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ANA CRISTINA MUNARO

SOCIAL MEDIA INFLUENCERS' PROFILE ON YOUTUBE AND THEIR EFFECT ON CONSUMER DIGITAL ENGAGEMENT

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> Doctoral thesis presented to the Graduate Program in Administration, research line in Digital Marketing of the Business School from Pontifical Catholic University of Paraná, as a partial requirement to obtain a Doctoral degree in Administration. Under the guidance of Prof. Ph.D. Eliane Cristine Francisco Maffezzolli.

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TERMO DE APROVAÇÃO

SOCIAL MEDIA INFLUENCERS' PROFILE ON YOUTUBE AND THEIR EFFECT ON CONSUMER DIGITAL ENGAGEMENT.

Por

ANA CRISTINA MUNARO

Tese aprovada em **27 de setembro de 2021** como requisito parcial para obtenção do Título de Doutora no Programa de Pós-Graduação em Administração, Área de Concentração em Administração Estratégica, da Escola de Negócios da Pontifícia Universidade Católica do Paraná.

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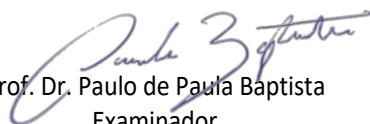Coordenadora do Programa de Pós-Graduação em Administração

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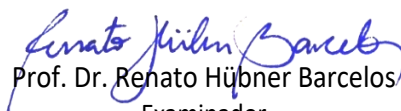Orientadora

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To my family.

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Is a wholy new start, and a different kind of failure
Because one has only learnt to get the better of words
For the thing one no longer has to say, or the way in which
One is no longer disposed to say it. And so each venture
Is a new beginning, a raid on the inarticulate,
With shabby equipment always deteriorating
In the general mess of imprecision of feeling,
Undisciplined squads of emotion. And what there is to conquer
By strength and submission, has already been discovered
Once or twice, or several times, by men whom one cannot hope
To emulate - but there is no competition -
There is only the fight to recover what has been lost
And found and lost again and again: and now, under conditions
That seem unpropitious. But perhaps neither gain nor loss.
For us, there is only the trying. The rest is not our business.

(T. S. Eliot, Four Quartets)

ABSTRACT

Social media influencers have attracted the attention of both marketing managers and researchers because of their crucial role in effectively disseminating messages and affect people's decisions. Several brands are investing huge budgets in influencer marketing, social media companies invest to build the best platforms for these content creators and more and more people want to become an influencer. The study aims to classify the different world's leading social media influencers based on the elements of the content of their channels and the personal traits of each influencer and their impact on consumer digital engagement. The studies use a mixed-method approach from qualitative data analysis to machine learning and data mining method with secondary data from hundreds of social media influencers' channels on YouTube. Through four studies it is (1) assessed the theoretical underpinnings and contextual features of the relevant studies on social media influencers, analyzing, and categorizing the literature according to common interests and similarities; (2) it is delineated the professional trajectory of social media influencers, identifying the turning points in the career of a successful influencer; (3) it is identified which variables from social media influencers have the greatest impact on online consumer engagement on YouTube, and; (4) it is proposed a taxonomy based on the similarities of attributes derived from the linguistic content of the channels and personal traits of social media influencers on YouTube and the impact of these profiles on consumer digital engagement. The studies make theoretical contributions to influencer marketing, human brand theory, parasocial relationship theory, and the elaboration likelihood model. Our research offers some remarkable implications for marketing practitioners helping to associate digital marketing strategies and tactics to the most appropriate influencer profile for the desired objective. Understanding distinguishing characteristics of social media influencers is a theoretical and practical gap that affects how brand managers choose the most effective influencer and create relationships with them, ensuring the exposure of product/service in a personalized and effective way to the consumers.

Keywords: Social media influencers. Influencer Marketing. Linguistic style. Personal traits. Digital engagement. YouTube.

ILLUSTRATION INDEX

THESIS STRUCTURE

The thesis is structured in three main parts: the first is the characterization of the research, the second comprises the originated articles (submitted/published) and, finally, we have the final considerations of the studies.

PART 1   CHARACTERIZATION OF THE RESEARCH

It covers the introductory part of the studies, contextualizes the research problem, identifies the managerial and theoretical justifications, general objectives, theoretical framework, and theories adopted in subsequent studies.

Section 1.1   introduces the research context.

Section 1.2   highlights the theoretical justifications of the study.

Section 1.3   emphasizes the managerial reasons the study.

Section 1.4   presents the question problem guiding the thesis.

Section 1.5   identifies the main objectives of the study.

Section 2   identifies the structural concepts and theoretical contextualization of the studies.

Section 3   presents the studies developed and how they are grouped in a continuous conceptual and practical context.

PART 2   DEVELOPED ARTICLES

Part 2 includes the four main articles that are part of this thesis. The organization of articles is described in Section 3 of Part 1.

Article 1   *Social media influencers and Influencer marketing: A Systematic Review and future research agenda*

Article 2   A Star Was Born: The Professional Trajectory of Brazilian Digital Influencers

Article 3   To engage or not engage? The features of video content on YouTube affecting digital consumer engagement

Article 4   Does your style engage? A taxonomy of social media influencers and engagement reactions

PART 3   CONCLUSIONS

It presents the conclusion of the studies, identifies the study limitations and future research for the academic development of the theme.

SUMMARY

PART 1

The first part of the document introduces the study, presents the context, justifications, questions, and objectives of the research. It brings forward the contribution of each article developed to fulfill the general objectives of the thesis, explores the common theme among the research, and provides a holistic view of the studies developed.

1 INTRODUCTION

Advertisers are confronted with two main challenges when they try to reach consumers: scarce resources and competition for attention (Gavilanes, Flatten, & Brettel, 2018). The changing face of media consumption has created the difficulty of communicating meaningfully with customers, and companies are looking for new ways to interact with customers (Kumar, 2018) in a more interactive, complex, and dynamic interaction (Chung & Cho, 2017).

Consumers now go above and beyond their traditional role as passive recipients of information to actively engage with companies online. Companies also spend resources on elaborate efforts to operate their online social media platforms, and these companies have increasingly advocated social network sites to improve marketing or financial outcomes. Thus, it is no wonder that any social media are becoming a critical part of companies' media mix (Yoon et al., 2018), become an important communication tool and a crucial factor for influencing consumers' attitudes, opinions, and purchasing behaviors (Oh, Roumani, Nwankpa & Hu, 2017; Li & Du, 2017).

Further, the elements of a social communication process, the relationships between the source and the receiver, and the bandwagon effect, all influence the individual information dissemination decisions, besides still little is known about the priorities of these factors affecting individual retweeting behavior (Shi, Hu, Lai, & Chen, 2018). And information dissemination mechanisms are based on new pillars of social influence, such as bloggers and opinion leaders (De Almeida, Coelho, Camilo-Junior, & de Godoy, 2018).

Social media are a central tool for referent power base, giving brands like celebrities a new platform for building relationships with fans by offering a glimpse into their lives and addressing them directly (Kupfer et al., 2018). Social media influencers play a crucial role in effectively disseminating messages in new-media contexts (Li & Du, 2017) and in people's decisions (Song, Cho, & Kim, 2017). These contributors attract a mass audience, build a fan

base and become a source of advice for their followers (Vrontis, Makrides, Christofi, & Thrassou, 2021).

Considering the challenger consumer landscape, companies must operate in a market in which populations are becoming more demographically diverse, customer needs and expectations are becoming more and more, and the requirements of ethnic consumer groups are becoming more distinct (Kumar, 2018). Thus, Social media influencers (SMIs) in partnerships with brands emerge as a great alternative to communicate in a personalized way with niches, in the right media, right time, and promoting great exposure for the brand.

SMIs ability to influence the audiences' attitude, perceptions and even purchase behaviors makes them powerful in the eyes of brands (Uzunoğlu & Misci Kip, 2014; Delbaere, Michael, & Phillips, 2021), then online celebrity endorsements are perceived to be important and credibility to marketing messages. It is essential for brands consider what type of celebrity would be the most effective in appealing to a particular target group (Djafarova & Rushworth, 2017).

In this scenario, there is great interest to understand more about who are these bloggers (Agarwal et al., 2008; Erz & Christensen, 2018), YouTubers (Jerslev, 2016; Lovelock, 2017), opinion leaders (Li & Du, 2011), microcelebrities or non-tradition celebrities (Djafarova & Rushworth, 2017; Jerslev, 2016), instagrammers, citizen influencers (Martensen, Brockenhuus-Schack, & Zahid, 2018), digital influencers (Uzunoğlu & Misci Kip, 2014), social media influencers (Delbaere et al., 2021; Vrontis et al., 2021) and other classifications for which they are known.

The theme of social media influencers has attracted the attention of both marketing managers and researchers to understand the relationship of these influencers with the audience in a digital environment, and how they can transfer their influence power to brands, products, and services (Kupfer et al., 2018) to make the right investment in influencer marketing and influencers.

They are content creators born in the digital environment and they develop great influence in consumer behavior with their audience in different social media platforms. Specially, how did these influencers gain the influencer power to interfere in customer decision-making? Which distinctive features from influencers have greater weight in consumer digital engagement? Is there any pattern with these distinctive features among social media influencers? This research will investigate the distinguishing characteristics of SMI's and their effect on digital engagement audience to clarify these questions.

The main gap of the study is to understand which distinguishing characteristics related to linguistics style from video content and influencers' personal traits have a greater effect in the consumer digital engagement. Different digital influencers have different social networks, growth curves, trajectories life and audience engagement. Our study investigates whether the results of social influence and persuasion caused in users by SMIs are related to intrinsic factors of the communicated language and personality aspects of the persona.

Little research has been conducted to understand the social identification of influencers and how famous online personalities influence buying behavior (Djafarova & Rushworth, 2017). In addition, the impacts of the relationships between the source and the receiver on the receiver's information retweeting behavior are still controversial (Shi et al., 2018). Figuring out what factors lead to individual information dissemination behavior can help understand the driving force behind social epidemics, devise sensible online marketing strategies, or effectively intervene in online rumors in case of emergencies (Stephen, Sciandra, & Inman, 2015; Shi et al., 2018).

Few research studies have emerged in the past few years that analyze social network content in a real market situation (Gavilanes et al., 2018). In real-world inquiry the emphasis tends to be on solving problems, looking for robust results and concern for actionable factors (where changes are feasible), often generalist researchers, multiple methods, currently viewed as dubious by some academics and need for well-developed social skills (Robson, 2002).

The results of these thesis studies help marketing managers in the challenging choice of social media influencers for marketing strategies. Not only in choosing the influencer but in the analysis of diverse digital engagement measurements that are based on different influence profiles arising from content and influencers' personality characteristics. Also, the study supports marketers in (re)defining influencer marketing strategies and when online advertising efforts are effective in terms of engagement. The findings, as results from Gavilanes et al. (2018), could support an argument for allocating advertising budgets to generate certain intermediate responses that can have a sustainable, profitable impact in the long run.

1.1 Research context

The high exposure of the SMIs/opinion leaders, present in various social networking sites (SNS's), blogs, YouTube, traditional media, and events, posting and interacting simultaneously several times in a day, ensure proximity and identification with their audience. Especially, because people want to see people with whom they identify by fairly talking about

the pros and cons of a product. This type of assessment seems more reliable and provides a more realistic view of what they intend to buy, more prevalent in the lifestyle type of consumers' decisions (Moraes, Gountas, Gountas, & Sharma, 2019).

Social media content marketing, designing brand content that is disseminated to consumers through social media, requires complex decision making, yet marketers lack a systematic understanding of how to design and disseminate content to maximize engagement and related marketing outcomes (Stephen, Sciandra, & Inman, 2015). Then, from the marketing communications perspective, an SMI can take on a key role in providing opportunities, particularly for launching new products or introducing an existing product to a new market (Uzunoğlu & Misci Kip, 2014). The challenge for companies is to search for appropriate influencers in the social media sphere in the hope of finding credible people disseminating their brand's message (Schwemmer & Ziewiecki, 2018).

Further, users do not consider social media as an advertising platform (Stephen et al., 2015). So, the more a post is relevant to the brand and the less it feels like an advertisement, the more consumers like it (Stephen et al., 2015). In this sense, social media influencer, as a mediator of brand-consumer communication, is a more effective communication strategy, since the influencer knows his audience and knows the proper form and language to spread the brand message (Fang & Hu, 2016).

In particular, YouTube has become the launchpad for the generations of celebrities, personalities, and big stars (Leskin & Haasch, 2021). YouTube's establishment was in 2005, as a video sharing platform. In 2006, YouTube first presented several advertising concepts to companies for utilizing the platform as an effective marketing tool. With the purchase of the platform in October 2006, Google followed a clear path to developing YouTube into a revenue-generating product (Gerhards, 2017), with a business model focused on advertisement (Schwemmer & Ziewiecki, 2018). From comedians to gamers to vloggers of all kinds, YouTubers have harnessed the video-sharing platform to build their followings and brands from nothing more than a video camera and a solid internet connection (Leskin & Haasch, 2021).

Summarizing: On the one hand, we have increasingly demanding consumers, immersed in an environment with 24-hour stimuli, less passive to the traditional style of advertising, hungry for companies/brands that recognize their unique desires and needs, and no longer accept products/services and standardized communications. On the other hand, we have companies that are moving to understand and respond to this new consumption behavior, companies that understand the importance of generating value for society, and that need to "speak the same language" as their potential consumer market.

Finally, we have social media influencers, who, in addition to content creators, are influential consumers, know their followers, build intimate bonds, have high constancy and interactivity in their digital platforms, generating reliability and power of influence. In addition to co-creating your personas considering different stakeholders, without losing your own authenticity. In this sense, they are seen as this third part of communication, a link between consumers and brands.

1.2 Theoretical reason

The studies primarily contribute to the literature on social media influencers with support including other theories in the area: celebrity endorsement theory, human brand theory, parasocial interactions and relationships (PSI/PSR) and Elaboration Likelihood Model theory.

The main theoretical contribution of this study is to assume that the distinguishing characteristics of social media influencers impact on their social influence and associated these features to digital consumer engagement. Besides, considering these characteristics - personal traits and the influencer's content - as determinants to classify the social influence on YouTube in different profiles, a new taxonomy, strengthening studies in influencer marketing and social media influencers literature. These categories are important principally because the literature is rather unexplored about the relationship between content and influence (Francalanci & Hussain, 2017). Therefore, measuring communicator influence in a way of isolating the components of influence and weigh them accurately is crucial to the development of literature. Further, extant research has been largely mute about the impact of the development of SMI as a professional practice and the emergence as a new organizational field (Erz & Christensen, 2018).

Additionally, a theoretical implication arising from this research is to demonstrate the operating dynamics of consumer engagement in virtual social networks, based on social media influencers' characteristics, since influencers posts generate significantly more likes, comments and eWOM (Electronic word-of-mouth) compared with institutional content (De Almeida et al., 2018). Hundreds of studies have been carried out to determine which particular endorser traits are more effective under certain conditions and how their combination affects advertising efficacy. However, the resulting assemblage of studies has failed to produce clear and consistent guidelines that would be helpful to a marketer deciding (Schimmelpfennig & Hunt, 2020).

Thus, this study also aims to contribute to identifying ways in which it is possible to generate more engagement in virtual social networks. Since, online celebrity endorsements are perceived to be of significant importance and credibility when communicating marketing

messages (Djafarova & Rushworth, 2017). Especially, because while a large body of literature already examined YouTube as a video sharing platform, only a few researchers have analyzed the use of YouTube for commercial intentions (Schwemmer & Ziewiecki, 2018).

Few studies have investigated the differences in identity between traditional celebrities and social media influencers (Hu, Min, Han, & Liu, 2020). Most of the research in this area focuses exclusively on three source attributes (trustworthiness, expertise, and attractiveness). Thus, the relevance of other celebrities' personality attributes and symbolic meanings requires a better understanding. Expanding the source models' variables is likely to provide a deeper understanding of how celebrity endorsements affect consumers (Moraes, Gountas, Gountas, & Sharma, 2019).

The relationship of social media influencers with their audiences goes beyond the relationship proposed by source credibility, or traditional endorsement theories (Ohanian, 1990; Erdogan, 1999; Sokolova & Kefi, 2020). Since it does not refer only to the positive characteristics of an endorser that lead to consumers' accepting the veracity of their messages. It is a relationship in constant construction, which is strengthened by the high presence and intimacy, based not only on the positive persona characteristics but also the negative ones, emphasizing the human side of these endorsers in the journey of an influencer and professional competence (Sette & Brito, 2020). They are human brands co-created in a mediated environment, revealing their vulnerabilities and behavioral changes that are unique to the human being, and now, explored as communication vehicles and own brands.

Then, the study also contributes to the human brand theory by presenting the SMIs lifecycle, and reinforcing these personal traits of closeness, intimacy, and exposure of their personal lives that influencers develop in their online interactions and that this human side is crucial for engagement results and the identification of SMI's profiles. Therefore, marketers need to analyze the selection of endorsers more comprehensively and develop contingency plans to handle dissonant celebrity behaviors (Moraes et al., 2019).

Deepening the study contribution, social media followers develop an intense attachment to these human brands (Labrecque, 2014), which results in the formation of parasocial relationships with them (Chung & Cho, 2017; Delbaere et al., 2021). Thus, identifying profiles of influencers will help to better understand how parasocial relationships occur. Mainly as parasocial processes vary, both according to the influencers chosen and the relationships created.

Finally, the study helps to elucidate which variables affecting more the motivation and/or ability to process a message on social media to promote an attitudinal change, reinforcing

the Elaboration Likelihood Theory (Petty & Cacioppo, 1986). Regarding the videos of influencers on social media, there is still a need to better understand the behavior of followers about the routes of persuasion (central and peripheral) with the elements of communication coming from the message and the sender.

1.3 Practical reason

Global brands are investing huge budgets in influencer marketing. In 2021, three of the top ten most popular YouTube channels by the number of subscribers were digital influencers. These out-of-the-box stars have millions of fans and considerable earnings (Statista, 2021). In Latin America, people whose purchases are driven by influencers, sum up to 64%, in North America, it's 39%, and in Europe, 36% (Labs, 2019). Estée Lauder brand is addressing 75% of its marketing budget to digital marketing, but mostly to social media influencers (Labs, 2019). Fyre Festival organizers invested Kendall Jenner $250,000 to her post about the festival. If one percent of her 115 million Instagram followers bought a $100 product being advertised; the total revenue for the company would be almost $115 million (Forbes, 2019).

In a scenario of scarce resources and competition for attention (Gavilanes et al., 2018), marketing managers and advertising professionals face great challenges in corporate communication strategies. They are confronted with increasing expectations and opportunities to offer personalized and experiential offerings. This has made marketers look to newer tools such as big data to understand and develop better offerings, in addition to managing omnichannel communications (Kumar, 2018). Then, finding the influential people will not only allow to better understand activities happening in a virtual world, but also present unique opportunities for industry, sales, and advertisements (Agarwal et al., 2008).

