashion Marketing and Management	12	4	Caderno Profissional de Marketing Unimep	4
5	British Food Journal	11	5	Journal of Fashion and Marketing Management	3

Based on the journals, we observe that, even though the number of articles for Generation Z is smaller, the number of studies by the journals Sustainability and Young Consumers remains expressive, demonstrating the relevance of these journals when the subject is consumption and generations. The set of top journals from both databases present articles on the topic from the time frame of the last 10 years (for Millennials) and since the beginning of publications on Generation Z, i.e. 2017. Thus, they cover the entire development of this last theme. The journals Sustainability and Young Consumers stand out. They are the ones who publish the most about consumption of both generations and began to explore the topic from 2016 (for Millennials) and 2017 (for Generation Z). This shows that the topic has been recently explored, but with great intensity if we consider the number of publications. In addition, the Journal of Fashion Marketing and Management is also a reference for publication on consumption by Millennials and Generation Z, now with a focus on fashion products. This market is one of the most explored by both generations and also has a growing number of publications.

3.3. Authors

The authors who publish the most are different for each generation. The theme “consumption of the Millennial generation” is more consolidated and has a greater number of studies and also of authors, totaling 999 identified in the database. For Generation Z, this number is 249 authors, which reflects the number of publications to be highlighted in the table 2. With this analysis, it is possible to identify some theoretical inconsistencies between the papers. Although the authors use the terms “Generational Cohort Theory” (DUFFETT, 2017a.b.) and “generational theory” (BILGIHAN, PENG, KANDAMPULLY, 2014; BILGIHAN, KANDAMPULLY, ZHANG, 2016), they all describe the same theoretical definition: generational cohort is a construct that refers to the sharing

of life experiences of a certain age group, causing them to develop similar behaviors and beliefs (MERIAC, WOEHR, BANISTER, 2010). The generational theory, in turn, analyzes these groups to predict their key characteristics in certain contexts (OKROS, 2020). Thus, it is possible to generalize both terms identified in the database as a single theoretical approach.

Table 2 – Gen Y (Millennials) and Gen Z top authors

Gen Y (Millennials)			Gen Z		
Order	Authors	Nº of Publ.	Order	Authors	Nº of Publ.
1	Jain, S.	6	1	Gentina, E.	2
	Duffett, R.G..			Martinez-Gonzalez, J.A.	
2	Edu, T.	5		Dabija, D.C.	
	Ozuem, W.			Kamenidou, I.	
	Negricea, I.C.			Lee, Y.K.	
3	Howell, K.	4		Priporas, C.V.	
4	Arli, D.	3		Stylos, N.	
	Bilgihan, A.				
	Chattaraman, V.				
	Johnson, O.				
	Kandampully, J.				
	Lancaster, G.				
Willis, M.					

3.4. Most-cited articles

The most cited articles in the databases, mostly, refer to the oldest articles identified, precisely because of their time available for access. To show a more current scenario of the most relevant studies, table 3 of the most-cited articles of Millennials consumers was divided into 3 time periods, bringing the three most referenced articles from each period, with the last period having 4 articles due to the large number of studies in this time frame, thus totaling 10 papers. In the case of Generation Z, this division was not necessary due to the small number of studies identified and the fact that publications began in 2017 only. Thus, the 10 most cited articles about Generation Z consumers are presented in table 4.

When we compare the two tables, we see that studies on Millennials have more occurrence of theoretical background in relation to generation Z. This can be explained by the fact that studies from this last generation are recent and are more dedicated to exploratory approaches, seeking to understand the field. This is what happens in articles

by Ao & Nguyen (2020); Su et al., (2019a.b.) and Duffet (2017a.b.), for example. There are no review studies on Generation Z, which may also be due to the recent start of this area of study.

Regarding the Millennials table, there is already a review article and it is the most cited of all, which is most common for this type of study. However, this article is from the year 2014 and may not represent the current reality of this consumer market. The journals of the top articles of this consumer group are, in large part, aimed at the tourism area and are present in the three determined periods. This shows that the Millennial tourist consumer is a target market for the sector and that this service consumption is relevant in scientific research.