SMIs are facilitating brand engagement through their digital content in all three aspects: (a) cognitive processing, (b) affection, and (c) activation (Delbaere et al., 2021). Cognitive processing is demonstrated because consumers' brand thoughts are being triggered because of the influencer's content, the SMI is responsible for transmitting brand awareness and knowledge to her followers (Delbaere et al., 2021). The comment sections accompanying YouTube videos provide viewers of the video a virtual venue to exchange ideas. Through the exchange of ideas in the comment section, viewers of the video and the host of the channel interact with each other. Such interactions are very likely to shape people's opinions (Xiao, Wang, & Chan-Olmsted, 2018).

Visual information is becoming more and more prevalent in online markets, and companies are relying more than ever on online videos to introduce, promote, and advertise their products and services (Li, Shi, & Wang, 2019). The study helps to identify and analyze the linguistic elements of the influencers' videos, and their impact on digital engagement. The fit between content and user is an essential driver of rebroadcasting behavior. This implies that organizations can tailor content to match the audience's interests to increase rebroadcasting activity from them rather than simply disseminate viral content (Zhang et al., 2017).

Further, when the reactions of audiences are available, it is helpful to incorporate individual heterogeneity into the analysis of videos, this development could also be important for practitioners: with the ability to personalize recommendations, firms could deliver different video content to different users (Li et al., 2019). Therefore, associating videos posted to their respective results of digital engagement (number of likes, dislikes, comments) is a strategy to understand the idiosyncrasies of the public.

Managerial, research will help decision makers how to identify and choose the most effective or appropriated social media influencer from the created taxonomy based on linguistic style data, personal traits, and user engagement on YouTube. The research results are particularly important for companies and brands that rely on the community gathered around these profiles of social media influencers, in a context where traditional advertising has been losing space for integrated communication actions based on virtual social networks (De Almeida et al., 2018).

The developed studies aim to contribute to the decision-making of marketing managers and advertising professionals in communication strategies to better understand the performance of social media influencers as information disseminators and their power of influence on digital engagement. In this sense, managers need to understand what the most effective approaches to associate the brand image with the personal brand of influencer. It is important to be well acquainted with the influencer's audience, as is their style, language, and content format, to establish authentic links between the digital influencer and the brand.

It is important to emphasize that YouTube has great relevance today to digital influencers. The videos make the scenes real to the viewer and show how things really are by the eyes of someone like him. Also, 4 in 10 millennial subscribers say their favorite YouTube creator understands them better than their friends; 7 in 10 YouTube subscribers say that YouTube creators change and shape culture (aged 18-49) and 6 in 10 YouTube subscribers would follow advice on what to buy from their favorite creator over their favorite TV or movie personality (aged 13-64) (The YouTube Generation Study, U.S., *in* Think with Google, 2018).

Effective YouTube ads can be many things, like an episodic docu-series, an undercover investigation, a user-narrated product review, or an interview with the CEO. It can be a music video partnership with a YouTube creator that becomes the most-watched video in the world in its first 24 hours, leading to a 100% increase in year-over-year sales. It can even be an anime series starring the product as the hero, which sells out immediately, and boosts year-over-year product sales (Jones, 2021). This is especially important on YouTube where 63% of viewers in the markets studied say they bought from a brand because of seeing it on the platform[1].

In addition to YouTube, other social media platforms have focused on developing tools and attractions for the activity of SMIs. The Facebook will dispense $1 billion to social media stars using its apps over the next year, through shared ad revenue and bonuses for time spent on Facebook and Instagram, and, in some cases, Facebook will offer seed funding to some creators who want to establish their presence on those sites (Brown, 2021). The company intent to build the best platforms for millions of creators to make a living. In this sense, TikTok, Snap, and Twitter are also all at work on similar projects to provide influencers with better avenues toward making money (Brown, 2021).

Therefore, besides the impact on marketing strategies and decision-making of his followers, influencers move the market of social media platforms. Today, SMIs act not only as messengers for brands (a third-part communicator) and themselves, but they have become a medium of communication as well, getting more real than ever the expression "the medium is the message" from theorist Marshall McLuhan.

1.4 Thesis statement and Research problem

It is assumed as a premise of the thesis that the personal traits and content elements of social media influencers are factors that distinguish them from each other, and impact differently consumers' responses. Based on this statement, the four studies developed in this thesis seek to answer preliminary objectives to propose a taxonomy of social media influencers.

The study considered existing empirical research that focused mainly on two determinants of marketers' decision making and information dissemination on social media: the characteristics of the content (i.e., what should each post say and look like?) (Dobele et al., 2005; Stephen, Sciandra & Inman, 2015) and the ideal propagation strategies (i.e., to whom

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[1] Google/Talk Shoppe, AR, AU, BR, CA, CL, CO, FR, IT, IN, JP, MX, PE, KR, ES, U.K., U.S., Why Video study, n=32075, A18-64 gen pop video users, March 2020–Aug. 2020.

should each post be targeted?), given social network structures (Bampo et al., 2008; De Bruyn & Lilien, 2008; Hinz et al., 2011; Van der Lans et al., 2010).

Different types of information trigger different outcomes (Stephen, Sciandra & Inman, 2015). The impacts of the relationships between the source and the receiver on the receiver's information sharing behavior are still controversial (Shi, Hu, Lai & Chen, 2018). The message content features such as linguistic style, structure, message size, the content (Schulze, Schöler, and Skier., 2014; Pratkanis, 2011) impact on user engagement. And yet marketers lack a systematic understanding of how to design and disseminate content to maximize engagement and related marketing outcomes (Stephen et al., 2015). Also, the size and structure of an author's network is a significant driver of the popularity of videos (Yoganarasimhan, 2012). Social media influencers are linked to many others directly or indirectly in a network structure, connects many isolates that otherwise have no network link (Rehman et al., 2020).

The study highlights the importance of adding more personality traits in influencers as a differentiator in the choice of influencers and in the popularity of information. Hundreds of studies have been carried out to determine which endorser traits are more effective under certain conditions and how their combination affects advertising efficacy (Liu-Thompkins & Rogerson, 2012). The personality traits attributes, which are more effective in marketing communications and on creating a following/fandom by targeting certain consumer groups, are still unknown. Understanding which influencer personal traits, beyond conventional celebrity endorsement literature, attract more consumers would benefit endorsement marketing practitioners and researchers (Moraes, Gountas, Gountas, & Sharma, 2019).

Therefore, this thesis aims to answer the following research question:

Since elements of created content and influencers' personal traits affect their influence on social networks, how can we find patterns and classify different social media influencers and their impacts on consumer digital engagement based on these attributes?

1.5 Research objectives

General objective:

The study aims to classify the different world's leading social media influencers based on the elements of the content of their channels and the personal traits of each influencer and their impact on consumer digital engagement.

Specific objectives:

a) Assessing the theoretical underpinnings and contextual features of the relevant studies on social media influencers, analyzing, and categorizing the literature according to common interests and similarities, to discover the determining factors from social media influencers that affect the influencer marketing strategy.

b) Investigate the professional trajectory of social media influencers, identifying the turning points and the common characteristics in the career of a successful digital influencer.

c) Recognize which variables from social media influencers have the greatest impact on online consumer engagement (number of views, likes, dislikes and comments) on YouTube.

d) Propose a taxonomy based on the similarities of attributes derived from the linguistic content of the channels and personal traits of social media influencers on YouTube and the impact of these profiles on consumer digital engagement.

2 THEORETICAL BACKGROUND

The theoretical framework begins with the definition, and characteristics of social media influencers. Also, we present the historical line and concepts of information diffusion theory to identify the key factors affecting the diffusion and the popularity of social media influencers: online network structure, content elements, and author personal traits. Understand information (fads, innovations, collective actions, viral memes, opinions, and rumors) diffusion process is of outstanding interest for analyzing the information spreading patterns on social networks, stopping the transmission of viruses, as well as controlling the spread of rumors, etc. (Zhang, Liu, Zhan, Lu, Zhang, & Zhang, 2016).

2.1 Social media influencers

The idea that some consumers are influencers and have a disproportionate degree of influence on others has been studied for decades (Martensen et al., 2018). Since the beginning of the study on the diffusion of innovation and information in the 50s and 60s, the role of opinion leaders is considered fundamental (Rogers, 1995). Especially, the cultural evolution entailed by the historical evolution of the Internet (Busca & Bertrandias, 2020), aggregated social and economic relevance to the influencers' role and transformed consumer engagement with popular culture (Susarla, Oh, and Tan, 2012).

The changes in the market systems starting at the end of 1990s, such as the creation of the major platforms dedicated to user reviews; creation of the major social networking services with the normalization of self-branding behaviors; incorporation the decentralized management decision structure, greatly favored the emergence of 'professional influencers' on social media platforms (Busca & Bertrandias, 2020). Individuals turned into prosumption market systems, as they could behave like firms for profit, advertise themselves, and promote their brands (Busca & Bertrandias, 2020). Therefore, although 'traditional' celebrities have also found their way to social media, influencers built their careers online by successfully branding themselves (Schouten, Janssen, & Verspaget, 2020).

Currently, influencers' literature adapts concepts of sociology, communication, and social networks' areas, as naming opinion leaders, social media influencers, influential nodes, hubs, and celebrity's endorsement. In this review, social media influencers (as we call them in this study) are those born in a digital environment who can mediate messages, can affect the opinions of their audience in their communication activities as content generators and mainly

advisers, being recognized by others as one who makes important contributions (Li & Du, 2011; Uzunoğlu & Misci Kip, 2014; Rosenthal & Mckeown, 2017).

An influencer is someone who has credibility in the group, persists in attempting to influence other individuals' attitudes or behavior, and introduces ideas that others pick up on or support (Rogers, 1995; Zhao et al., 2018). Also, can informally alter the opinions of their audience in the desired way, resolve disagreements, and be recognized by others as one who makes important contributions (Rosenthal & Mckeown, 2017; Li & Du, 2011; Zhang et al., 2017; Martensen et al., 2018). The high disclosure of their private lives, continuously and truly, creates a great affinity and familiarity with the public (Martensen et al., 2018). Therefore, they may be more effective product endorsers than traditional celebrities and affect positively advertising effectiveness (Schouten et al., 2020).

The "boom" in the influencer market reflects the strategic use of decision-making decentralization processes in digital marketing: influencers are co-responsible for the effectiveness of the marketing campaign (Busca & Bertrandias, 2020). Moreover, this market system illustrates the managerial exploitation of a low agency context, whereby companies enact strategies focused on promoting a small set of behaviors by instrumentalizing multiple individual self-marketers (Busca & Bertrandias, 2020).

However, many questions are raised to choose digital influencers as brand endorsers, goes beyond knowing the content created and engagement metrics achieved, it is crucial the identification of the influencer's personality traits and the fit with the brand personality/image. Individuals can change, and endorsement relations can sour (Erdogan, 1999). The influencer endorsement strategy can be a two-edged sword, which makes selecting a social media influencer from innumerable alternatives in the presence of potential pitfalls very challenging (Erdogan, 1999; Chung & Cho, 2017).

Assuming digital influencers' role, we outlined the information diffusion process on social networks as a contextual element, and as a piece of essential information spreading patterns through digital influencers. We used an extensive literature search to identify studies that have investigated digital influencers on social media to understand their origin, theories relate, and their effect on marketing strategies.

2.2 Information diffusion on Online Social Networks

What makes an influential spreader become such a viral phenomenon? Social networks impact economic outcomes by structuring the information available to other actors, which

influences others' decisions, perceptions, and behavior (Susarla, Oh, & Tan, 2012). That's why viral marketing is a hot area, has advantages such as low cost, exponential growth, and a long-term effect (Hinz, Skiera, Barrot, & Becker, 2011; Zhang et al., 2016). Further, we rely on others to validate our views of the world, maintain norms and values about what is appropriate or not (Pratkanis, 2011; Nejad, Sherrell, & Babakus, 2014).

When an idea, information, rumor, or a virus propagates from one node to some other nodes of the underlying network, a diffusion has happened (Foroozani & Ebrahimi, 2019; Yerasani et al., 2019). Understanding this adoption through a population driven by social influence is a central issue for the whole of social sciences (Barbieri, Bonchi, & Manco, 2013).

The heart of the diffusion process is based on the modeling and imitation in multiple steps by potential adopters (initial seed of customers) of their near peers' experiences with the new idea until the market saturates (Rogers, 1995; Zhang et al., 2016). And the information diffusion model is a mathematical or conceptual model that describes and analyzes how information is diffused or predicts how it will spread (Mahajan, Muller, & Bass, 1990; Foroozani & Ebrahimi, 2019). Diffusion research is suitable strategies for innovative information dynamics, and thoughts of influencers (Bamakan, Nurgaliev, & Qu, 2019; Zhao et al., 2018).

Influentials have several advantages over ordinary consumers in terms of promotional targets: first, they are linked to many others directly or indirectly, targeting them exposes the product to many consumers; second, influential have a strong influence on the attitudes and behaviors of other consumers (Hu et al., 2018; Moldovan & Goldenberg, 2004).

2.3 Historic evolution of diffusion models

As one of the most long-standing traditions in communication research, diffusion models began in the 1940s concerned with representing the growth of a product category (Mahajan et al. 1990) and increased during the 1960s–1980s with a rich set of models developed that all try to describe the dynamics of information propagation or different mechanisms by which the contagion spreads from the infected to an uninfected node (Li et al., 2018; Leskovec, Adamic, and Huberman, 2007; Guille, Hacid, Favre, & Zighed, 2013).

The narrative review shows that insights from epidemics about the spread of viruses are useful to understand and model the spread of marketing messages in viral marketing campaigns, the development of a life cycle curve, and forecasting sales (Mahajan et al., 1990). Diffusion models assume an underlying infection process, and the corresponding model parameters are

inferred from the total number of infected individuals over time (Van der Lans, Van Bruggen, Eliashberg, & Wierenga, 2010).

Based on these insights, Bass (1969) developed his famous diffusion model. The focus is on communication channels (mass media and interpersonal communications), i.e., how information about the innovation is transmitted to or within the social system (Mahajan et al., 1990). As the number of customers in viral marketing campaigns is also influenced by these two forces, the Bass model was able to describe the spread of information during viral marketing campaigns (Van der Lans et al., 2010) (see Mahajan et al. (1990) for several developments and refinements of the Bass model in marketing).

Hereafter, the most fundamental models of information propagation in social networks are the independent cascade model (IC) and linear threshold model (LT) (Li et al., 2018; Bamakan et al., 2019; Zhang et al., 2016). The LT was proposed by Granovetter (1978) to describe collective behavior and has been applied to describe a series of binary decision phenomena from the receiver (receiver-centric) in economics and sociology. The IC was proposed by Goldenberg, Libai, and Muller (2001), reflects a cascade of diffusion give everyone the ability to influence their neighbors as soon as they are activated (sender-centric) (Guille et al., 2013; Bamakan et al., 2019; Leskovec et al., 2007).

Recently, multifarious spreading patterns in many domains based on the empirical analysis in information spreading from online social systems have been obtained (see Kempe, Kleinberg, and Tardos, 2003; Zhang et al., 2016; Zhao et al., 2018). What is clear is that most of the first models studying the dynamics of information were based on classical epidemic spreading, which hypotheses that contagion propagation (see Van der Lans et al., 2010; Zhang et al., 2016), and with the main use of forecasting sales. From the 1970-1980 decades to nowadays, there have been several refinements and extensions of diffusion models.

To Hinz et al. (2011), most of the models focus on social network topology (individual agent attributes, information flow, network attributes), and obviously remain a crucial determinant of optimal seeding strategies in practice because a social structure is much easier to observe and measure. As many of the current diffusion models derive from traditional models that arose before the Information and communications technology evolution, there is a need to incorporate additional parameters to better understand the process of social influence and the dissemination of content on social media. The online social network expansion and facilitation changed the fundamental mechanisms underlying the emerging complex spreading patterns (Zhang et al., 2016).

Goel, Watts, and Goldstein (2012) realized that the majority of adoptions models did not result from multi-step diffusion, then what does account for large adoption events that do occur, such as online videos that generate many millions of views in a short period of time? To Zhang et al. (2016) and Zhu, Kim, and Park (2019) it is still unclear what features of the content are the critical factors to affect the spreading pattern and the consumer engagement with brands on social media. Besides, prior models of diffusion, do not identify the mechanism by which the transmission of social influence occurs (Susarla et al., 2012).

Assuming the dissemination process like a complex system of co-evolution of opinions and networks and involves many variables (Zhang et al., 2016), we focus on understanding what other factors affect the information diffusion process considering the phenomenon of digital influencers as key parts in content creation on social media. If those factors are considered in modeling the corresponding dynamics, can thus prove more powerful in studying the driving of information spreading patterns.

In accordance with Schulze, Schöler and Skiera (2014) and Khan and Vong (2014), extant empirical research has primarily focused on two determinants of viral marketing success: the characteristics of the content (Dobele et al. 2005) and the optimal seeding strategies given the social network structure (Bampo et al. 2008; De Bruyn and Lilien 2008; Hinz et al. 2011; Van der Lans et al. 2010). Previous research has emphasized: (1) the sender-receiver relationship (i.e., who are the sender? Are consumers close friends or strangers?), the social position of the sender and the receiver (i.e., role of influential users, consumers' connectedness, or bridging function across subnetworks); and the other side, (2) the message content (e.g., is the message inspirational, funny, or shocking?), message features (e.g., does the message come with an incentive to act? has URL or image?) (Schulze et al., 2014).

2.4 Factors affecting information diffusion

Based on the narrative literature review in information diffusion, we propose a model of three main factors originating from the message sender (social media influencer): the social network; the elements of a message; and the influencer's personality traits (see Figure 1).
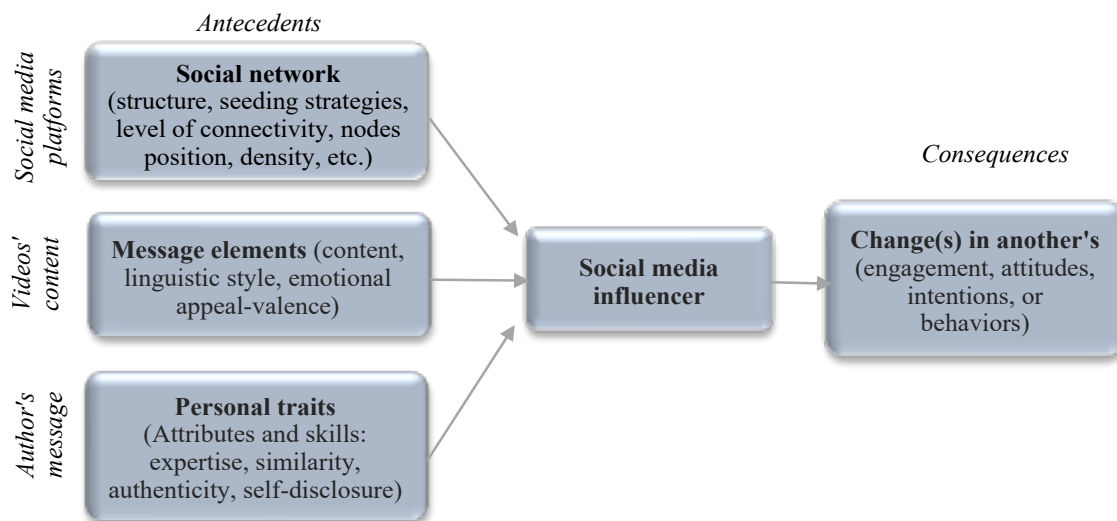
Figure 1. Social media influencer factors' affecting information diffusion.

2.4.1 Social network structure

Empirical research has primarily focused on studying influencers according to the structural property of a member's relationships, as a determinant of spread information, ideas, and influence among its members (Kempe et al., 2003; Schulze et al., 2014; Zhang et al., 2016; Khan & Vong, 2014). Many studies (e.g., Goldenberg et al. 2001; Hinz et al., 2011; Yoganarasimhan, 2012) demonstrate valuable insight can be gained from understanding how consumers' connections with each other can affect the way information is transmitted, and how networks stimulate diffusion and which people possess influential positions (Chen et al., 2017).

Best seeding strategies can be up to eight times more successful than other seeding strategies (Hinz et al., 2011). However, the optimal seeding strategies given the social network structure are depending on many factors, as the influencers' nodes choice, their relationship with receivers (Bampo et al. 2008; Hinz et al. 2011; Sun & Tang, 2011), the network social position of the sender and the receiver (Sun & Tang, 2011), and the relationship's characteristics, such as its type (i.e., friend, colleague), duration, and interaction intensity (Chen et al., 2017). Seeding strategies increase conversations about that product among non-seed consumers, and, interestingly, decreases WOM about other products from the same brand and about competitors' products in the same category as the focal product (Chae et al., 2017).

A person's number of connections has a positive effect on the diffusion process (Yoganarasimhan, 2012). Channels with several connections (network density) might be more popular and might be more likely to disseminate information (Susarla et al., 2012; Chen et al., 2019). That clarifies vast literature with a focus on identifying "influential nodes" in social

networks, people in a strategic position, and/or great power to disseminate information and influence people. The network where users reside affects their willingness to engage in WOM and information diffusion (Chen et al., 2019), also, the size and structure of an author's network is a significant driver of the video popularity seeded by them (Yoganarasimhan, 2012). Myers, Zhu, and Leskovec (2012) found that about 71% of the information volume in Twitter can be attributed to network diffusion, and the remaining 29% is due to factors outside the network.

SMI's are linked to many others directly or indirectly, they serve as a strong influence on the attitudes and behaviors of other consumers (Rogers, 1995; Munnukka, Uusitalo, and Toivonen, 2016). The social media metrics, as subscribers, views, comments received, and the connection between users and/or social network indices show how effective an influencer is (Balabanis & Chatzopoulou, 2019), serving as a heuristic clue for new adopters, and playing a crucial role in the viral phenomenon (Khan & Vong, 2014). Influencers with higher numbers of views, tend to have higher numbers of engagement (Liu-Thompkins & Rogerson, 2012).

2.4.2   Message elements

Modeling the effects of message features on diffusion speed provides the fundamentals to tackle the challenges in propagating valid information. The content of messages plays a critical role and can be a determinant of social influence (Dobele et al., 2005; Bampo et al., 2008; Pratkanis, 2011), and digital engagement (Hughes, Swaminathan, and Brooks, 2019). Especially, because, unlike perceived message features that are subject to audiences' responses, intrinsic features may be more easily modified by communicators and hence provide direct implications for strategic message design (Zhu et al., 2019).

Intrinsic features are message variations, e.g., content, message features (e.g., does the message come with an incentive to act? has text, image, links, videos?), linguistic choices, the completeness of information, relevance, accessibility, and timeliness that are independent of audience perceptions. Schindler and Bickart (2012) divide these factors into two categories, content, and style: the content of as the information it provides, i.e., a group of words that comprise a single thought, and its style involves the choice of words the individual uses to express this information.

In general, messages with a rational appeal by exploring information attributes will be perceived to possess better information quality, consequently being effective messages (Zhu et al., 2019; Zhang & Peng, 2015). However, Sabate et al. (2014) point towards the importance of

the use of images that are proven to cause the greatest level of engagement, attracting more easily users' attention, and turning this attention into likes and comments.

Moreover, the language style reflects how people convey a message (Liu et al., 2019). Liu et al. (2019) provide evidence that the language style of online reviews (i.e., how the content is conveyed) significantly affects how they are received by readers. Especially by the function words (articles, conjunctions, prepositions, quantifiers, auxiliary verbs, etc.) have a significant impact on how communication is received (Liu et al., 2019). In this sense, stylistic elements that may impair clarity (such as spelling and grammatical errors) are associated with less valuable WOM, and elements that may make a review more entertaining (such as expressive slang and humor) are more valuable WOMs (Schindler & Bickart, 2012). Thus, hedonic content increases the social transmission and virality of online messages but depends on the campaign objective and involvement level of consumers (Hughes et al., 2019).

Zhu et al. (2019) found that tweet messages including more affiliation words had a smaller diffusion size and slower speed. Aleti et al. (2019) increase the attention for storytelling, a post's narrative style, which may determine whether consumers will share or ignore a post. Labrecque, Swani, and Stephen (2020) analyzed the pronoun usage and additional message characteristics (e.g., presence of images, videos, links, hashtags), and found that these content elements affect different engagement choices.

Zhang and Peng (2015) consider the characteristics of interactivity, affectivity, typicality, length, and completeness of the information all of which are crucial to the persuasive strength of advertising messages. Sabate et al. (2014) found that the number of characters employed is positively correlated with the number of likes. Following Zhang and Peng (2015), the length of the advertising messages on social media facilitates diffusion in terms of the capacity of messages to generate offspring reposts and the efficiency of the information diffusion process. However, Rietveld et al. (2020) found a negative influence of informative appeals on customer engagement. Informative appeals might signal a persuasion attempt, which is incongruent with the motivations of consumers to follow brands. Revealing that the literature still does not have conformity to the topic.

Emotional appeal. Informativeness and emotionality are not mutually exclusive, and research needs to look beyond what is said and start looking at how it is said (Aleti et al., 2019). Emotional posts generate valuable virality, they increase sharing, while also boosting brand-related outcomes (Akpinar & Berger, 2017; Xu & Zhang, 2018), by generating more positive inferences and increasing brand knowledge (Akpinar & Berger, 2017). Sharing content that

evokes emotional states (such as amusement, empathy, love, joy, warmth, inspiration, and pride) should make the receiver feel positively toward the sharer, enhancing the sharer's opportunities for self-enhancement and reciprocity by the recipient in the future (Tellis et al., 2019; Pratkanis, 2011).

In textual messages, positive emotion can be captured by the frequency of words such as happy, excited, and thrilled, whereas negative emotions are related to words such as anxious, tragic, and selfish (Aleti et al., 2019). The emotional content can vary in valence, the extent to which a person perceives an experience as pleasant or unpleasant, and arousal, the extent to which a person is energized by an experience (Yin, Bond, & Zhang, 2017).

Second Zhu et al. (2019), humans are predisposed to be sensitive to threats in the interest of survival and hence respond more strongly to negative than positive stimuli, so the more negative emotion words a tweet included, the wider and faster it spread. On the other hand, positive emotional and affiliative information, albeit deterring diffusion, serves important social functions for consumer engagement, since sharing positive emotional information with others may increase mutual enjoyment (Zhu et al., 2019). Receivers are likely to feel more positively inclined toward socializing with those individuals who make them feel good (Aleti et al., 2019; Tellis et al., 2019). To Xu and Zhang (2018), positive emotions are linked with more sharing. Perhaps, the public avoids negativity to seek a rare sense of hope and comfort or because sharing positive emotional messages involve complex considerations about receivers (Zhu et al., 2019).

However, Berger and Milkman (2012) and Rietveld et al. (2020) indicate that online content that evoked high-arousal emotions is more viral, regardless of whether those emotions were positive or negative. To Yin et al. (2017) low levels of emotional arousal positively affect the perceived helpfulness. A moderate proportion of positive evaluative statements was associated with helpful reviews, but too much positive information might lead the reader to question the reviewer's motives (Schindler & Bickart, 2012). This suggests that social transmission may be more about the transmitter's internal states (Berger & Milkman, 2012).

2.4.3 Social media influencers' personal traits

The content creator and his/her characteristics need to be considered as a factor that affects the social influence and content diffusion on online social media (Khan & Vong, 2014; Liu-Thompkins & Rogerson, 2012). Most studies present SMI's as mediators between the sender and receiver, adopting part of the two-step flow of communication (Katz & Lazarsfeld, 1966), and the endorsement concept of traditional celebrities (Ohanian, 1990). In this sense, the

SMI's traits are, to a large extent, categorized according to celebrity endorsement theory, attractiveness theory, celebrity credibility, and the 'match-up' theory (Moraes et al., 2019).

Endorsers' expertise, trustworthiness, similarity, likability, and a host of personal characteristics have been found to affect brand attitude, awareness, recognition, perception, image, purchase intention, and other effectiveness indicators, and these relationships change depending on brand/product categories, level of consumer involvement, and perceived risk (Schimmelpfennig & Hunt, 2020; Munnukka et al., 2016). Also, enhancing SMI's credibility is a crucial precondition to maximize the propagation effect and will cause a person to be liked (Zhao et al., 2018; Rosenthal & Mckeown, 2017).

A considerable body of research within advertising and celebrity endorsement suggests that physical attractiveness is an important clue in an individual's initial judgment of another person (Ohanian, 1990; Martensen et al., 2018). Good-looking communicators are consistently liked more than neutral or less attractive persons (Schimmelpfennig & Hunt, 2020). Attractiveness also encompasses similarity, familiarity with the public, and liking (Schimmelpfennig & Hunt, 2020), includes many virtuous characteristics that consumers might perceive in an influencer endorser, for example, intellectual skills, personality properties, lifestyles, or athletic prowess (Erdogan, 1999).

People refer to reviews to reduce the perceived risk in a purchase based on their admiration of and trust in their idols (Djafarova & Rushworth, 2017). Trustworthiness refers to the honesty, integrity, and believability of an endorser, or motivation of the source to provide accurate and reliable information (Erdogan, 1999; Balabanis & Chatzopoulou, 2019). Besides, people would be willing to trust the celebrities to whom they aspire, as they presume that digital influencers value their position of power and are unlikely to abuse it, therefore their opinions would be considered credible (Djafarova & Rushworth, 2017).

SMI's often are recognized as being experts as they have superior product knowledge and experience or skills (Erdogan, 1999). Expert influencers are those who mainly cover more specific subjects, and give advice, useful information, tips, or insightful comments (Uzunoğlu & Misci Kip, 2014). An expert endorsement is beneficial under an awareness intent; however, this effect also depends on the involvement and distraction of consumers (Hughes et al., 2019).

Openness, who tends to seek attention, high exhibitionism, to be extraverted, and to show off for others' admiration, is arguably an important trait that affects people's preferences for the contents of communications (Song et al., 2017). SMI's constantly post videos that show their lives, homes, routines; the perceived openness, and willingness to be vulnerable to enhance consumers' feelings of intimacy and friendship (Chung & Cho, 2017).

Consumers tend to be attracted to influencers who represent their ideal self-image. Self-identification is a consistent predictor of consumer behavioral imitation (Moraes et al., 2019). The similarity is a perceived resemblance between the sender and the receiver (Erdogan, 1999; Martensen et al., 2018), an important aspect to younger consumers because of their susceptibility to self-image and identity (Moraes et al., 2019). Consumer-celebrity relationships seem to be stronger when there are a congruence of attitudes, personality, aspirations/goals, and behaviors, affecting the effectiveness of celebrity endorsement (Chung & Cho, 2017). On YouTube, the logic of self-revelation functions within a symbiotic process, where an authentic persona is gradually built up as the influencer's video output expands (Lovelock, 2017; Ferchaud et al., 2018).

Lovelock (2017) emphasizes the influencer authenticity as an important personal trait on social media, in which the digital influencer has been rewarded with celebrity status, monetary gain, and the expansion of their image in the mainstream media through the sharing of 'authentic' details of their private life. This curated authenticity, along with personal appeals to like, subscribe, or otherwise participate in the community, is seemingly part of an effort to increase sociability (Ferchaud et al., 2018).

Through social media exchange, consumers learn more about digital influencers, including the negative characteristics and undesirable behaviors of them (Chung & Cho, 2017). To Nejad et al. (2014), it is important to emphasize that overestimating or underestimating the value of influentials without considering other elements of a successful marketing program may lead to undesirable outcomes.

2.5 Effects of social media influencers on consumers

As diffusion models idea, individuals tend to adopt the behavior of their social peers, depending on the proportion of their friends/neighbors who have adopted it (Zhang et al., 2016). Therefore, consumers form attitudes based on the endorser (Munnukka et al., 2016), since people examine source factors as possible arguments or reasons for favoring or disfavoring the attitude object (Schimmelpfennig & Hunt, 2020). Influencers are perceived as fellow consumers, and followers find their recommendations to be more credible than marketing-initiated posts (Martensen et al., 2018).

Influencers nowadays have a more significant impact on brand attitudes and purchase behaviors than traditional celebrities (Schouten et al., 2020). Consumer's social media exchanges with digital influencers facilitate parasocial relationships via perceived self-

disclosure, which, in turn, influences source trustworthiness. Source trustworthiness, then, has positive effects on brand credibility, attitude toward the advertisement, attitude toward the product**,** which influences purchase intention (Chung & Cho, 2017; Uzunoğlu & Kip, 2014).

As studies showed, digital influencers leverage brand awareness, brand credibility, brand attitude, ad attitudes, brand preferences, and purchase decisions (Ladhari, Massa, and Skandrani, 2020; Chung & Cho, 2017; Uzunoğlu & Kip, 2014; Zhao et al., 2018). This suggests that social media marketing strategies using SMI's are an effective tool in promoting sales and branding strategies (Chung & Cho, 2017).

This first part of the theoretical contextualization of the study aimed to bring the elements from the literature that have affected the popularity of content on social networks. From the raised criteria, we will further explore these factors in each of the four studies focusing on the role of social media influencers and their role on consumer digital engagement.

3 STRUCTURE OF STUDIES

This document presents the four main studies proposed to meet the overall objectives of the thesis.

Article 1: The first study is theoretical, with a qualitative approach. It presents the theoretical framework of the study, consolidating the most relevant studies for the marketing area on social media influencers. By applying a systematic review method, the purpose of this review article is to analyze SMI's and influencer marketing literature and identify knowledge gaps. The review consolidated the SMIs literature into two groups according to their focus on the stages of social influence. Studies on the place of SMIs in the social network, the celebrification, and the characteristics of SMIs focus on the antecedents of social influence. Studies on the role of SMIs on information diffusion, on the relationship between SMIs and their followers, and their impact on marketing campaigns, focus on the consequences of social influence.

Article 2: The second study adopts social media influencers as the unit of analysis, in a qualitative content analysis approach to understand the professional life trajectory of these influencers. The authors analyzed the video posts of five influencers on YouTube and other complementary sources from the beginning of their career to the present time to identify five common stepstones in their professional trajectories.

Article 3: Starting from one of the main factors that affect the dissemination of information on digital platforms, the content and, considering that one of the main managerial focuses is to better understand how to increase the consumer's digital engagement, the third study investigates which video features drive popularity on YouTube. It focuses on content created by influencers in YouTube videos, considering the linguistic style of the broadcast message, sentiment analysis and other factors, and their impacts on digital engagement. Then, we present and empirically test a conceptual model to determine how elements such as a video's linguistic style, valence, category, and length influence various consumer engagement metrics, such as views, likes, dislikes, and comments. For this purpose, we analyze transcriptions of the contents of more than 11,000 videos from 150 digital influencers on YouTube across several categories.

Article 4: Grouping the variables raised in previous studies (channel content attributes and digital target engagement) this fourth study adds the personal traits of influencers to analyze the joint effect of these variables on the performance of digital engagement. Our study deepens the studies involving digital influencers, integrating two overarching factors that emerged as SMIs' key attributes that helped them establish relational bonding with their followers: 1) SMIs' personal traits, the human emitter, including psychological-related influential factors; and 2) their linguistics style from content attributes. Further, we identify different profiles of social media influencers based on the characteristics of the linguistics video content and the personal traits of the influencers. Specifically, this study aims to verify which feature(s) describes better the distinguishing SMI's profile on YouTube and influence user engagement on social media. Finally, we propose a taxonomy of digital influencers and their influence on digital engagement.

Figure 2 demonstrates the focus of the four studies of the thesis.

Study 1: Assessing the theoretical underpinnings and contextual features of the relevant studies on social media influencers, analyzing and categorizing the literature according to common interests and similarities, to discover the determining factors from social media influencers that affect the influencer marketing strategy.

Study 2: Investigate the professional trajectory of digital influencers, identifying the turning points and the common characteristics in the career of a successful digital influencer.

Study 3: Recognize which variables from social media influencers have the greatest impact on online consumer engagement (number of views, likes, dislikes and comments) on YouTube.

Study 4: Propose a taxonomy based on the similarities of attributes derived from the linguistic content of the channels and personal traits of social media influencers on YouTube and the impact of these profiles on consumer digital engagement.

Figure 2. Scope of the studies developed for the thesis.

PART 2

Part II aggregates the main original articles written for this thesis. The presentation of the articles was made in Part 1, section 3.

ARTICLE 1

Paper submitted to the International Journal of Research in Marketing.

SOCIAL MEDIA INFLUENCERS AND INFLUENCER MARKETING: A SYSTEMATIC REVIEW AND FUTURE RESEARCH AGENDA

Highlights

- This paper provides a systematic review of the literature on social media influencers (SMIs).
- Research on SMIs and influencer marketing is concentrated on six thematic axes.
- The thematic axes relate to three general antecedents and three consequences of social influence.
- This paper identifies the main contributions and knowledge gaps of each theme.
- The conclusions provide a research agenda for future research on SMIs and influencer marketing.

1 INTRODUCTION

The fast-paced and stressful routines that induce people's usual 'lack of time' and exposure to excessive data and information strengthen the role of influencers as shortcuts and heuristics for decision-making. Because of their expertise, their recommendations are frequently considered trustworthy (Uzunoğlu & Misci Kip, 2014). Moreover, digital influencers play increasingly essential roles in facilitating access to information (Turcotte et al., 2015), content dissemination (Agarwal et al., 2008; Kwon et al., 2017) and customer relationships (Liu, Liu, & Zhang, 2019). As an example of their popularity, three of the top ten most popular YouTube channels by the number of subscribers in 2021 belong to digital influencers (Statista, 2021). People who declare their purchases are driven by influencers sum up to 64% of the audience in Latin America, 39% in North America, and 36% in Europe (Labs, 2019).