Albeit the top journals Sustainability and Young Consumers are references for publications about generations, they do not appear in the list of most cited by the Millennial database. This can happen for two reasons: even though these journals have started their publications on the subject in 2016 and 2017, most of their studies are from the years 2019, 2020 and mainly 2021. Thus, the availability of these papers may influence the absence of these studies in the top-cited articles. Furthermore, the subject "Millennials tourism" may not be the most commonly found in these two top journals, although this is an apparently important market for Millennials researchers, after all, it represents a large part of the most cited articles. Thus, it is possible that the subjects of the top journals are still on the rise and not as consolidated as the tourism sub-theme, for example.

This scenario is a little different for two top journals: Journal of Fashion Marketing and Management; and the Journal of Retailing and Consumer Services. In the first case, it can be seen that the most cited article is one of the oldest in the database (2015), which makes it more likely to be cited if we consider only the time of publication. In the second case, the article is relevant, because even due to the shorter publication time, the study is one of the most cited, showing that the topic "online shopping" is a recent and prominent topic in relation to the consumption by Millennials.

In the table of most-cited articles of Generation Z, the results are also different. Most of these studies belong to top journals, especially Sustainability. Both the number of articles and the number of citations are smaller, which indicates that the consumption of this generation is still little explored. Here, tourism studies give way to research in the technological field, ranging from the focus of social media (Duffet, 2017a.b) and the use of innovative devices, as exposed by Priporas, Stylos, Kamenidou (2017).

As seen in the significant number of articles in the top journal Sustainability in the Generation Z database, sustainable focus is a key issue for this generation's consumption and the themes range from the food sector (Su et al., 2019b.; Kamenidou et al., 2019) to sustainable consumption in the fashion industry (Su et al., 2019a; Gazzola et al., 2020; Nguyen, Nguyen, Nguyen, 2019).

Table 3 - Millennials Most-cited Articles

Gen Y - Millennials								
Time Period	Year	Times-cited	Author	Title	Theoretical Approach	Journal	Aim of Study	Findings
2011-2014	2014	229	Cohen, S.A.; Prayag, G.; Moital, M.	Consumer behavior in tourism: Concepts, influences and opportunities	-	Current Issues in Tourism	Review the CB-related literature in three major tourism journals from 2000 to 2012.	They identify three crucial factors for the analysis of tourism consumer behavior: Technology, Generation Y and Ethical Consumption.
	2011	138	Jang, Y.; Jung, K.; Woo Gon, B.; Mark A.	Generation Y consumers' selection attributes and behavioral intentions concerning green restaurants	-	International Journal of Hospitality Management	To examine the Generation Y consumer segments' selection attributes and behavioral intentions toward green restaurants.	The study identified four different segments of Generation Y consumers according to their food-related life-style, which presented different behavioral intentions toward green restaurants.
	2014	116	Pomarc, E.; Vecchio, R.	Millennial generation attitudes to sustainable wine: an exploratory study on Italian consumers	-	Journal of Cleaner Production	To explore Millennial consumer preferences and purchase decisions of sustainable wines.	Living in an urban area, being female and older (age cohort 27-35) significantly increases the probability of buying sustainable wines in Italy.
2015-2018	2018	92	Wang, J.; Wang, S.; Xue, H.; Wang, Y.; Li, J.	Green image and consumers' word-of-mouth intention in the green hotel industry: The	-	Journal of Cleaner Production	To examine the relationship between green image and the word-of-mouth intention of consumers	The consumers' green satisfaction and green trust are positively related to their intention to recommend green hotels

				moderating effect of Millennials			in the Chinese green hotel industry.	to individuals around them, and Millennials moderate this effect.
	2015	92	Giovannini, S.; Xu, Y.; Thomas, J.	Luxury fashion consumption and Generation Y consumers Self, brand consciousness, and consumption motivations.	Self-Congruity Theory	Journal of Fashion Marketing and Management	To investigate Generation Y consumers' luxury fashion consumption.	Public self-consciousness and self-esteem have significant influence on Generation Y consumers' brand consciousness, their luxury consumption motivations and brand loyalty.
	2017	92	Hwang, J.; Griffiths, M.A.	Share more, drive less: Millennials value perception and behavioral intent in using collaborative consumption services	Theory of Reasoned Action	Journal of Consumer Marketing	To investigate how the cognitive value perceptions and affective attitudes of Millennial consumers are related to behavioral intent in the context of collaborative consumption.	Specific dimensions of value perceptions (utilitarian, hedonic and symbolic) have differing effects on young consumers' attitude and empathy toward collaborative consumption services.
2019-2021	2019	67	Liu, H.; Wu, L.; Li, X.	Social Media Envy: How Experience Sharing on Social Networking Sites Drives Millennials' Aspirational Tourism Consumption	Social Comparison Theory	Journal of Travel Research	To investigate why and under what conditions others' positive experience sharing may trigger Millennial consumers' destination visit intention.	Among consumers with low trait self-esteem, luxury travel experiences shared by similar others stimulate focal consumers' own intentions to visit the same destination.
	2019	49	Femenia-Serra, F; Perles-Ribes, J.F.; Ivars-Baidal, J. A.	Smart destinations and tech-savvy millennial tourists: hype versus reality	Generational Theory	Tourism Review	To compare the expectations of Spanish Millennial tourists about smart destinations with the emerging demand for specialized	There is a gap between expectation and reality in three main areas: use of mobile technology, data sharing for personalized experiences and smart

							technology tourism.	technologies for experiences improved.
	2019	45	Ladhari, R; Gonthier, J.; Lajante. M.	Generation Y and online fashion shopping: Orientations and profiles	Generational cohort theory	Journal of Retailing and Consumer Services	To segment Generation Y female online shoppers according to their psychographic, demographic, and behavioral characteristics.	The results reveal four approaches to online shopping and six distinct shopping profiles.
	2019	44	Wang, Y.; Herrando, C.	Does privacy assurance on social commerce sites matter to millennials?	-	Journal of Information Management	To explain how concerns about privacy affect consumers' social interaction behavior and purchase decision-making on s-commerce sites.	Institutional privacy assurance positively influences institutional-based trust, which, in turn, affects online social interactions, and consequently increases the likelihood of product purchases on s-commerce sites.

Table 4 - Generation Z Most-cited Articles

Year	Times-cited	Author	Title	Theoretical Approach	Journal	Aim of Study	Findings
2017	113	Priporas, C.V.; Stylos, N.; Fotiadis, A.K.	Generation Z consumers' expectations of interactions in smart retailing: A future agenda	-	Computers in Human Behavior	To explore Generation Z consumers' current perceptions, expectations and recommendations in terms of their future interactions in smart retailing contexts.	They expect various new devices and electronic processes to be widely available, thus offering consumers more autonomy and faster transactions. In addition, they expect the technology to enable them to make more informed shopping decisions.
2017	69	Duffett, R. G.	Influence of social media marketing communications on young consumers' attitudes	-	Young Consumers	To examine the influence of interactive social media marketing communications on teenagers' cognitive, affective and behavioral attitude components in South Africa.	Social media marketing communications had a positive on each attitude component among adolescents, but on a declining scale, which correlates to the purchase funnel.
2019	24	Kamenidou, I.C.; Mamalis, S.A.; Pavlidis, S.; Bara, E.Z.G.	Segmenting the Generation Z Cohort University Students Based on Sustainable Food Consumption Behavior: A Preliminary Study	Theory of Planned Behavior	Sustainability	To explore the sustainable food consumption behavior of the Generation Z cohort that is studying at Greek universities and living away from home, and to segment them according to their behavior.	The focus of sustainable food consumption behavior is limited to eating seasonal fruits and vegetables and purchasing regional food. Additionally, it identified two student segments based on sustainable food consumption behavior.
2019	19	Su, C.H.; Tsai, C.H.; Chen, M.H.; Lv, W.Q.	US Sustainable Food Market Generation Z Consumer Segments	-	Sustainability	To explore the interaction between environmental consciousness and sustainable food attributes as predictors in the market	Gen Z consumers with high environmental consciousness and moderate ecological awareness considered more eco-friendly and healthy product attributes when