It is no accident then that global brands are investing considerable budgets in influencer marketing. Due to their ability to influence the target audiences' attitude, perceptions, and purchase behaviour, influencers can set standards and become powerful in the eyes of brands (Hudders, De Jans, & De Veirman, 2021; Martensen et al., 2018; Uzunoğlu & Misci Kip, 2014; Zhao et al. 2018). For example, Estée Lauder brand is addressing 75% of its marketing budget to digital marketing, but mostly to social media influencers (Labs, 2019). The organizers of Fyre Festival invested $250,000 for a post on Kendall Jenner's Instagram – if only one percent of her 115 million followers purchased the $100 product advertised, the company would make a revenue of almost $115 million (Forbes, 2019).

Nevertheless, brand managers are still struggling with managing influencer marketing, and there is still considerable uncertainty among practitioners about the best way to work with social influencers (Wiedmann & von Mettenheim, 2020). For example, little is known about the factors that drive the success of online engagement with influencers (Hughes, Swaminathan, & Brooks, 2019; Ladhari, Massa, & Skandrani, 2020). There are also doubts regarding the choice of a given influencer as a brand endorser. The partnership with influencers can be a two-edged sword, given the risk of associating the brand with controversial eWOM, making selecting a social media influencer from numerous alternatives very challenging (Chung & Cho, 2017; Erdogan, 1999). Given these uncertainties, conceptual articles and literature reviews on social media influencers and influencer marketing represent an opportunity to consolidate existing knowledge and provide solid recommendations to guide future research in the field. However, although there has been considerable attention to the topic among researchers in the last years, such reviews are still limited in scope and number.

To address this gap, we propose a systematic review of academic marketing papers on social media influencers and influencer marketing with the aims of:

(1) Assessing the theoretical underpinnings and contextual features of the relevant studies.

(2) Analysing and categorizing the literature according to common interests and similarities.

(3) Developing a model framework and research agenda based on the knowledge gaps uncovered.

We conducted a systematic search in the Web of Science and Scopus databases for these goals, resulting in 110 articles with contributions to the field. We further analysed these articles to provide insights into six general thematic axes of research and their current contributions to understanding the strategic use of influencers.

The structure of this systematic review is as follows: First, we present a theoretical background of social media influencers and influencer marketing strategy. Then, we explain the methodology of the systematic review of this study. Next, we describe the findings and present the major contributions of each thematic axis. Finally, we discuss the implications of the review and provide a research agenda, as well as concluding remarks and contributions to theory and practice.

2   THEORETICAL BACKGROUND

2.1 Social media influencers

Influencing someone or being influenced is a natural part of any social interaction. The idea that some people (called "influencers") have a significantly greater degree of influence on others has been studied for decades (Martensen et al., 2018). For instance, the role of "opinion leaders" in modern society is considered fundamental in the study on the diffusion of innovation and information since the 50s and 60s (Rogers, 1995). More recently, however, the emergence of "professional influencers" can be connected to the changes in the market systems starting at the end of the 1990s: the cultural evolution entailed by the evolution of the Internet aggregated social and economic relevance to the role of influencers role (Susarla et al., 2012).

The creation of platforms dedicated to user reviews and social networking services that allow the normalization of self-branding behaviours and the decentralization of management decision structures transformed consumer engagement with products and services (Busca & Bertrandias, 2020). Individuals increasingly turned into prosumption market systems to behave like for-profit firms and advertise themselves (Busca & Bertrandias, 2020). In this context, although traditional celebrities have also found their way to social media, people who were previously unknown to the public found an opportunity to become famous influencers and build their careers by successfully branding themselves online (Schouten, Janssen, & Verspaget, 2020).

The literature on digital influencers can be traced to different sources. It uses several concepts and ideas of sociology, communication, and social network theory, such as "opinion leaders," "influential nodes," "hubs," and so on. For this reason, there is no precise definition of "digital influencers" in the literature. One of the most widely used definitions comes from Freberg, Graham, McGaughey, Freberg (2011), who define social media influencers (SMIs) as a new type of independent third-party endorsers who shape audience attitudes through blogs,

tweets, and other social media. Another popular definition, from De Veirman, Cauberghe, and Hudders (2017), considers social media influencers as people who have built a large network of followers and are regarded as trusted tastemakers in one or several niches. Hudders et al. (2021) propose two central characteristics required for someone to be considered an influencer: reach and impact. Reach refers to the number of followers, while impact refers to the ability to influence the decision-making of these followers, which may be due to several factors – for instance, the influencer's expertise, authenticity, intimacy, immediacy, and communication style (Jerslev, 2016; Lovelock, 2017).

For the purposes of this systematic literature review, we use the term "social media influencers" (SMIs) as a synonym of "influencers" or "digital influencers" to refer to people born or raised on social media and able to build and maintain direct relationships with multiple users (Belanche, Casaló, Flavián, & Ibáñez-Sánchez, 2021). In addition, we consider SMIs as content creators who have the goal of influencing the opinions of a given audience and being recognized as trustworthy advisers (Li & Du, 2011; Uzunoğlu & Misci Kip, 2014). An influencer is thus someone who has credibility in the group, persists in attempting to influence other individuals' attitudes or behaviour, and introduces ideas that others pick up on or support (Rogers, 1995; Zhao et al., 2018). They usually disseminate messages rapidly and easily with a potentially viral effect (Rosenthal & Mckeown, 2017; Zhang et al., 2017). Furthermore, through processes of wishful identification, trust, similarity, and identification, SMIs can be more effective in marketing strategy than traditional celebrities, especially in product endorsement (Schouten et al., 2020).

2.2 Influencer marketing

Influencer marketing consists of identifying and targeting influential users and stimulate them to endorse a brand or specific products through their social media activities (De Veirman, Cauberghe & Hudders, 2017). Influencer marketing can increase the visibility of a company and work just as well as celebrity endorsement (or sometimes even better than them) in driving desirable campaign results (Lou, 2021; Wiedmann & von Mettenheim, 2020).

The efforts in this domain should lead to increased engagement, stronger relationships with customers, and improved brand awareness (Tiago & Verissimo, 2014). The recent "boom" of influencer marketing reflects the strategic use of decision-making decentralization processes in digital marketing, in which SMIs are co-responsible for the effectiveness of the marketing campaign (Busca & Bertrandias, 2020). Moreover, this market system illustrates the managerial

exploitation of a low agency context, whereby companies enact strategies focused on promoting a small set of behaviours by instrumentalizing multiple individual self-marketers (Busca & Bertrandias, 2020).

Influencer marketing initiatives are also pushed by evolving consumer behaviours. They seek balanced situations and avoid unbalanced situations, which in turn shapes their attitudes and intentions toward products and brands sponsored by the influencers they follow (Belanche, Casaló, Flavián, Ibáñez-Sánchez, 2021). In addition, consumers increasingly avoid traditional forms of online advertising (through ad blocks, for instance), which considerably reduce their effectiveness and push brands towards more creative and subtle promotion strategies (De Veirman & Hudders, 2020).

However, it is important to emphasize that overestimating or underestimating the value of influencers without considering other strategical elements of marketing campaigns may lead to undesirable outcomes (Nejad et al., 2014). For instance, endorsement strategies should focus on identifying which influencer traits are most effective for distinct value propositions instead of generic functional purposes (Schimmelpfennig & Hunt, 2020). Likewise, to effectively leverage social influence, marketing managers must be able to identify opinion leaders and early adopters, target them as seeding points, and understand how their dynamic relationship with their audiences (Akdevelioglu & Kara, 2020; Zhang et al., 2018). These many uncertainties drive the need for a better understanding of social media influencers and influencer marketing and consumer responses to influencer marketing campaigns (Martínez-López et al., 2020).

3   METHODOLOGY

Given that the purpose of this study was to synthesize and consolidate the stream of research on social media influencers, we adopted a systematic review methodology. Moreover, since we were mostly interested in influencers born or raised on social media, our review covered articles that focused on them, not on traditional celebrities or opinion leaders who may be active on social media but mainly exert influence through other means.

Building on the recommendations of Biolchini et al. (2007), this systematic literature review (SLR) consisted of three steps: planning, processing and analysis. In the first step, we mapped and identified common search strings and how journals and other channels usually deal with the subject. Then, we chose the scholarly databases Web of Science and Scopus to identify relevant academic articles in management and business. While Web of Science can reach

indexed journals with a calculated impact factor in the Journal Citation Report (JCR), Scopus delivers the broadest overview of global, interdisciplinary scientific data and literature (Elsevier, 2021).

The criteria for selecting articles from these databases and the number of articles remaining after each filter stage are presented in Table 1. We began with all English-language peer-reviewed articles corresponding to the search strings, with no restriction on the year of publication. From this pool, we excluded articles in non-academic journals, duplicated papers, book chapters, review articles, discussions, conference papers, and book reviews. After this, we scrutinized the articles' titles, abstracts, and keywords to recognize relevant studies to the domain of social media influencers and influencer marketing. We then proceeded to the full reading of each article, aiming at the categorization of its content. To ensure the systematic review focused on relevant articles that aimed for high research quality standards, we further filtered the sample to include only publications in top-tier journals, as indicated by their ranking in the Journal Citation Reports (JCR). However, to not be too restrictive, journals were selected by their presence in the ranking itself and not considering a minimum impact factor. Since we were interested in the literature on social influencers from a marketing and management perspective, we considered only journals categorized as Business and Management by the JCR. The final sample consisted thus of 110 studies suitable for the systematic literature review.

Table 1. Procedures for data selection and number of articles remaining after each filter stage.

Stage of data selection	N
Initial search of relevant terms on articles from Web of Science and Scopus databases*	4,683
Exclusion of duplicated articles	3,543
Exam of title, abstract and keywords for relevance	381
Full text analysis	323
Selection of papers in journals ranked by the Journal Citation Reports (JCR)	111
Final sample for the systematic literature review	110

* Search strings used: *blogger*, *youtuber*, *instagrammer*, *vlogger*, *social media influencer*, *influencer marketing*, *social media celebrity*, *digital influencer*, *microcelebrity*, *opinion leader*, *micro influencer*, *nano influencer*, *macro influencer* (also included plurals).
Note. Search performed in the Web of Science and Scopus databases in June 2021.

After identifying the relevant articles, we proceeded to the processing stage. Articles were coded according to the bibliographic characteristics of the source, the type of study, and several contextual dimensions such as the article's goal, study variables, data collection, and research contributions. Finally, the resulting coding categorization enabled us to perform two

types of analysis: descriptive and thematic. The results of the descriptive analysis provide bibliographic data and support the following thematic analysis, which consisted of identifying, analysing, and interpreting patterns of meaning (the themes) within data. Six major thematic axes emerged from this last stage.

4   DESCRIPTIVE ANALYSIS

The studies in our SLR are published in 39 different journals with impact factors from 0.439 to 6.302. Ten journals are responsible for 63% of these articles (see Table 2). Overall, we can notice not only that the topic is still very recent, but also that the interest in the topic of social media influencers has been increasing quickly in the last three years: 75% of all relevant papers on the topic were published after 2018 (see Figure 3). Since only publications until June 2021 were included by the time of this study, the total ratio should be higher by the end of the year.

Table 2. Journals with most published articles in social media influencers.

Journal	IF	Articles on social media influencers per year*											N
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Journal of Business Research	4.874				1		1		3		5	5	15
Journal of Retailing and Consumer Services	4.219							1		1	7	3	12
Journal of Marketing Management	1.719									1	5	3	9
Public Relations Review	2.321	1								1	2	2	6
Journal of Fashion Marketing and Management	1.706								1	1	3	1	6
Journal of Research in Interactive Marketing	2.540						1				3	1	5
Journal of Product and Brand Management	1.832									1	4		5
Journal of Interactive Marketing	5.097								1	2	1		4
Asia Pacific Journal of Marketing and Logistics	2.511									1	1	2	4
Psychology and Marketing	2.370									2	1	1	4

* Only papers until June 2021 were available by the time of this review.

Figure 3. Number of published studies on social media influencers and influencer marketing per year until June 2021.
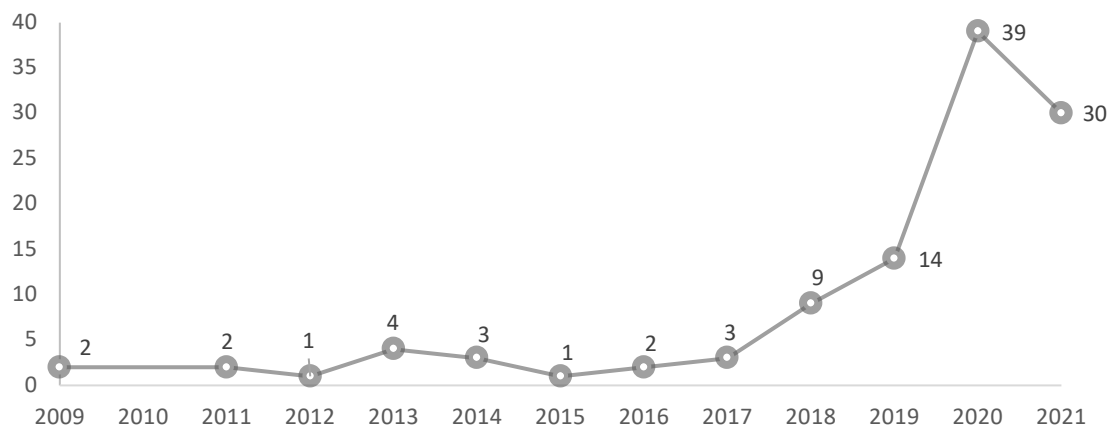
Regarding the methodological preferences of the published studies, most have adopted a quantitative approach (74%, opposed to 21% qualitative and 5% mixed-method approach). At the same time, most papers are mostly either descriptive (48%) or exploratory (24%), which may be explained by the recency of the topic (so far, only 24% of studies may be considered causal and 5% have mixed goals). While quantitative studies have used mainly surveys and regressions – with a few experiments and social network analyses – the qualitative studies opted for netnographies, in-depth interviews, and content analysis.

Concerning the theoretical approach, the published studies were based in several different theories. Opinion leadership (17 articles) and parasocial interaction-relationship theory (16) were the most used, followed by ELM (elaboration likelihood model – 9), PKM (persuasion knowledge model – 9), celebrity endorsement theory (8), social network theory (8), two-step flow of communication model (5), source credibility theory (5) and social influence theory (5). This finding demonstrates the varied backgrounds of researchers interested in the topic, as well as the absence of a consolidated theory in marketing to explain it.

Finally, regarding the social media platforms which were the focus of any study, the most prominent popular so far is Instagram (30 studies), followed by YouTube (25), Facebook (13), Twitter (8) and blogs (8). This finding was expected since YouTube was the birthplace of the first generation of influencers in 2009, and Instagram gained the most prominence in the last three years. Thirty-seven studies did not focus on any specific social media, while some focused on several at the same time.

5 THEMATIC ANALYSIS

The thematic analysis led to a comprehensive overview of academic research on SMIs. The six main thematic axes that emerged from the codification phase consist of similar interests among the 110 studies that relate to different aspects of influencer marketing strategy, i.e., three antecedents and three consequences (Figure 4).

Figure 4. Framework of the thematic analysis.
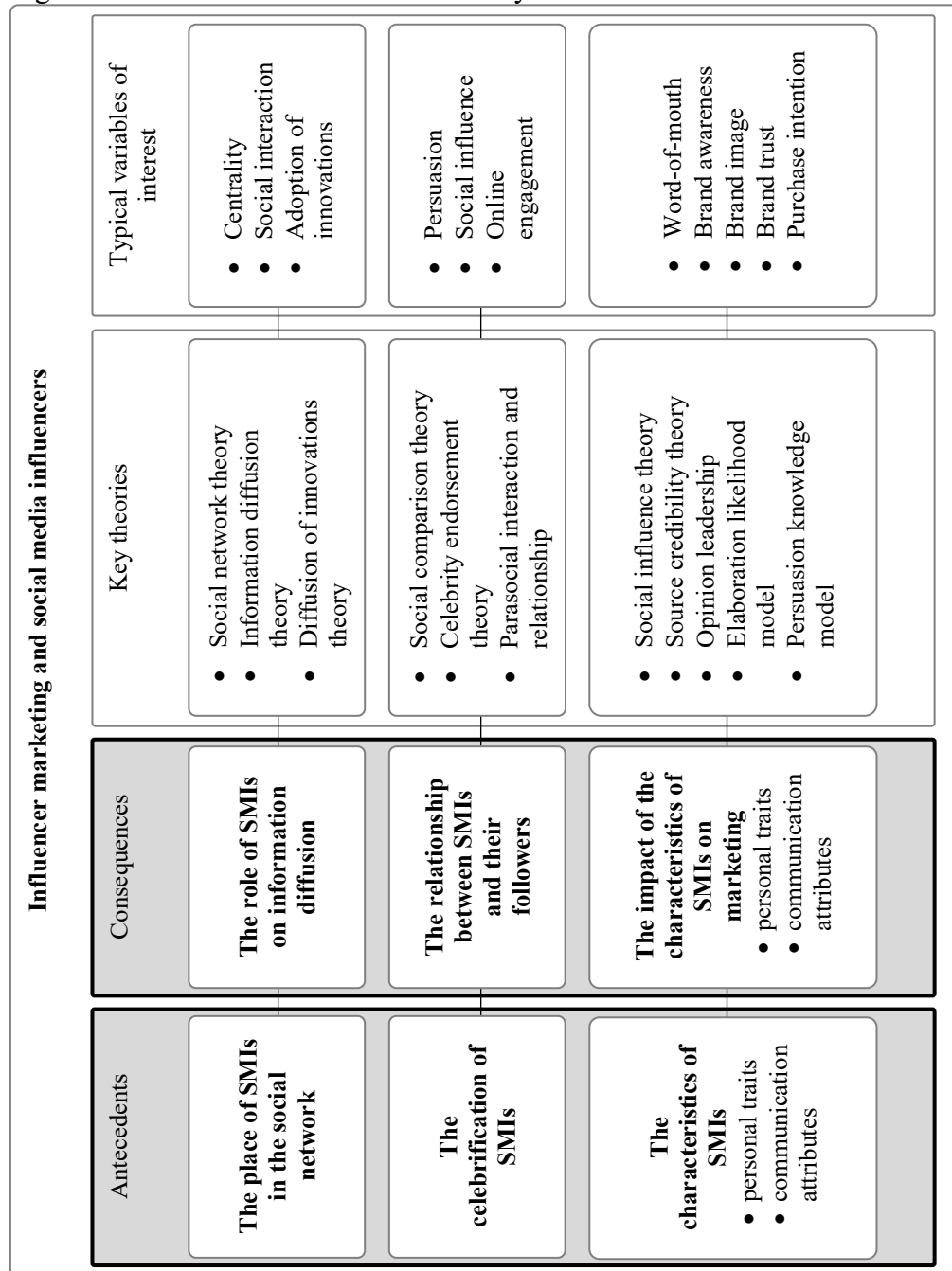
Table 3 presents the thematic axes with some descriptive statistics of methodological approaches and a few representative studies of each one. Figure 5 shows the cumulative contribution of each theme over the years. In the beginning, the studies on the field focused mainly on the identification of influencers in social networks and their distinctive characteristics, i.e., what makes them different from other users. The six themes have evolved and gained representation; however, research on the impact of SMIs on marketing has attracted the most attention of researchers, especially in the last three years. This theme is also the only one to present a significant proportion of causal studies (44%), while the others are mainly descriptive or exploratory. The theme about the celebrification of SMIs is the only one whose studies are predominantly qualitative, which makes sense given its interpretative approach and its goal of understanding the lives and trajectories of influencers.