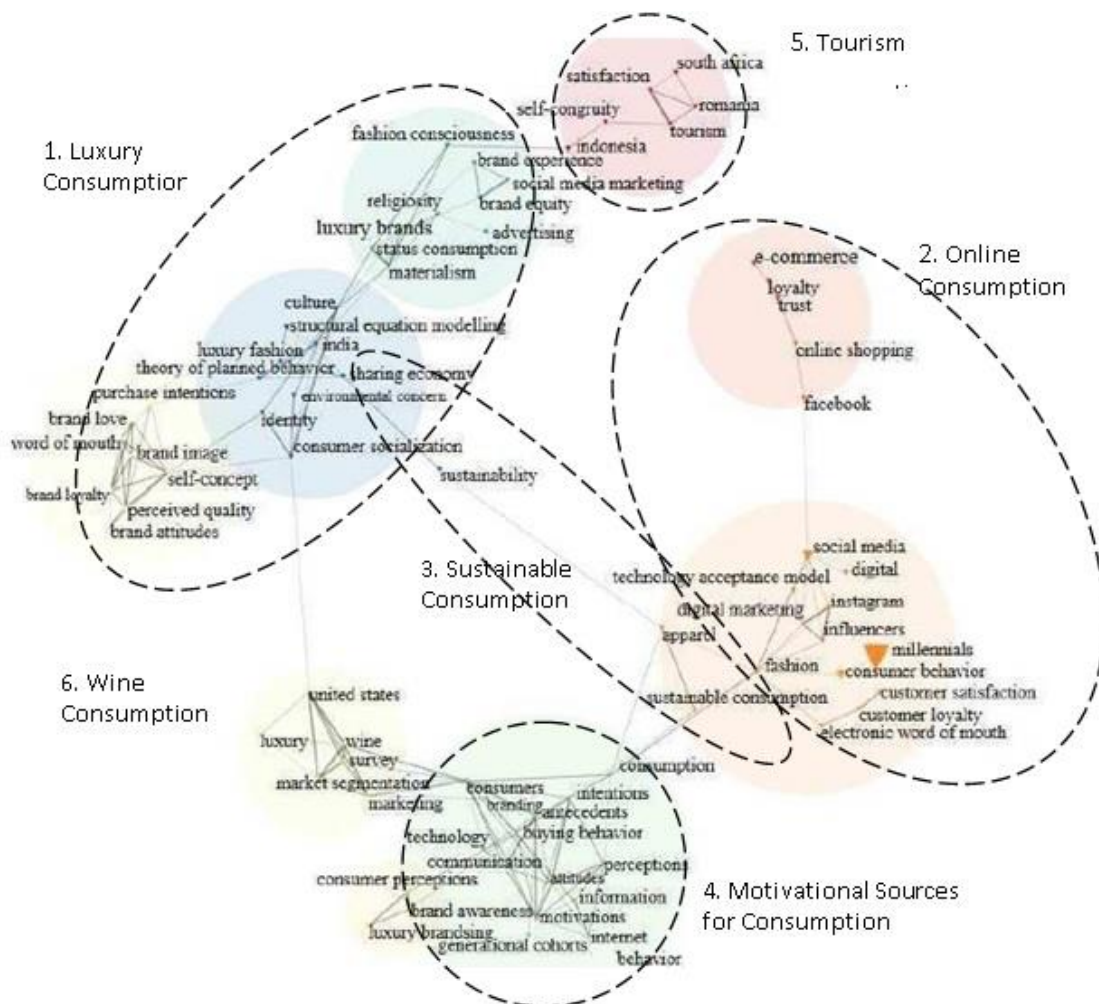
						segmentation process for sustainable foods for United States Generation Z.	purchasing sustainable food, and with low environmental consciousness they considered more extrinsic product attributes (e.g., price and convenience).
2020	15	Gazzola, P., Pavione, E., Pezzetti, R., Grechi, D.	Trends in the Fashion Industry. The Perception of Sustainability and Circular Economy: A Gender / Generation Quantitative Approach	-	Sustainability	To analyze how sustainability and circular economy principles are influencing the perception of the fashion world among the new generations of consumers.	The results of the survey describe the students' behavior as regards fashion's emerging trends, with particular attention to sustainability issues and the application of circular economy principles.
2020	15	Priporas, C.V.; Stylos N., Kamenidou, I.	City image, city brand personality and generation Z residents' life satisfaction under economic crisis: Predictors of city-related social media engagement	-	Journal of Business Research	To examine generation Z residents' engagement with the city's social media during economic crisis in relation to city image, city brand personality and residents' overall satisfaction.	The findings reveal the significant impact city image and city brand personality have on generation Z residents' engagement with city's social media.
2019	9	Nguyen, M.T.T.; Nguyen, L.H.; Nguyen, H.V.	Materialistic values and green apparel purchase intention among young Vietnamese consumers	Theory of Plan-ned Behavior	International Journal of Retail & Distribution Management	To investigate factors driving young adult Vietnamese consumers' purchase intention toward green apparel products with emphasis on the role of materialistic values.	All three antecedents from the TPB were positive contributors to green apparel purchase intention.
2017	9	Duffet, G.	Influence of Facebook Commercial Communications on Generation Z's	-	The Electronic Journal of Information Systems in	To investigate the influence of Facebook commercial communications (FCC) on the hierarchy-of-effects model attitude stages	FCC had a positive effect on cognitive, affective and behavioral attitudes amid South African adolescents, which is in correlation with the communications effects pyramid model.

			Attitudes in South Africa		Developing Countries	amongst Generation Z.	
2020	8	Ao, H.T.; Nguyen, C.V.	The Reaction of Vietnam's Generation Z to Online TV Advertising	-	Journal of Asian Finance Economics and Business	To examine the reaction of the Z-Vietnam generation to online TV advertising (TVC).	Due to the influence of social media and generational characteristics, most consumers of the Generation Z in Vietnam have a favorable attitude towards online TV advertising, and they appreciate this form of advertising.
2018	7	Chen, Z.T.	Poetic presumption of animation, comic, game and novel in a post-socialist China: A case of a popular video-sharing social media Bilibili as heterotopia	-	Sustainability	To investigate the construction of heterotopia on Bilibili through their various practices of tactical presumption.	Presumption on Bilibili makes this particular social media a virtual heterotopia in the sense that it mirrors the real world but with more tolerant, friendly and progressive possibilities..

4. Network Analysis

In this section, we present the network charts referring to the frequency of keywords. The first chart below refers to the consumption of Generation Y (Millennials). For its construction it was selected the 90 most cited keywords. A number greater than that made it difficult to see the terms. In the case of generation Z, the cut was 65 keywords for the same reason. Due to the fact that the Generation Z base presents a smaller number of documents, some of the exposed keywords are relatively specific and, generally, involve long terms that can interfere with the visualization of the chart. Thus, the smallest cut was needed.

Figure 2 – Research Domains on Gen Y (Millennials) Consumption



Source: elaborated by the author based on the Gen Y database

The figure above reveals five top research domains related to Millennials consumption, whatever product or service it may be. Circle number one represents the strong line of research on the consumption of luxury items by Millennials, especially in the fashion industry. This group represents the largest consumer market in this segment, with growth prospects (DE KERVILER, RODRIGUEZ, 2019). The articles that represent this area of research ensure that this generation uses luxury brands as a source of status, originality and authenticity (BUTCHER, PHAU, SHIMUL, 2017), which is evidenced in the keywords present there such as “identity”, “self-concept” and “consumer socialization” and they are connected with the term “luxury fashion.” Furthermore, there are studies such as the one by Rodrigues & Rodrigues (2019) which shows that the image of a luxury brand is directly related to Millennials’ brand love. This shows the impact of brand attitudes and status outcome it provokes in the loyalty of this type of consumer.