Table 3. Thematic axes, subdivisions, and research methodological procedure.

Thematic axis	Number of articles	Descriptive stats of research	Some key references
The place of SMIs in the social network	6 (5%)	83% descriptive, 67% secondary data, 100% quantitative	Goldenberg et al. (2009), van der Merwe and van Heerden (2009), Lu et al. (2013)
The celebrification of SMIs	13 (12%)	92% exploratory, 54% primary data, 85% qualitative	Lin et al. (2018), Cocker and Cronin (2017), Ashman et al. (2018)
The characteristics of SMIs	20 (18%)	40% descriptive and 40% exploratory, 40% primary data, 45% quantitative	Freberg et al. (2011), Audrezet et al. (2020), Shi and Wojnicki (2014)
The role of SMIs on information diffusion	9 (8%)	78% descriptive, 55,5% primary data, 89% quantitative	Iyengar et al. (2011), Arora et al. (2019), Moldovan et al. (2017)
The relationship between SMIs and their followers	14 (13%)	71% descriptive, 100% primary data, 86% quantitative	Lee and Watkins (2016), Sokolova and Kefi (2020), Reinikainen et al. (2020)
The impact of the characteristics of SMIs on marketing	48 (44%)	44% causal, 85% primary data, 96% quantitative	Hsu et al. (2013), Casalo et al. (2020), Zhu et al. (2014), Hughes et al. (2019), Dhanesh & Duthler (2019)

*The five most cited studies of each thematic axes as of July 2021 (Google Scholar).

Figure 5. Cumulative contribution of each thematic axis until June 2021.
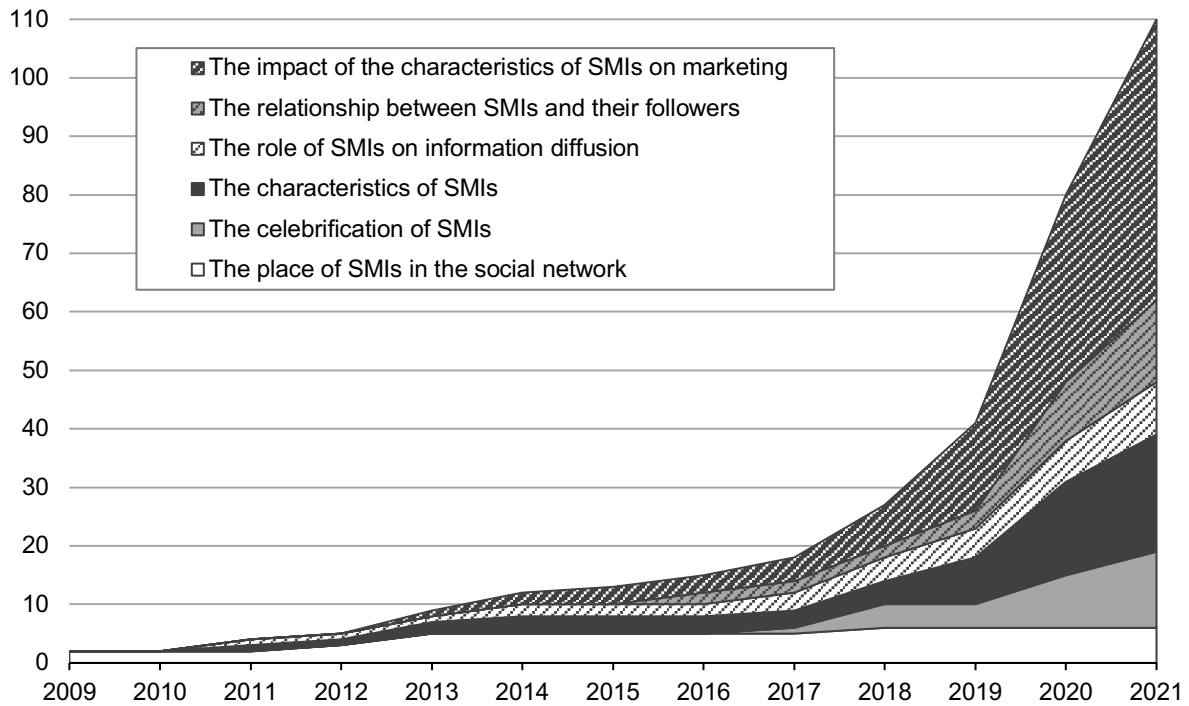
Next, we examine each thematic axis in detail, with a particular interest in the main findings and contributions of each one to influencer marketing literature.

5.2 The place of SMIs in the social network

Studies on this axis see influencers as persons whose power comes from their structural position in the social network, which is also a worthy indication of opinion leadership (van der Merwe & van Heerden, 2009). For instance, Cho, Hwang, and Lee (2012) find that opinion leaders with high distance centrality are the best ones for the maximum cumulative number of adopters, whereas those with high sociality are the best for fast diffusion of innovations. The characteristics of influential opinion leaders may also vary depending on the features of the social network and the type of innovation (Cho et al., 2012).

Researchers on this theme are particularly interested in targeting the right influencers in a given network for the objectives of marketing campaigns. For example, Kaiser et al. (2013) affirm that global opinion leaders are the best for spreading positive opinions about a brand's product, as well negative opinions about competing products, due to their short distance to all other network members. Hu et al. (2018) argue that the choice of a given influencer is highly

dependent on the conditions of targeting, the size of the budget allocated, and the selected consumer groups (influential, susceptible, or unsusceptible).

Finally, studies on this theme also explore the role of different attributes of the network itself, such as hubs, in the diffusion and adoption of innovations – for instance, innovative hubs influence mainly the speed of adoption, while follower hubs mainly influence market size (Goldenberg et al., 2009). To Lu et al. (2013), whereas network structure-based factors and reciprocity are significant drivers of network growth, intrinsic characteristics of information diffusion (such as the number of reviews) and textual characteristics (such as objectivity, readability, and comprehensiveness) are also significant drivers of network growth.

5.3 The celebrification of SMIs

Studies on this theme aim to understand the phenomenon of influencers from a sociological perspective and their broader impacts on modern society. Sashittal & Jassawalla (2020) consider influencers as new tribal leaders, anointed by their followers on the medium; they curate brands for their followers' consumption and endow the status of tribal artifacts to brands (Sashittal & Jassawalla, 2020). Drawing upon Weber's concept of charismatic authority, Cocker and Cronin's (2017) investigate the appeal that YouTuber videos have gained among their fan communities, arguing that these new cults of personality differ from traditional ones through collaborative, co-constructive, and communal interdependence between the worshiped figure and its followers.

In this sense, Lou (2021) proposes a new conceptualization of trans-parasocial relation, marked by influencers who engage followers through collectively reciprocal, (a)synchronously interactive, and cocreated interactions and relationship development between influencers and their captive followers. In this sense, Choi (2020) shows that social comparison with influencers is a powerful driving factor among followers: blog readers in his study indicated preference toward fashion bloggers who also perform as self-modelling image producers.

Interestingly, some studies on the role of social media influencers as new celebrities show that they can also serve as agents of social change. Pemberton & Takhar (2021) show that Hijabi French Muslim fashion influencers are increasingly positioning themselves as "cyberarbiters" of social transformation and shifting attitudes about the intersections of Islam, the body, and female sexuality. At the same time, they must conciliate different (and sometimes contradictory) societal forces to keep their status with followers. For instance, Leban et al. (2020) explored how high-net-worth influencers reconcile ethicality and living a luxury

lifestyle through the enactment of three personas: (1) the "ambassador of true luxury", through their portrayal of what they view as "true" luxury; (2) the "altruist", by occasionally engaging in altruistic activities, which render luxury consumption more ethical; and (3) the "good role model," through the enactment of different practices to appear as good persons.

Other researchers focus on the process and the external forces that shape ordinary people into online celebrities. For instance, Erz and Christensen (2018) explore the transformational consumption and production power of the blogging practice, identifying three identity phases of bloggers: the individual consumer, collective blogger, and blogger identity phase. They showed that the influencers transform themselves into human brands through a continuous process of identity negotiation, adaptation, and reinterpretation with multiple stakeholders. Do Nascimento, Campos, and Suarez (2020) outline three forms of endorsement relationship that evolve during the influencers' career: experimenting, partnering, and bonding. In that context, brands play different roles, as providers, partners, and hirers, supporting and rewarding the digital influencers' entrepreneurial process. Ashman et al. (2018) also connect the influencers' trajectory with market forces, more specifically through the life choices of autopreneurial YouTubers: (1) the obsession with their marketability and performance; (2) the indulgence in an unseemly bout of narcissistic self-displays and ruthless competitiveness; (3) the constraint of their creativity by the neoliberal logic of hyper-normality; (4) and the compliance with prescribed norms.

Finally, some researchers investigate the challenges for brands to interact with and contribute to social media influencers. Ao and Mak (2021) analysed the socio-cultural meanings in the social-mediated crisis between organisations and the public and found that the attitudes and emotions expressed by the posts of influencers may lead followers to express similar/opposite attitudes and emotions. Davies and Hobbs (2020) explore the tension between the uses and potential misuses of SMIs by examining the worldviews, strategies and practices of senior public relations practitioners at several agencies. Lin et al. (2018) presented a five-stage planning process designed to guide partnerships with SMIs: planning (setting the objectives of the campaign and the role of SMIs), recognition (identifying influential and relevant SMIs), alignment (matching SMIs with the products or services promoted), motivation (rewarding online opinion leaders in a way that aligns with their social role), and coordination (negotiating, monitoring, and supporting). Similarly, Borchers and Enke (2021) identified four central phases in the implementation of strategic influencer communication: influencer selection and contact, preparation and coordination, content production, and content distribution. Nevertheless, these authors criticized organizations for deploying strategic

influencer communication primarily for marketing objectives, while the potential for improving public relations seems neither fully explored nor exploited.

5.4 The characteristics of SMIs

This theme includes studies that investigate the distinct characteristics that make some people influential in social networks. We divide them into two subgroups: while some focus on the personal/psychological traits of influencers, other focus on communication elements, such as style and linguistic attributes.

5.4.1 Personal traits

Several researchers aimed to understand influencers based on theories from psychology, social psychology and consumer behaviour, frequently with the motivation of providing insights for management decision of marketing campaigns. From their studies, we learned several usual personal traits of users who become successful influencers.

One of the traits most associated with social influencers is authenticity (for instance, Audrezet, de Kerviler, & Moulard, 2020; Campbell and Farrel, 2020; Ouvrein et al., 2021). Audrezet et al. (2020) found that influencers often use two authenticity management strategies: passionate authenticity, which is shown by a discourse driven by their inner desires and passions more so than by commercial goals; and transparent authenticity, which refers to the use of fact-based information about the product or service endorsed. Freberg et al. (2011) related helpfulness with authenticity (i.e., giving advice and being turned to for advice) and argued that, when collaborating with influencers, marketers should be sure to provide scope to allow authenticity to emerge.

Other common personal traits of social influencers and that impact both their trustworthiness opinion leadership include expertise and authority in the field (Balabanis & Chatzopoulou, 2019; Campbell & Farrel, 2020), credibility (Al-Emadi & Ben Yahia, 2020; Jin & Ryu, 2019a), innovativeness (Akdevelioglu & Kara, 2020), quality of interaction (Lee & Theokary, 2020) and homophily, i.e., the similarity between influencers and their followers (Al-Emadi & Ben Yahia, 2020; Balabanis & Chatzopoulou, 2019). Furthermore, drawing from identity theory, Jin and Ryu (2019a) argue that social identification between Facebook users and opinion leaders, as well as owner and ingroup vs. outgroup perception, help explain their interpersonal attraction to the celebrity. Moreover, it impacts their involvement with ads

endorsed by the influencer, the believability of the ads and their willingness to buy the advertised fashion products (Jin & Ryu, 2019a).

Based on several of these personal factors, some authors tried to categorize influencers into distinct groups. For instance, Campbell and Farrel (2020) incorporated insights from industry sources to define influencers within five distinct categories based not only on follower counts but also perceived authenticity, accessibility, and expertise: celebrity influencers (the "rich and famous"), megainfluencers (the "everyday celebrity"), macroinfluencers (the "sweet spot"), microinfluencers (the "rising star"), and nanoinfluencers (the "newcomers"). Ouvrein et al. (2021) proposed a different conceptual classification that combines the characteristics of social media influencers with audience's perceptions and consists of three types of top SMIs – "passionate business influencers," "passionate influencers," and "celebrity influencers" – and two types of potential SMIs – "dreaming business dormants" and "passionate topic enthusiasts." They explain the differences between these categories by the influencers' celebrity status, authenticity and received revenues.

Finally, Haenlein et al. (2020) argue that firms who want to engage in influencer marketing must understand that each platform has its own user culture and language. Hence, influencers' skills and familiarity with each platform should also be considered when choosing the right partner for influencer marketing.

5.4.2   Communication attributes

Other than the personal traits of SMIs, their communication attributes also play a role in their influence. In this sense, researchers have been studying factors related to both the content and the form of communication.

On the content side, several authors have found that the quality of content is a predictor of credibility and preference for a given social influencer (for instance, Al-Emadi and Ben Yahia, 2020; Navarro et al., 2020; Nunes et al., 2018; Sette & Brito, 2020). Navarro et al. (2020) found that brands and agencies are increasingly focusing on the quality of content, along with personal reputation, to select social media influencers. Al-Emadi and Ben Yahia (2020) define the content quality of messages based on their usefulness, attractiveness, visual interactions, and diversity. Sette and Brito (2020) relate quality content with creativity, informativeness and innovativeness, and Moldovan, Steinhart and Lehmann (2019) found that messages which combine these characteristics are more likely to go viral than those that are only creative or informative, for example. Influencer storytelling is another factor associated with quality

content that may lead to fame and leadership on social media platforms (Al-Emadi and Ben Yahia, 2020).

Certain content elements were also found to increase referral rates across SMIs. For instance, Chia, Hsu, Lin, and Tseng (2021) highlighted the importance of items related to self-initiated community interactions in the posts of SMIs. Shi and Wojnicki (2014) argued that SMIs are more successful when they confer extrinsic rewards along with their posts, such as monetary gains or prizes.

Regarding attributes of form in communication, the peripheral elements of linguistic style and emotional contagion have been found as central to influencers with a higher number of views and subscribers, especially in situations in which viewers do not exert much cognitive effort – for instance, followers of YouTube videos (Lee & Theokary, 2020). Aleti, Pallant, Tuan, and van Laer (2019) found that externally focused styles (i.e., focused on the audience, not on the influencers themselves) and narrative styles are more effective for eWOM. In that regard, Zhou et al. (2021) argue that marketers may use narrative strategies as standards for content and structure in their analysis and selection of SMIs. The benefits of using emotional styles, however, are not yet evident in the literature. In the study of Aleti, Pallant, Tuan, and van Laer (2019), emotional styles were not very effective in terms of eWOM, except for angry outbursts (standing out with a highly negative emotional style). In the study of Munaro et al. (2020), consumers preferred influencers whose videos showed moderate emotions and low arousal levels. It is possible that the use of emotions may serve influencers in different ways, according to their personal style, audience, and context.

Nevertheless, a common factor among many influencers seems to be the ability to create a feeling of intimacy with their followers. For instance, Pihl and Sandstrom (2013) found that fashion bloggers present a combination of private and commercial content, thereby creating a customer intimacy that differentiates them from traditional market channels. Likewise, in the study of Gannon and Prothero (2018), beauty creators engage in regular social interaction with their followers, forming relationships relating to their practice and offering mutual support to each other (Gannon & Prothero, 2018).

5.5 The role of SMIs on information diffusion

Studies on this theme focus on social influence and information diffusion and how they operate over social networks. Opinion leaders such as SMIs can affect the degree to which an individual is susceptible to social influence (Zhang, Fam, Goh, & Dai, 2018). Moreover, the

customer lifetime value of SMI's is higher than that of other people because they tend to be early adopters and heavy users and start influencing others sooner and more effectively than do less connected people (Iyengar et al., 2011). Furthermore, Moldovan et al. (2017) argue that not only do opinion leaders lead to churn, but they can also influence their followers to stay with the current provider/brand or switch to another one.

Iyengar et al. (2011) found evidence that contagion over network ties (in the context of product adoption) is moderated by the recipient's perception of the early adopter's opinion leadership. That effect holds even after controlling for marketing effort and arbitrary systemwide changes. Arora et al. (2019) proposed a mechanism for measuring the influencer index considering the frequency of social media usage, engagement, outreach, sentiment, and growth across popular social media platforms, including Facebook, Twitter, and Instagram.

Regarding the effects of social influence in the perspective of social network theory, Moldovan et al. (2017) found that opinion leaders usually have the strongest effect in small groups and strong ties. Zhang et al. (2018) showed that not only opinion leaders but also their strongly tied peers work as effective seeding points and thus can be useful for network marketing campaigns. However, influencers who are not in strongly connected, small, dense networks can also exert some types of influence. For instance, Zhang and Gong (2021) suggest that, through normative influence, strategies for product adoption may be successful for activating opinion leaders within loosely connected networks or motivating opinion leaders who are not well connected and do not stand at the crossroads of networks based. This will leverage social influence to affect opinion leaders' behaviours (especially when they are not the earliest adopters) which will eventually speed up new product adoption in social networks.

Some researchers on this thematic axis were also interested in the motivations behind the influence of opinion leaders in social networks. While some common factors emerge, they are also very dependent on the market or activity focused by the influencer. For instance, in Mariani, Styven and Nataraajan (2021) study about travel influencers, their primary drive is social comparison. These influencers compare themselves to others on Facebook to learn more about their own abilities and improve how they work with social media.

In the case of fashion influencers, they are often associated with the intrinsic motivations of sharing and helping other consumers make fashion decisions (Quelhas-Brito et al., 2020). Further, in the case of influencers in the smartphone market, their main distinguishing features include greater expenditures than regular users, lower frequency of replacement, and showing a more positive emotional bond (Romero-Rodriguez et al., 2020). Finally, adolescent

influencers rely on a balance between desires for assimilation (i.e., centrality within the peer network) and individuation (i.e., need for uniqueness) (Gentina, Butori, & Heath, 2014).

5.6 The relationship between SMIs and their followers

Social media influencers' ability to create active communities around themselves can be seen as one of their defining characteristics. Furthermore, this ability may extend to creating brand communities since a trustworthy relationship with an influencer can eventually lead to trust in a brand recommended by the influencer, thus promoting favourable attitudes and reducing the uncertainty that people might have towards the brand (Reinikainen et al., 2020). For this reason, marketing researchers have been interested in the nuances of the relationship between influencers and their followers.

Some studies highlight that followers' engagement with SMIs presents cognitive, affective, and behavioural aspects which are often related to products and brands (Yuksel & Labrecque, 2016; Corrêa et al., 2020; Delbaere, Michael, & Phillips, 2020). The cognitive aspect – opinions, interests, or allocation of attention for a given brand – is shown when consumers' thoughts are triggered due to the influencer's content. The affective aspect occurs when consumers have strongly positive reactions to the content, for instance, messages that can alter emotion and mood, induce empathetic responses, or trigger inspiration. The behavioural aspect may manifest as decisions towards brands, such as purchases or WOM, influenced by the SMI's recommendations (Yuksel & Labrecque, 2016).

Regarding the nature of the relationships between SMIs and followers, several authors describe them as parasocial relationships or parasocial interactions (Aw & Chuah, 2021; Farivar, Wang & Yuan, 2020; Lee & Lee, 2021; Lee & Watkins, 2016; Liu, Liu & Zhang, 2019; Reinikainen et al., 2020; Sakib, Zolfagharian & Yazdanparast, 2020; Sokolova & Kefi, 2020). Parasocial interactions arise from the illusory feeling of friendship with media personalities or brands as if they are present and engaged in reciprocal relationships (Labrecque, 2014). To Ladhari et al. (2020) and Sokolova and Kefi (2020), these relationships are explained by the emotional attachment and homophily (in attitude, values, and appearance) between influencers and followers; the stronger these factors, the more followers accept the SMI's product/brand endorsements. Sanchez-Fernandez and Jimenez-Castillo (2021) relate both emotional attachment and perceived information value to the SMI's influence, which in turn also predicts followers' positive acceptance of recommended brands. Moreover, according to Ki, Cuevas, Chong, and Lim (2020), the more the SMIs satisfy their followers' needs for ideality,

relatedness, and competence, the more they perceive SMIs as human brands and the stronger their emotional bonds with their followers.

Other factors also seem to influence the parasocial interactions between SMIs and their followers, such as credibility and physical attractiveness (Sakib, Zolfagharian, & Yazdanparast, 2020), physical and social attractiveness (Liu, Liu, & Zhang, 2019) or expertise and prestige (Aw & Chuah, 2021). Furthermore, Farivar, Wang, and Yuan (2020) argue that when followers perceive that the influencer truly believes in the endorsed product, the effect of the parasocial relationship in influencing their purchase decisions becomes stronger.

Overall, parasocial relationships with influencers contribute to their perceived credibility and thus to trust and purchase intentions for the influencers` endorsed brands (Lee & Watkins, 2016; Reinikainen et al., 2020). Lee and Lee (2021) add that parasocial interactions with influencers promote followers' vicarious expression and content diagnostic experiences, which reduces risk perceptions and increases viewers' purchase intentions. However, this effect seems not to be always so generalizable or straightforward. For instance, in their study of fitness influencers, Sokolova and Perez (2021) found no evidence that parasocial relationships relate to the followers' intentions to exercise or to adopt the "good" behaviour that the model endorses. These relationships, indeed, help to sell products and influence followers to continue watching videos proposed by the influencers, but only for non-exercising viewers. Exercising viewers probably come for motivation that helps to maintain their exercising behaviour or for workouts that are ready to be followed (Sokolova & Perez, 2021).

Finally, some influencers highlight actions that risk harming influencer's relationships with followers, such as prioritizing endorsement gains over authenticity and community trust. For instance, Cocker, Mardon, and Daunt (2021) identify five recurring influencer endorsement transgressions: 1) underhand endorsement, 2) over-endorsement, 3) over-emphasis, 4) over-saturation, and 5) over-indulgence – each underpinned by an established moral responsibility within the community. Since these transgressions can also impact brand trust, managers should inspect prospective SMI endorsers' social media content and viewer comments before selecting endorsers (Cocker et al., 2021).

5.7 The impact of the characteristics of SMIs on marketing

Studies on this theme investigate the effect of several features of social media influencers on the performance of influencer marketing, including personal features (such as expertise, attractiveness and trustworthiness) and communication attributes (such as originality,

narrative style or the choice of pictures). Although we divide studies in our review based on their main focus of research, we also note that many studies investigate a combination of personal features of SMIs and attributes of communication at the same time.

5.7.1   The effects of the personal features of SMIs on marketing variables

As SMIs grow in popularity, so did marketers' interest in understanding how different influencer features affect the effectiveness of marketing campaigns. As a result, there are now several studies on this topic, and many of them point to the SMI's credibility and trustworthiness as the most decisive factor determining the success of influencer endorsements (Belanche et al., 2021; Chetioui, Benlafqih, & Lebdaoui, 2020; Fink et al., 2020; Hsu, Lin, & Chiang, 2013; Le, Dobele, & Robinson, 2018; Martensen et al., 2018; Nunes et al., 2018; Wiedmann & von Mettenheim, 2020). For instance, Le, Dobele, and Robinson (2018) affirm that SMI's trustworthiness impacts the followers' judgment of message quality, which leads to significantly greater eWOM. To Fink et al. (2020), influencer endorser credibility enhances purchase intention among the members of a sponsored Facebook fan community by enhancing the image of the sponsor's brand. Overall, credibility helps influencer messages to change the attitudes of followers and make them accept the information provided, thus increasing their purchase intentions (Nunes et al., 2018).

Other factors contribute to the SMI's credibility and work on their own to increase persuasiveness and acceptance of endorsed messages. SMI's expertise is one of them, as suggested by several researchers (Chetioui, Benlafqih, & Lebdaoui, 2020; Hughes, Swaminathan, & Brooks, 2019; Le, Dobele, & Robinson, 2018; Martensen et al., 2018; Martínez-López et al., 2020a; Soltani et al., 2021). For instance, Martínez-López et al. (2020a) argue that if followers consider an influencer as an expert in a product segment, their trust in the influencer will be higher, predicting post credibility and interest. Hughes, Swaminathan and Brooks (2019) add that the influence of expertise is especially effective when the advertising intent is to raise brand awareness.

Besides expertise, the influencer's attractiveness has also been found as a common predictor of message persuasiveness (Chen et al., 2021; Martensen et al., 2018; Nunes et al., 2018; Taillon et al., 2020; Torres, Augusto, & Matos, 2019; Wiedmann & von Mettenheim, 2020; Zhu, Yin, & He, 2014). The SMI's attractiveness can be physical or social, and both play

a significant role in predicting purchase intentions (Chen et al., 2021; Nunes et al., 2018). Torres, Augusto, and Matos (2019) and Taillon et al. (2020) found attractiveness to also positively predict WOM, while Wiedmann and von Mettenheim (2020) found a significant impact of attractiveness on brand image, brand trust and brand satisfaction. However, Su and Kunkel (2021) advise that, when attempting to leverage their social media profiles, influencers should balance between showcasing an attractive self of themselves and not overtly flaunting their physiques if the goal is to build long-lasting relationships with their followers.

The influencer's socioeconomic status, which is connected to their perceived attractiveness, has also been found to increase followers' curiosity and evaluation of reviews' helpfulness in sectors such as tourism and fashion (Shin & Lee, 2021; Zhu, Yin, & He, 2014). Moreover, having a substantial number of followers works as a signal of an influencer's social status and thus has a similar positive effect on their influence (Martensen et al., 2018; Valsesia, Proserpio, & Nunes, 2020).

While these studies suggest expert or attractive influencers as the best choices for effective marketing campaigns, some studies also show the value of influencers whom followers see as very similar to them (Le, Dobele, & Robinson, 2018; Martensen et al., 2018). The similarity between followers and SMIs seems to provide the basis for increased trust, which then leverages meanings associated with brands (Martensen et al., 2018). Torres, Augusto, and Matos (2019) and Taillon et al. (2020) found that similarity between followers and SMIs predicted increased eWOM. Von Mettenheim and Wiedmann (2021) explored the similarity between the influencers' personas and consumers' actual or ideal selves and argued that each could be important depending on consumers' involvement level. More specifically, influencers' fit with consumers' actual selves seems more important when the involvement level is high. In contrast, the fit with consumers' ideal selves has more impact under low-involvement conditions (von Mettenheim & Wiedmann, 2021).

Belanche et al. (2021) argue that when followers find an influencer who reflects their own values, personality, or image, and at the same time, promotes a product that is congruent with their usual style, followers tend to align their perceptions of the product with the implied perceptions of the influencer. Thus, the perceived congruence between the influencer and the product or brand helps generate more favourable attitudes toward the sponsored product and higher intentions to purchase and recommend it (Belanche et al., 2021a). Torres, Augusto, and Matos (2019) also highlight the importance of that congruence between the SMI and the brand and suggest it as a significant moderator of the effect of other personal traits (such as attractiveness and likeability) on the brand endorsement.

Finally, a still underexplored factor seems to be the SMI's perceived authenticity. Jun and Yi (2020) argue that active interactions between SMIs and followers enhance their authenticity and thus followers' emotional bond with them. As a result, influencer interactivity and authenticity should affect brand trust, and ultimately, brand loyalty (Jun & Yi, 2020).

5.7.2   The effects of SMIs' communication attributes on marketing variables

Social media influencers can generate persuasive messages through choices of content or style that influence the attitudes of followers and the acceptance of the information provided. For instance, Casalo, Flavian and Ibanez-Sanchez (2020) argued that aspects such as creativity, perceived originality and uniqueness of the posts – instead of perceived quality or quantity – are the key factors that lead an influencer to be perceived as an opinion leader in the fashion industry. Furthermore, Hughes, Swaminathan and Brooks (2019) showed that posts with higher hedonic content on Facebook are more effective in increasing trial intentions among users, and Chen et al. (2021) found that influencers' self-disclosure plays a significant role in predicting purchase intention.

Hence, several recent studies have been interested in the impact of communication attributes on the results of marketing campaigns. For instance, Kim et al. (2021) compared the style of the influencer's message (narrative versus nonnarrative) and found that a narrative introduction engendered more favourable message attitudes and corporate reputation. Likewise, Munaro et al. (2021) found similar results when comparing narrative vs. analytical/argumentative videos on YouTube, i.e., influencers who adopted a more narrative style received more views. Munaro et al.'s (2021) study also explored the effect of other attributes of communication style on the popularity of YouTubers' channels, showing that the use of a subjective style (vs. an objective one) and function words contribute to increasing the number of views, likes, and comments.

While these previous studies have been focused on the linguistic style of influencers' posts, others have been focused on visual attributes such as the type of video or the choice of pictures (Gerrath & Usrey, 2020; Jin & Muqaddam, 2019; Jin & Ryu, 2020; Jin, Ryu, & Muqaddam, 2021; Szymkowiak, Gaczek, & Padma, 2021; Zhang, Kuo, & McCall, 2019). For instance, Szymkowiak, Gaczek and Padma, 2021 have shown that certain compositions of photos with thematic compatibility by an SMI can evoke positive emotional reactions. Moreover, Jin and Muqaddam (2019) have found that coupling products/brands with an influencer source maximizes the appeal of endorsements due to the combined effect of the

brand's credibility and the personal appeal of the influencer. Similarly, fashion brands can also improve social presence and trustworthiness perceptions through posts that feature their products with an influencer (Jin, Ryu, & Muqaddam, 2021). However, some of these effects can be moderated by gender (Jin & Ryu, 2020). For instance, Instagram fashionistas seem to be more effective in increasing brand trust through delivering product-centric visual images when targeting women with high vanity and fashion consciousness. In contrast, the exact opposite pattern was found for men (Jin & Ryu, 2019b).

Finally, the commercial orientation of the message has also been studied due to concerns that it could negatively impact the trust in the influencer and the message's credibility (Martínez-López et al., 2020a). Woodroof et al. (2020) argue that when consumers become aware that an influencer's branded promotional post was motivated by an underlying financial relationship, they evaluate the influencer as significantly less transparent, impacting their perceptions of product efficacy and purchase intentions. Moreover, the perception of a brand's control over the influencer's message leads to reduced post credibility, diminished follower interest in the brand, and lower intention to search for related information (Martínez-López et al., 2020b).

According to some studies, the recommended solution lies in disclosing the brand-influencer partnership to preserve the SMI's transparency and perceived benevolence (Raghupathi & Fogel, 2015; Singh et al., 2020). In De Jans and Hudders's (2020) study, disclosure was beneficial for influencers and showed to be also more favourable for brands as it increased brand effects among children. According to Dhanesh and Duthler (2019), awareness of being exposed to paid content only bolstered the relationship between followers and influencers, strengthening trust and satisfaction. However, in Kim, Duffy and Thorson's (2021) study, sponsorship disclosure eliminated the positive effect of SMI's endorsement on message attitudes toward the commercial ad and perceived corporate reputation. Thus, the effect of disclosing the commercial partnership may depend on the way it is done and the SMI's audience, as shown by Han et al. (2020). In their study, consumers were less inclined to purchase products when influencers expressed explicit advertising disclosures than when the advertising disclosures are subtle. Moreover, micro-influencers seem to be more effective than macro-influencers in managing disclosures since their negative effect was shown to be more prominent when influencers had a large (vs. moderate) number of followers (Han, Yi, Jun, & Ahn, 2020; Kay, Mulcahy, & Parkinson, 2020).

6   DISCUSSION

Overall, SMI's literature showcases influencers as content generators, with the status of experts, who create and disseminate useful, attractive, and organic content within a knowledge domain while curating a relationship with their audience (Lou, 2021). Moreover, the third-party nature of SMIs suggests that they occupy a different place in social networks than typical consumers or brands (Delbaere, Michael, & Phillips, 2020). They are more socially connected and active than other consumers on social media (Moldovan, Steinhart, Lehmann, 2019; Haenlein et al., 2020) and are considered credible sources of information, regardless of their original professions or how they first gained recognition (Djafarova & Rushworth, 2017; Schouten et al., 2019; Tobon & Garcia-Madariaga, 2021). Their achieved social influence and status can be leveraged for the influencers' own goals and to assist brands in communicating marketing messages and shaping consumer attitudes.

As discussed in our thematic analysis, studies on social media influencers can be divided into two groups according to their focus on the stages of social influence. Studies on the place of SMIs in the social network, the celebrification of SMIs, and the characteristics of SMIs focus on the antecedents of social influence. They aim to understand the influencer phenomenon and describe its distinctive characteristics. Studies on the role of SMIs on information diffusion, on the relationship between SMIs and their followers, and on the impact of SMIs on marketing campaigns, on the other hand, focus on the consequences of social influence for followers and brands. However, regardless of the remarkable progress made by these studies in the last years, there are still knowledge gaps and underexplored questions which call for further investigations, especially concerning its implications for marketing management and influencer marketing strategy. Hence, we identify these gaps in the following sections and present an agenda for future research.

6.1 Current contributions of SMI's literature to influencer marketing strategy

To evaluate the current contributions of SMI's literature to influencer marketing strategy, we begin by relating the six thematic axes with the conceptual model of five factors to a successful endorser and influencer marketing strategy proposed by Wiedmann and von Mettenheim (2021, 2018). These consist of:

(1) endorser distinctive factors, which describe factors that are inherent to the endorser;

(2) perceiver congruence factors, which involve the interplay of the endorser with a targeted audience;

(3) brand/product congruence factors, which describe the interplay of the endorser with the brand;

(4) communication factors, which are related to whether an endorser can communicate adequately, for example, the suitability of their voice; and

(5) management factors, which include "behind-the-scenes" administrative issues such as the financial constraints of the endorsement.

Regarding endorser distinctive factors, these relate strongly to studies on the characteristics of SMIs and marginally with studies on the place of SMIs on the social network. The latter theme was more prominent in the past, but significantly few recent articles still research SMIs using a social network theory approach. However, the former theme is attracting growing interest, and many studies mostly address the characteristics of traditional celebrity endorsers, such as attractiveness, trustworthiness, expertise, and likeability.

Perceiver congruence factors (i.e., the interplay of the endorser with a targeted audience) are more related to the studies on the relationship between SMIs and their followers, even though they explore several aspects of the influencer-follower relationship and not only their congruence. The literature on this theme has mainly shown that the influencer's similarity, proximity, and emotional bond with his followers are essential for communication effectiveness and the success of influencer marketing strategies (Sánchez-Fernández & Jiménez-Castillo, 2021). However, there is still room for investigation on perceived congruence factors since it is still unclear which ones have the most significant impact on the influencer-follower relationship. Moreover, the relationship between micro or local influencers with their followers is still underexplored.

Brand/product congruence factors (i.e., the interplay between the endorser and the brand) are moderately addressed by studies on the impact of the characteristics of SMIs on marketing campaigns – particularly those on the effects of SMIs' personal features on marketing variables. Not many studies so far have focused on brand-product congruence, but since this is the theme that has been attracting the most interest recently (see Figure 3), that situation is expected to change soon. This strategic factor still needs more research regarding, for instance, the SMI's market segment and socio-cultural background or partnerships more critically susceptible to reputation damage.

Communication factors can be strongly related to studies on the characteristics of SMIs and their impact on marketing – i.e., the antecedents and consequences of social influence

regarding communication attributes. These studies cover aspects of the influencer's content, such as tone of voice, linguistic elements, valence, elements of the message (image, video, text), and others. Although both themes have been proliferating in interest, the literature regarding attributes is still in its infancy. There are still underexplored topics, such as the impact of different social media and new content formats on the behavioural intentions of followers. Studies on the role of SMIs on information diffusion also address communication factors, although under a different perspective and more focused on the communicated messages than on the communicators.

Finally, management factors have barely been explored by SMI literature so far. These factors include, for instance, the contractual, administrative issues such as the financial constraints of the endorsement, the co-creation of content between the influencer and the brand, and how the selection of the SMIs aligns with the brand's strategic goals. Moreover, the position of SMIs is dynamic, and they might change their strategy over time, being perceived differently by their audience (Ouvrein et al., 2021). In this sense, as suggested by Lin et al. (2018), research on this theme might benefit from case studies and investigations about previous partnerships between influencers and brands at different stages of their strategic planning.

6.2 Knowledge gaps and opportunities for future research

Based on the previous discussion and other knowledge gaps identified in our systematic review, we present an agenda for future research on SMIs in Table 4. The purpose of this table is not to be exhaustive but rather to inspire new studies into the six thematic axes regarding antecedents and consequences of social influence.

Table 4. Agenda for future research.

Thematic axes	Knowledge gaps and opportunities for future research
The place of SMIs in the social network	• The role of different networks agents in facilitating or obstructing SMI's influence. • Critical SMIs, "trolls," and negative WOM in social networks. • The effects of overlapping information diffusion in social networks (multiple influencers endorsing a brand simultaneously, for instance). • The role of influencers for low-level engagement in social networks.
The celebrification of SMIs	• The life cycle of SMIs and their adaptation to varied social media platforms. • The influence of personality traits and content choices in the influencer career, such as the rise from nano to macroinfluencer.