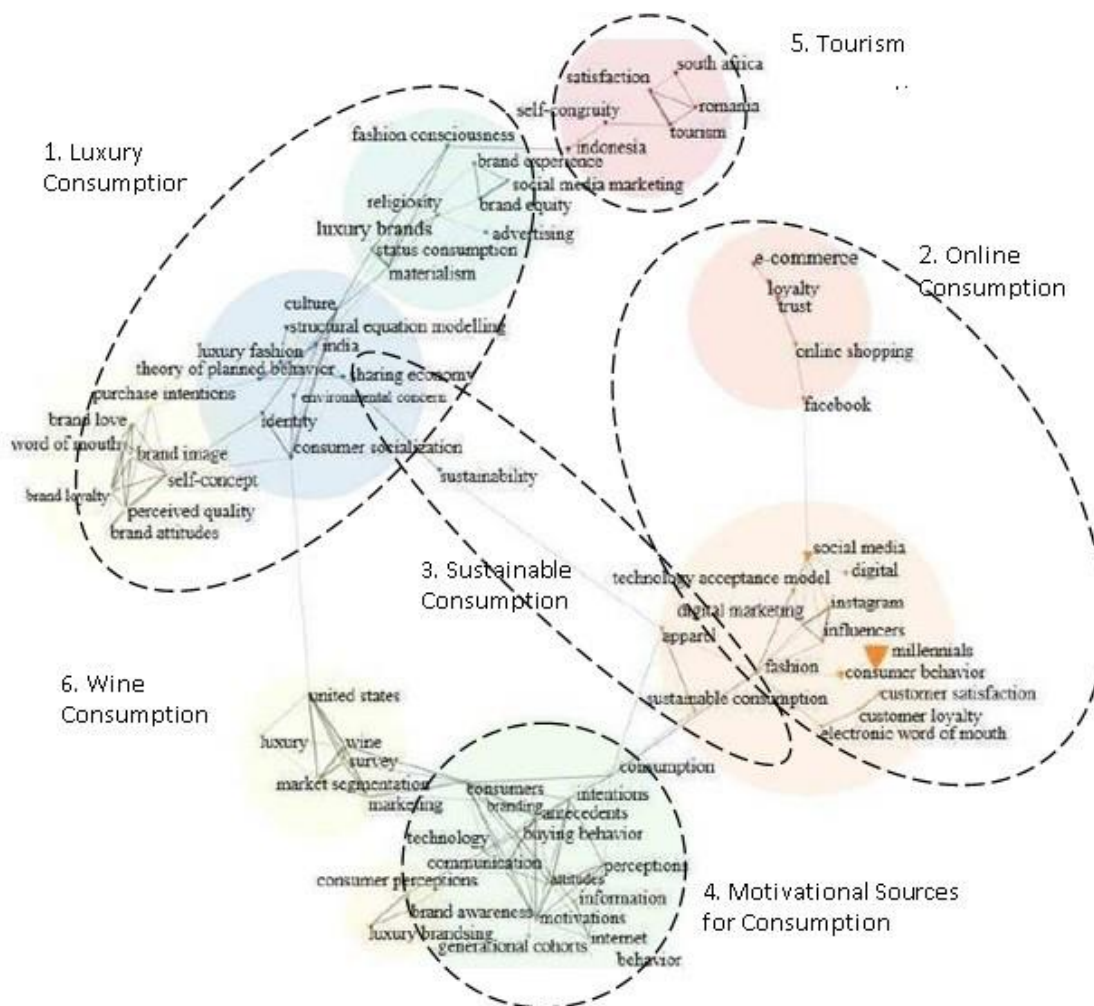
In circle number two we have the main search term highlighted, the word “millennials”. This means that most studies on this generation are linked to the themes of this research domain. This cluster of keywords brings online commerce to the fore, highlighting it as an important way of consumption by Millennials. The highlight, however, is the influence of social networks on this type of purchase. Studies from this circle mention the relevance of social media such as Facebook and Instagram as a means of attracting Millennial consumers, but underline the important role of the influencer in this attractiveness (JANSOM, PONGSAKORNRUNGSILP, 2021; MUDA, HAMZAH, 2021; TRIVEDI, SAMA, 2020). These and other authors claim that influencers act like the Word of Mouth in the digital age, influencing the behavior of these consumers. Still in this circle, there are discussions about the role of digital communication between brands and consumers as one of the main marketing tools today, as evidenced in the research by MUNIESA, GIMÉNEZ (2020).

Circle number three involves the keywords “sustainability”, “sharing economy” and “sustainable consumption”. They represent the strand of discussions about the sustainable concern of this generation, which is evidenced in the top journal Sustainability. This approach is pulled into the area of circle one due to the term “sharing economy” being attached to it. This term is a concept that refers to the efficient, collaborative and technological use of products by different industries (BOTSMAN, ROGERS, 2010) and there are studies in the database that relate this sustainable practice to actions of luxury brands. However, social networks are also mentioned as a source of encouragement to sustainability (SOGARI et al., 2017) and the word “apparel” integrated into this circle exemplifies the concern of this generation in the sustainable consumption of environmentally correct clothing and brands (SU et al., 2019a; TING et al., 2019).

The fourth circle is more abstract and involves a range of articles on different markets. What they have in common is the clear definition of studies in the field of consumer behavior. Here you can find terms such as “consumer perceptions”, “intentions”, “buyer behavior”, “motivations”, “information”, “brand awareness”, “attitudes” among others, which are classic terms of consumer behavior research. As they are key constructs, this circle is connected with the other main circles (1, 2 and 3) and is pulled down because the area with the word “millennials” is located in this lower part of the circle.