	• The impact of SMI's transgressions, personal controversies, and misconduct on their career and partnerships with brands.
The characteristics of SMIs	• The impact of SMI's negative personal traits on brand partnerships and endorsements. • The interplay between SMI's emotional appeals, the type of post and the digital platform. • The inclusion of other influencers' characteristics such as ethnicity, language, and cultural values.
The role of SMIs on information diffusion	• The spread of social influence and information diffusion in different market/product segments. • Comparative studies of information diffusion in different network structures, tie strengths, hubs, and nodes. • The interplay between SMI's communication style and social network structure for information diffusion.
The relationship between SMIs and their followers	• The evolution of the relationship between SMIs and followers in different stages of the influencer's career (success and decline). • The relationship between followers and local influencers, i.e., influencers who focus on local markets or communities. • The impact of the congruence between SMIs and followers' linguistic style. • Followers' responses to SMI's emotions (beyond valence) and interplay with brand endorsement.
The impact of the characteristics of SMIs' on marketing	• The impact of different formats of sponsored content on digital platforms (such as reels and lives) on consumer responses. • The interplay between the SMI's scope (nanoinfluencer, microinfluencer, macroinfluencer, and megainfluencer) and their personal traits and communication attributes. • Deeper investigation of perceiver congruence factors (interplay of the influencer with the audience/product/brand) considering the SMI's market segment and socio-cultural background. • The strategic management of SMIs, such as administrative and financial factors and the forms of partnership contracts with influencers. • The cocreation of content between SMIs and brands. • The ethical issues in the use of SMIs in marketing campaigns, especially towards children and adolescents.

Some opportunities for future research are directly related to the previous discussion on the factors to a successful endorser and influencer marketing strategy (Wiedmann & von Mettenheim, 2020). For instance, most research on the characteristics of SMIs and their impact on marketing campaigns aims to explain the effectiveness of SMIs using variables such as perceived credibility, trustworthiness, expertise, attractiveness and homophily. However, these

elements are still strongly based on classical celebrity endorsement theories. Therefore, the challenge for the field is to develop theories the new type of influencer whose influence comes solely from their social media activities and develop other constructs that could have a strong impact on their effectiveness, such as the stage of the influencer life cycle and its scope (from nano influencer to macroinfluencer).

Perceiver congruence factors are also still being studied incipiently and should include aspects such as the influencers' life trajectory, language, and socio-cultural background. These factors can be particularly relevant under the current trend of brand activism movements, which forces managers to consider not only traditional engagement variables but also the influencer's life history and congruence with societal values. Neglecting these factors may damage the brand's reputation, boycotts, and negative repercussions both online and offline. Due to these risks, marketers also need to develop contingency plans to handle negative celebrity behaviours (Moraes et al., 2019; Ladhari et al., 2020). In the same way, researchers should also explore how local influencers develop their relationships with their respective communities and how that relationship evolves according to the influencer's dynamicity and maturity.

Moreover, social media influencer's persuasiveness lies in their unique ability to encompass two opposing qualities: being relatable like ordinary consumers while presenting themselves as taste leaders with celebrity-like status (Martensen et al., 2018). At the same time, SMI's literature has shown that influencers' self-disclosure can help them create a great affinity with their audience, enhancing their parasocial relationship (Yuksel & Labrecque, 2016). However, this may depend on the type of influencers and their audience and have significantly different results for nanoinfluencers and macroinfluencers. Similarly, future research can investigate the interplay between these different levels of influence and personal traits. For instance, should macroinfluencers also aim for similarity and intimacy when communicating with their followers? Is authenticity equally crucial through all stages of the influencer's career? Furthermore, what are the specific challenges for brands when partnering with nanoinfluencers or macroinfluencers?

Regarding studies on the SMI's place on social networks, questions remain when considering the interconnection of multiple agents and the network. There may be structural factors on social networks that facilitate or obstruct the SMI's influence. Also, since most studies on the theme focus on influencer popularity and brand endorsement, there remains the need to understand the diffusion of negative messages or low-level diffusion networks, which may also impact SMI's effectiveness.

As previously mentioned, management factors have also barely been explored by SMI literature so far. Hence, questions remain about the contractual or administrative challenges of dealing with influencers, the financial constraints of the endorsement, and how the selection of the SMIs aligns with the brand's strategic goals. Understanding this relationship with contracting brands can favour the long-term relationship with influencers, avoid reputational crises, and explore the mutual benefits of this partnership. In the same way, the co-creation of content between the influencer and the brand and other mutual decisions on how messages should be delivered to the target audience are still underexplored topics.

Future studies can also investigate communication variables such as the use of humour, subtle emotions, intimacy, or other elements of the tone of voice that can impact the consumers' perception of brands (Barcelos et al., 2018). This investigation can be assisted by machine learning algorithms and semantic analyses on the influencer's content to identify specific textual elements that impact followers' behaviour. Such studies may find if strategical communication choices are helpful when dealing with different partner brands or market segments.

Finally, little attention has been given to ethical issues of influencer marketing. For instance, there are questions about the impact of influencers' messages on children and adolescents, which may be more vulnerable to their persuasive appeals than other groups. Moreover, as many SMIs share an idealized version of themselves on social media – including images of perfect bodies, exciting lifestyles, and luxurious places – they increase their aspirational power and appeal to the followers' ideal (and often unattainable) self (Ki et al., 2020). Due to the risk of psychological stress and anxiety to the followers, future studies could investigate the ethical boundaries of persuasive messages for both influencers and brands and propose alternative strategies aligned with the public's values and needs.

7 CONCLUSIONS

We expect our systematic review to contribute to the SMI literature by providing a reliable summary of the current production in the field. In addition, we identify knowledge gaps regarding success factors to influencer marketing strategy and propose an agenda for future research. However, our review is not free of limitations. For practical reasons, our selection of articles was initially based on keywords and restricted to articles published in peer-reviewed academic journals indexed by the JCR ranking. Hence, even if that decision prioritized high-quality research, it may also have left other important sources out of the analysis. Furthermore,

since interest in the topic is still growing quickly, the review's results represent more a snapshot of its evolution than a definitive description of the field.

Nevertheless, the proposed framework of thematic axes may help marketers and researchers to obtain a more holistic view of social media influencers. Brand managers are still struggling with questions on the benefits of influencer marketing and how to manage it. In this sense, the results of our systematic review suggest that SMI's literature has already offered many insights for influencer marketing, but the subject is still in its infancy. The inclusion of SMIs in communication strategies has been very promising, but many tactics so far seem to be still very similar to those of traditional brand communication on social media. Considering the technological changes in social media platforms, the differences between influences and celebrity endorsers, and the growing importance of content marketing over online advertising, the field of influencer marketing has only begun to tap into its many possibilities. As a result, many questions remain on how to leverage it to offer value to brands and build relationships with consumers.

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ARTICLE 2

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A STAR WAS BORN: THE PROFESSIONAL TRAJECTORY OF BRAZILIAN DIGITAL INFLUENCERS

1. INTRODUCTION

The changing face of media consumption has created new challenges to the planification of brand communication strategies, and marketing managers are looking for new ways to interact with customers (Kumar, 2018). As companies move increasingly toward digital means of communication to promote their products and brands, understanding how to leverage social media and influencer marketing when defining marketing strategies becomes almost unavoidable (Sokolova & Kefi, 2019). However, on the process of social communication, many factors in the relationship between the source and the receiver can influence customer behavior, and, so far, little is known on how these factors affect customers' purchase decisions and word of mouth (Shi, Hu, Lai, & Chen, 2018). In particular, there is great interest to understand more about digital influencers and other classifications for which they are known, such as microcelebrities or non-tradition celebrities (Djafarova & Rushworth, 2017; Jerslev, 2016), YouTubers (Jerslev, 2016; Lovelock, 2017), bloggers (Agarwal, Liu, Tang, & Yu, 2008; Uzunoğlu & Misci Kip, 2014) or opinion leaders (Li & Du, 2011).

Research about this phenomenon is still scarce and has been focusing on models to identify digital influencers (Agarwal et al., 2008; Fang & Hu, 2016; Uzunoğlu & Misci Kip, 2014) and attempts to understand how they relate to customer digital engagement (Djafarova & Rushworth, 2017; Kupfer, Pähler vor der Holte, Kübler, & Hennig-Thurau, 2018; Shi et al., 2018). On social media, digital influencers have differing information-spreading power and perceived credibility than other sources (Kim & Song, 2018). At the same time, the "always-on" nature of social media encourages celebrities and those aspiring to be famous to share constant details of their day-to-day lives. This high exposure ensures influencers' proximity and identification with their audience. Moreover, as many traditional jobs are disappearing,

achieving some kind of celebrity status – on YouTube or other social media sites – has come to seem as reasonable a life goal as any other for many people (Hearn & Schoenhoff, 2016).

From a managerial perspective, the visible and easily comparable metrics of social media performance encourage the active inculcation of an audience (Marwick, 2015). The popularity and power of influence of digital influencers provide brands with a new platform for building relationships with fans by offering a glimpse into their lives and addressing them directly (Kupfer et al., 2018). This type of assessment seems more reliable and provides a more realistic view of what they intend to buy since people want to see people with whom they identify by fairly talking about a product.

Nevertheless, it is essential for brands to consider what type of celebrity would be the most effective in appealing to a particular target group (Djafarova & Rushworth, 2017). Businesses need to understand the 'influencer' phenomenon in order to make the right decisions and investments in influencer marketing (Sokolova & Kefi, 2019). Moreover, for a successful partnership between brands and influencers, their relationship needs to be co-created, consistent and authentic. To this end, it is essential for managers to understand how the influencer's trajectory begins and develops itself on social media.

Hence, the main objective of this study is to investigate the professional trajectory of digital influencers. Specifically, we aim to identify the turning points in the career of a digital influencer and understand how they develop it to a business model. In this sense, we also want to identify if there are common characteristics in the trajectory of successful influencers. To achieve these goals, we adopted an exploratory interpretative approach to analyze secondary data derived from the YouTube channels of five Brazilian digital influencers. We used the influencers' self-presentation in their posts over the years as a data basis for categorization, comparison and interpretation of findings.

The results of this study contribute to the literature on social media and influencer marketing, since studies on digital influencers are incipient, and mostly focus on identifying social media influencers and measuring their influence on consumer digital engagement. But it is not yet clear for literature how a social media user quite anonymous becomes a digital influencer (Carrilat & Illicic, 2019), including the milestones of this professional career. Moreover, extant research has been mute about the impact of this influence practice as a professional practice and the emergence as a new organizational field (Erz & Christensen, 2018). Thus, the study aims to fill this theoretical gap of understanding the aspects related to the development of a digital influencer, from the perspective of human brand theory.

This study also contributes to managerial practice by informing marketing managers on the milestones in the professional career of Brazilian digital influencers and the strategies they use to increase and/or maintain engagement with customers, hence providing insights into future investments with influencers to build enduring and effective relationships. There is little research on how advertisers can identify emerging celebrities before their appeal reaches star level and their market price becomes (too) high (Carrilat & Illicic, 2019). Whereas the opinion of digital influencers has become one of the main ways for brands find their consumers.

2 DIGITAL INFLUENCERS

An influencer is someone who has credibility in the group, persists in attempting to convince others, and introduces topics/ideas that others pick up on or support. An influencer can alter the opinions of their audience, resolve disagreements where no one else can, be recognized by others as someone who makes significant contributions, and can exert an influence even when not present (Rosenthal & Mckeown, 2017).

Specifically, YouTube celebrity denotes an individual whose celebrity status stems directly from their activities on the site. The term "YouTubers" refers to video bloggers (vloggers) who regularly post videos on their personal YouTube channels (Jerslev, 2016). Many of these videos are recorded by individuals in domestic settings, talking in confessional style into a static camera, with seemingly minimal editing (Lovelock, 2017). The success of the "micro-celebrities" (as named by Jerslev, 2016) typically involves three elements: constant activity, immediacy, and a perception of authenticity based on the loss of their privacy (Lovelock, 2017).

The lifestyle of a micro-celebrity is marked by plenty of exposure: continuous uploads and an uninterrupted online presence. Performances of a private, authentic self are highly valued on social media and contribute to celebrity status through displays of connectedness, accessibility, and intimacy (Jerslev, 2016). These performances are vital to the function of YouTubers, enabling their lifespans as celebrities to be extended temporally and across texts and platforms, under the aegis of a seemingly ever-increasing intimacy between influencer and viewer (Lovelock, 2017). The relationship between influencers and their audience is not unidirectional, as users are able to add comments and discuss the contents of the videos (Sokolova & Kefi, 2019).

The influencers can also help users with customer support and troubleshooting, and their solutions are often seen as trustworthy because of their perception as authorities and the strong

social connections established (Agarwal et al., 2008; Djafarova & Rushworth, 2017). Uzunoğlu and Misci Kip (2014) highlight the role of expert exerted by influencers, which are those who mainly cover specific subjects and provide advice based on their professional experience, wisdom, and observations. To Zhao et al. (2018), they are interested in guiding the decision-making process of their followers, thus playing a dominant role in the formation of collective opinions. In this way, influencers are also able to improve the notoriety of products through persuasion techniques and positive associations (Djafarova & Rushworth, 2017).

2.1 Digital Influencers as Human Brands

According to Hearn and Schoenhoff (2016), the digital influencer works to generate a form of celebrity capital by cultivating as much attention as possible and crafting an authentic personal brand via social networks. The influencer is "produced", not born; he/she is identified and constituted by a variety of social media intelligence analytics and social scoring companies (Hearn & Schoenhoff, 2016). A digital influencer, in other words, is something one does, rather than something one is (Marwick, 2015). It typically involves self-conscious, carefully constructed personas, which may be primarily textual, visual, or in video. Influencers see their audience as fans rather than friends or family, and share information strategically with this audience to boost their popularity (Marwick, 2015).

Furthermore, an influencer is also a content producer, identified and arguably constituted by the variety of measurement mechanisms that serve to both bestow and extract value from a wide array of "selves". Then, the influencer is an economic condition rather than a singular "stellar" individual (Hearn & Schoenhoff, 2016). In this sense, digital influencers may be considered as human brands.

"Human brands", to Thomson (2006), refer to any well-known persona who is the subject of marketing communications efforts. Digital influencers can also be considered brands because they can be professionally managed and because they have additional associations and features of a brand. Erz and Christensen (2018) argue that the digital influencer can be understood as a human brand from a brand-as-process perspective, as they actively negotiate, re-interpret and adapt their identity within a multiple-stakeholder system. Their performances off- and on-line, public or private, are marketing and branding exercises. Their everyday life choices and values are intrinsically private, but performed in public (Marwick, 2015; Centeno & Wang, 2017).

Human brand identities form through an orchestrated co-creation that emerge as stories and conversations about the celebrity collide (Centeno & Wang, 2017). Stories and active engagement and participation by stakeholders are apparent in human brand identity co-creation. Through social media as an avenue of co-creation, human brand identities develop via a function of media experiences (TV shows, films, commercials), second-hand information (gossips, hand-me-down historical accounts), and even personal encounters (Centeno & Wang, 2017). Consequently, brand identities are reflexive and contextual; however, they are pliable only to the extent that they fit the individual's range of constructed human identities (Centeno & Wang, 2017; Hearn & Schoenhoff, 2016; Marwick, 2015).

Human brands make consumers feel appreciated, empowered, and understood to succeed in creating feelings of autonomy (Loroz & Braig, 2015; Thomson, 2006). When consumers view the human brand as accessible, there is an opportunity for feelings of autonomy and relatedness to be promoted. Then, repeated interactions between consumers and the human brand reduce uncertainty and provide the basis for an attachment to grow (Thomson, 2006). These interactions are powerful because human brands convey a level of authenticity and potent cultural meaning that non-human brands cannot match. This grants the resonance, differentiation and personal connections required for brands to thrive in today's commoditized world.

Thomson (2006) cites the fundamental human need for autonomy, relatedness, and competence as an explanation for the influencer's power in a human group. In this sense, human brands provide relational inputs to satisfy these needs (Thomson, 2006). According to Loroz and Braig (2015), when a human brand enhances a person's feelings of autonomy and relatedness and does not suppress feelings of competence, the person is likely to become more strongly attached to it. And strong attachments are predictive of satisfied, trusting, and committed relationships, (Thomson, 2006). Loroz & Braig (2015) propose that other dimensions such as brand personality appeal, favourability, originality, and clarity should also be considered as important to attachment strength for human brands.

The activating power of human brands that translates words and images into behaviors or at least behavioral intentions are deeply ingrained into the relational capacity of the influencer (Centeno & Wang, 2017). Human brands' performance- and popularity-based attributes correlate positively with their brand images, which, in turn, correlates positively with their market value. Then, a firm employing a human brand to whom consumers are strongly attached as an endorser may anticipate greater returns and insulation from transgressions (Thomson, 2006).

In the other hand, Fournier and Eckhardt (2018) argue that the human brands' very humanness – the physical and social realities, mental biases and limitations of being human – introduces risk while at the same time generating the ability for enhanced returns. Four human tenets can create imbalance or inconsistency across the human brand's: mortality, hubris, unpredictability and social embeddedness. The human being inadvertently leaks meanings every day and these meanings do not always align with the brand's positioning (Fournier & Eckhardt, 2018). Indeed, this very quality lends authenticity in a powerful way that non-human brands can never match. A large part of the cultural meaning of a human brand stems from what others reveal about the brand to the public. This lends an intimacy to the consumer-brand connection, as consumers feel they know the "real" person behind the brand (Fournier & Eckhardt, 2018; Thomson, 2006).

3 METHODOLOGY

The study adopted an interpretative, exploratory approach with the main premise of observing and analyzing digital influencers' presentations of themselves on YouTube. From the collection and analysis of the contents and milestones of influencers' career over time, we aimed to identify the different stages of their professional trajectory. We collected data from the channels of real digital influencers with the objective of identifying patterns that would allow to describe the trajectory stages of these individuals. Our perspective was that the accumulation of evidence pointing to empirical regularities would provide a much broader and more generalized understanding of the world (Helfat, 2007).

3.1 Selection of Digital Influencer Profiles

When selecting profiles for the study, we looked for active digital influencers born in the digital environment, established and recognized publicly as important in their fields. For this reason, we selected profiles featured in different rankings of influencers from Brazilian specialized websites such as Social Blade, ID Creators, Prêmio Influenciadores and QualiBest Institute[2].

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[2] Social Blade: https://socialblade.com/youtube/top/country/br/mostsubscribed; ID creators: http://criadoresid.com/; Prêmio Influenciadores: http://premioinfluenciadores.com.br/; QualiBest Institute: https://www.institutoqualibest.com/comportamento/os-maiores-influenciadores-digitais/.

Brazil has a digital market of 121.1 million people accessing in multiplatform. Furthermore, social media is the category with the highest time spent online per user among Brazilians (Comscore, 2019). A MindMiners Brazilian survey found that 41% of people sampled have already purchased a product or service recommended by digital influencers and 46% of people say they rely on influencers' opinion (Mathias, 2019), proving the power of influencing marketing in the country.