The fifth research domain involves the tourism studies that appeared among the most cited papers. We see that when we consider the entire database, especially the most recent articles, this topic is not as important as it was at the beginning of research on this generation, giving space to other subjects such as those in previous circles. So, one might think it's a not-so-hot topic at the moment. The last circle refers to research on wine consumption by Millennials. It is a subject that appears in the database since 2012 with the research by Chrysochou et al., (2012) and goes to recent days such as the work of Iazzi et al., (2020). According to the authors, this generation represents a large wine consumer market and the sector studies the consumption of this product through the lens of the consumer behavior approach, hence the proximity to the circle of concepts from this perspective.

Figure 3 - Research Domains on Generation Z Consumption



Source: Elaborated by the author based on the Gen Z database

The Generation Z chart presents two main areas that can be summarized as Social Media Influence on Consumption and Motivational Sources for Consumption. The first circle shows the great influence of social media on the consumer behavior of Generation Z.

Here are studies that highlight the communication of brands, companies and even institutions with this audience through social media, as seen in Priporas, Stylos & Kamenidou (2020) and Duffet (2017) for example. A common cutout within Generation Z in this literature is the gender analysis. An example of this type of research is that of Sramova & Pavelka (2019) on online shopping, with gender as a mediator and that of Kamenidou et al., (2020) on different ways of obtaining information by Generation Z according to gender.

There are also studies that link social media, communication and advertising as ways to influence the consumer of this generation. This is discussed in the work of Ao & Nguyen (2020) which analyzes the reaction of Vietnam's Generation Z to Online TV Advertising; and Tabassum, Khwaja, Zaman (2020) paper about narrative advertisement and e-word-of-mouth(e-WOM). The bottom circle of this region is pulled by the word "marketing" and that's why it's in this place. However, due to the generality of this term, it appears centrally in the graph and is highly related to the term "generational z cohort" that integrates the second research domain of this generation.

Area number two can be compared to the Millennial generation's eponymous dominance. It contains terms referring to concepts and constructs belonging to the consumer behavior literature such as "market segmentation" and the word "consumer behavior" per se. As in circle four of the Millennials chart, the term "generational cohort" is identified showing that this construct is, in fact, a frame for Generation Z consumption researches. Here, the studies are more focused on the relationship of brands with the consumer of this group and highlight the importance of their sustainable image for the acquisition of this type of customer. Examples of research in this scope are those by Bezbaruah & Trivedi (2020) and Shin, Eastaman & Lin (2021).

The last circle constitutes a group of studies that are highly related, but disconnected from the others in the base because they are very specific, refers to a few papers only, and do not involve the main characteristics of consumption research by Generation Z. In it are the works of Youn & Cho (2021) on the consumption of luxury brands and Strand & Robertson (2020) on the consumption of music festivals.

5. Conclusions

Comparing the Generation Y (Millennial) and Generation Z studies, it is possible to observe clear differences and trends for each of these groups. Within the scope of Millennials, we see that the luxury market has a large adhesion to this audience, which is not so present when analyzing Generation Z. In this last generation, the terms "sustainability" and "sustainable consumption" also appear in the two research domains, indicating that this concern is recurrent in the studies of this group. As this is a relevant topic for Millennials as well, we say that the subject is a trend in both groups and can benefit from studies on this topic.

The influence of the internet and its consequences, such as online shopping, is highlighted in the Millennial generation, but it is even more specific in the Generation Z cutout by focusing on the role of social media in this remote consumption. These media

represent a key issue in the consumption of this generation and prove to be a growing topic of research, even more than the Millennial generation.

When comparing the bibliometric data, we have different authors, for the most part, but discussing similar issues. Tourism is a field that begins to be explored in Generation Z while it is already consolidated for Millennials. It also highlights social media as the most relevant way of influencing the last generation when compared to the Millennial generation. As the proximity of age between generations (for example, late millennials and early Z's) may represent a similarity in preferences, it is possible to carry out studies that analyze the consumption trends of Generation Z, but within the Millennial section, showing more recent aspects of this group, as is the case with social media.

This study contributes to the mapping of research on consumers of generations Y (Millennials) and Z, and demonstrate the theories and approaches used when the generational approach is carried out. From this research, colleagues can gain a better insight into the topic and better select which research domain they can explore. Managers can also benefit from this paper as it brings information about a growing consumer market such as Millennials and especially Generation Z. With this data it is possible to better select the means of dissemination of the brands, products and services that depends on generation target audience, which can engender better results due to segmentation.

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