We focused on the influencer's YouTube channels. YouTube has great relevance today to digital influencers. The videos make the scenes real to the viewer and show how things really are by the eyes of someone like him. Also, 4 in 10 millennial subscribers say their favorite YouTube influencer understands them better than their friends; and 6 in 10 YouTube subscribers would follow advice on what to buy from their favorite influencer (The YouTube Generation Study, U.S., *in* Think with Google, 2018). Moreover, many digital influencers today start their careers on YouTube. As amateurs, they started sharing their personal opinions on the platform, then gained credibility enough to reach vast online communities. Eventually, many of them use YouTube for product placement (Schwemmer & Ziewiecki, 2018).

For the choice of influencers, we were interested in the prominent channels in the influencer's rankings, leaders in their particular categories. Also, influencers in the consolidation stage of the celebrity capital life cycle, that is, at the pinnacle of fame and is widely recognized due to widespread, recurrent media visibility (Carrilat & Illicic, 2019). And YouTube influencers that did not depict discourses of marginalized consumers as, but that could be regarded as mainstream (Erz & Christensen, 2018). To increase the validity of the study, we chose to address different content categories. Then, the selected digital influencers are each one influential in a different market segment such as beauty, food and travel, parenting, science and humor.

At first 10 digital influencers who met these criteria were selected. Then, the process of data collection and analysis began. In the iterative approach, following Audrezet, De Kerviler, and Moulard (2018), the analysis switched between examining each digital influencer video in depth versus examining a cross-section of several posts of videos from the same influencer together with comparing video posts from each selected influencer at once. After the analysis of 5 top-ranked influencers, we found that the information provided by new influencers would add little to the material already obtained, no longer sparks new theoretical insights, nor reveals new properties of your core theoretical categories. Thus, we considered that the categories were saturated (Charmaz, 2006).

We list the five top-ranked influencers analyzed and their YouTube channels on Table 5.

Table 5. Data from the selected digital influencers profiles

Digital Influencer	Channel Name	Category	Active on YouTube since	Total subscribers (thousands)*	Total views (millions)*	Total videos*
Bianca Andrade	Boca Rosa	Fashion and beauty	2011	5,243	370	594
Danielle Noce	Danielle Noce	Food & Travel	2011	2,799	344	1023
Felipe Castanhari	Canal Nostagia	Science	2011	12,352	1,045	321
Flavia Calina	Flavia Calina	Parenting	2009	6,787	2,220	1566
Whindersson Nunes	Whindersson Nunes	Humor	2013	36,589	3,019	364

* Data obtained on the August, 2019 on YouTube platform.

3.2 Data Collection and Analysis

Figure 6 synthesizes the methodological approach for data collection and analysis:
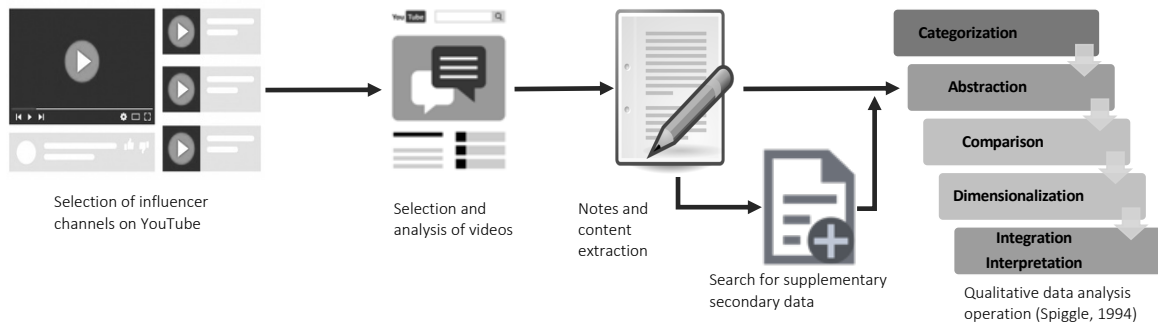
Figure 6. Procedure of data collection from YouTube channels and analysis.

1) We selected the YouTube channels of digital influencers following the criteria explained in section 3.1. They are active digital influencers born in the digital environment and recognized publicly as important in their fields.

2) For each influencer channel, we selected all video titles published since the beginning of his/her career on YouTube. We watched all the videos representative of distinct periods in the influencer's life, the channel's history and development. In this sense, the videos selected show information such as: personal news, significant changes in the channel (content, frequency) or in their careers, new product launches, celebrations of achievements, frustrations and problems faced by the influencer, retrospectives of the year, and finally, videos in which they narrate their own trajectory themselves. A very common example of the selected content presenting the influencer's trajectory is "draw my life". Draw my life is a type of video in which

the influencer narrates their life history, usually is a fast-motion video and the own author drawing illustrations on a whiteboard of key elements in their life.

3) The average number of videos selected from the 5 influencers was 51 videos for each one and the average total watched was 773 minutes. For all selected videos, we took notes and extracted the descriptions of the videos and parts of the transcriptions of speech. Then, these data and the video posts consisted the primary data sources for the analysis. Following the recommendations of Erz and Christensen (2018), the researchers did not actively participate as commenters (co-creators) but remained at a distance to the Youtubers and its channels. The collection was made independently at one channel at a time. At the end of the data collection of five channels from different content categories, we noticed the repetition of several findings, which indicated the saturation of necessary cases for the analysis.

4) In order to be sure of the correct dates of events and other information, we searched for supplementary data in the influencer's other media, such as blogs, Instagram, Facebook, and Twitter. In addition, we looked for other secondary data, such as participations in events, TV shows, magazine reports and newspapers.

5) During data analysis, we employed the qualitative data manipulation operation recommended by Spiggle (1994) to extract meaning, elaborate conclusions and create conceptual schemes. This operation consists of an iterative process including the steps of categorization, abstraction, comparison, dimensionalization, and integration/interpretation.

Categorization/coding was proceeded inductively, i.e., from emergent categories of data. The essence of categorization is identifying and naming segments of chunk/unit of data as belonging to, representing, or being an example of some more general phenomenon (Spiggle, 1994; Charmaz, 2006). Abstraction encompasses several more concrete instances found in the data that share certain common features. The theoretical significance of a construct springs from its connection to a broader meaning of an individual's experiences (Spiggle, 1994). We created preliminary codes for the data of each channel, and the iterative process allowed us to generate new codes emerging, thus renewing the ones already created.

The following steps, the comparison between channels, explores differences and similarities across incidents within the data collected (Spiggle, 1994). We employed a constant comparative method of analysis, where the initial findings of one channel were re-interpreted in the light of the findings of the subsequent channels. This made it possible to better understand the attributes or characteristics along influencers dimensions and integrate the relationships between conceptual elements. Dimensionalization involves identifying properties, attributes or characteristics in the created categories. Finally, the integration step requires the mapping of

relationships between conceptual elements and the interpretation represents a synthetic and holistic grasp of meaning, as in deciphering a code (Spiggle, 1994). We identified patterns in the created categories and mapped the relationships among the digital influencers.

4 FINDINGS

Some common stages in the trajectory of the five successful digital influencers emerged from data analysis. Each phase change in their careers is marked by turning points defined as major transitions that involve a variety of small, but significant changes in their actions and interactions. The influencers start adopting a new social role that is connected to newly defined relations to a set of stakeholders and a new self-conception (Erz & Christensen, 2018). Figure 7 summarizes the key moments of the professional careers of the digital influencer according to the findings of our study.
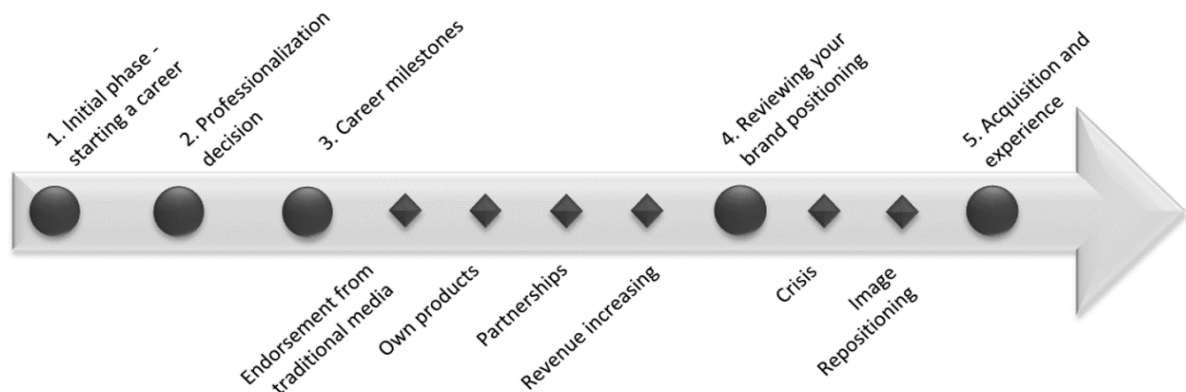
Figure 7. The five stages in the career of a digital influencer.

4.1 First Stage: Starting a Career

The beginning of a digital content creator's career is uncertain. The decision to open a YouTube channel to share to the public some content/knowledge/experience about a subject is unpretentious at first and begins as a secondary priority. The new YouTubers are still unsure of their success and financial return, as in any new venture. In a similar way as the bloggers in the study of Martensen et al. (2018), the YouTubers report boredom and desire for fun and self-expression as their main driving factors to start posting. Some of them seek inspiration from already well-established YouTubers to create their content, and produce videos such as makeup tutorials, or translate contents from other countries about gastronomy and geek life.

"My channel started as a joke and it worked. I watched some American doing makeup and was blown away. I asked my mother and sister if they wanted me to do a video for them teaching what I have learned, as they did not speak English. I was already married and had my permanent job (preschool teacher)." (Flavia Calina)

The first videos are recorded and uploaded by amateurs, and, from their perspective, without any commercial objectives. These new YouTubers set up with ordinary cameras and ignore most usual features of professional film making (Schwemmer & Ziewiecki, 2018).

"I walked 3 km to a friend's house that had a good camera, came back, filmed, edited and walked another 2 km to post the video in a lan house, since I had no internet connection at home." (Whindersson Nunes)

The content is presented in a personal diary-style, using unprofessional pictures and an informal tone of voice, thus creating an intimate and personal storyline that allow followers to feel closer to the YouTubers' lives. At this point, some posts are characterized by informative accounts of brands and interesting events, and, similarly to the findings of Erz & Christensen (2018), they more often reproduce and adapt existing contents than present original ones.

4.2 Second Stage: Professionalization Decision

Any person can create a channel on YouTube and aim for monetary gains from the number of visualizations. However, YouTube has strict content guidelines and videos need to be compliant with them in order to monetize (YouTube Creators, 2018). If these guidelines are followed, the higher the frequency of posting, the more the users spend time watching the videos and engaging with them, the greater the chance that YouTube will insert ads in the channel and offer monetary rewards to the YouTuber.

Thus, from the moment the channel is able to attract thousands of followers, the creator will begin to play the role of influencer, and such activity increasingly dominates his/her life. As the YouTubers gain popularity and their videos become popular, they transform an initially fun-motivated hobby into a serious activity. Hence, they are driven to improve the quality of content in their channels, for instance, by buying digital cameras and filming equipment, minding the lighting, looking for specific locations for filming, and learning how to properly edit videos. At the same time, their videos become more personal, and they disclose more information about themselves, their family members and friends. In this way, the new influencers can be seen as human brands (Erz & Christensen, 2018).

"For three years I continued working in kindergarten and made the videos when I could, but with the increasing number of hits I realized that I could create my own online classroom and reach many more "students". I made the decision to make YouTube my classroom full time." (Flavia Calina)

At this stage, the digital influencers begin to disconnect from their traditional jobs to focus exclusively on creating content for their channel/blog and other social media. They also seek to specialize at their new profession – for example, the influencer Bianca Andrade decided to take a makeup course and the influencer Dani Noce moved to Paris to take classes in gastronomy.

4.3 Third Stage: Career Milestones

After the professionalization decision, begins a stage of great personal and professional transformations for the influencers. In their study about bloggers, Erz and Christensen (2018) named this phase as "collective identity," which is manifested through high interactions with other bloggers online and offline, and is, thus, decisive for negotiation and development as an organizational field.

Digital influencers aim to professionalize their content without losing the essence and authenticity of themselves. It is a challenge to be present in digital media, innovate and maintain the authenticity image by which they became famous. On the one hand, the vertical distance between the influencers and their followers increases, marking their transformation towards a new possible self. The tone of their posts changes to a more distanced one: vacations become travels, events turn into meetings, other bloggers become colleagues, and posts about brands become sponsorships (Erz & Christensen, 2018). On the other hand, the influencers disclose more personal information in their posts, which keeps the narrative going. Despite their growing popularity, they are still seen as authentic and trustworthy within their communities. As they actively engage in discussions held by their fellowship and share major parts of their private lives, the influencers give the impression of being approachable persons (Schwemmer & Ziewiecki, 2018).

During this phase of collective image development, we can highlight some important milestones in the trajectory of the digital influencers: a) the endorsement from traditional media, b) the development of new products, c) the establishment of partnerships, and d) an increase of revenues.

Endorsement from traditional media: Despite the rise of consumer engagement in digital media, influencers still welcome the attention of traditional mass media. As they become increasingly popular, they are invited to participate in TV shows, magazine and newspaper reports, radio programs, which greatly increases their reach by allowing them to catch up with a different audience. For this reason, the influencers may work to develop new skills such as acting and interpersonal communication. The influencers achieve a new level of transmedia storytelling, an important strategy for their career advancement and to raise the interest of business partners.

> "The television's power puts me in touch with an audience that goes beyond my followers. It's a challenge. As much as the internet is universal, TV speaks for all ages at the same time. And being able to spend a little bit of knowledge about what I love, for millions of people, it's magic. The responsibility is even greater." (Bianca Andrade)

> "The happiest moment that the channel provided to me was to be invited by Deborah Secco... Being among guests like Fatima Bernardes and Tiago Leifert was an honor and at the same time a recognition of my work." (Flavia Calina)

Product development: Product development is an important issue for the influencers' career, as it provides new sources of income and allows them to develop a diversified business model. Based on the success of their main channel, the influencers may expand their content to new platforms and create by-products to increase monetization. These products are directly linked to their personality, image, and target market. For example, the influencer Bianca Andrade (fashion and beauty) launched her own collection of nail polishing, makeup, clothing, handbags, jewelry, and online makeup courses. The influencer Danielle Noce (gastronomy) launched her own cookbooks, kitchenware, online bakery courses. Whindersson Nunes (humor) focused on stand-up comedy tours, in addition to selling the content of his shows on DVDs and streaming.

Partnerships: At this stage in their career, the influencers further broaden their presence on digital media and begin to produce content in partnership with other YouTubers/influencers. For instance, they are invited to participate in competitions, activities, tags, and invite partners to their programs. By doing a "collab" (i.e., participating in videos of another YouTuber), they also expand their own reach to the audience of other influencers. Other partnerships include joining a media network to receive mentoring support and commercial contacts, or partnering with a talent agency to benefit of professional career management and new business

opportunities. The contents of the influencers' main channel, however, remain at their own care to preserve their unique style.

An important partner for all the influencers analyzed is YouTube itself, which organizes meetings where creators can learn about video production and connect to one another. One of these meetings, the Creator Camp, is a 5-day crash course where YouTubers get to know the ins-and-outs of building a "rockstar" channel with video assignments and network with other creators (YouTube, 2019).

Increased revenue: Their popularity brings opportunities for other income sources and exposure. The digital influencers in this study have several different income sources beyond the monetization of YouTube videos (AdSense): sponsored contents, product placement, advertising campaigns, licensed products aligned to their business segment, magazine articles, presentations in TV shows or on the radio, participation in events, online courses, consulting and coach programs. Some influencers even benefit of guest roles in movies, theatre productions, soap operas, and music albums.

> "We exist outside of YouTube. (...) We always talk to you about business and you need to, regardless of where you work in life, you need to diversify the portfolio; It is very, very important that you do not leave your eggs in one place. Then people ask: Do you only work with Youtube? No, we increasingly want to work with more things. There are three more businesses we are looking for." (Danielle Noce)

While enjoying their new earned success, influencers also experience the bad side of fame and exposure. Dealing with haters, criticisms, and controversies becomes a significant part of their lives. For example, as the influencers' personal image is intrinsic to their brand image, they often undergo changes such as weight loss, plastic surgery, dental whitening, etc. These changes can raise controversies on excessive commercialism and loss of identity. In our analysis, we noticed that the way each influencer deals with these criticisms depends mostly on his/her personal style. Usually, they opt for a strategy of transparency to maintain the intimacy with their audience, i.e., they may accept even greater exposure to mitigate the criticism, such as explaining their point of view to the public and trying to get even closer to their followers.

> "I knew it was normal to change, but I didn't assume that change. And why? Because these changes of mine were exposed, my girl-to-adult phase was fully filmed on YouTube. But the downside is that I've always had a before and after, a comparative. And many people have always said "I preferred Bia from before" ... but guys, to me this is very obvious, life is made of changes. (...) It's not because I fixed my smile, which was my dream, that I stopped being Bianca. (...) For a long time I did not accept myself

and I was measuring everything I said, everything I did, afraid of people who said "I preferred Bia before, it killed me ... I was no longer being me to be what people wanted me to be. (...) The changes are amazing, what you can't let is change the best in you." (Bianca Andrade)

4.4 Forth Stage: Positioning Review

The influencers' investment into their channels and their partnerships professionalized their identity projects and provided them with new opportunities. As such, a common strategy among top influencers is the creation of a parallel channel with more flexible content (e.g., vlog style) to remain up to date, increase exposure, and increase closeness to their audience. This new, second channel can also a way for creators to escape the rigidity and structure of their main channel.

1.   The new opportunities lead the digital influencers to question themselves and review their positioning. We identified two common situations associated with the trajectory of the evaluated profiles: a) a period of crisis, and/or b) the decision to reposition their image and innovate the channel content.

Crisis: There are times in the influencer's career when he/she must face a crisis and rethink their brand strategy as well as his/her career. For example, the influencer may experience fatigue, stress, and more serious psychological problems like anxiety and depression. The crisis moment can happen at any given moment in one's trajectory, even at the beginning. For instance, the influencer Flavia Calina launched her YouTube channel during a time of great sadness and disappointment following failed attempts of pregnancy.

> "In the midst of my pain, I discovered the gratitude diary and began to notice the small things around me and realize how good my life was - I just didn't have my biggest dream yet. But I had to learn to be happy with my situation, whether it was ideal or not. So the difficulty of getting pregnant only showed me how strong I was and how much I could achieve my life goals, which I didn't even pay attention to." (Flavia Calina)

Bianca Andrade, in the other hand, revealed an experience of psychological crisis when her career was already advanced. In the same way, Whindersson Nunes, decided to interrupt his work temporarily in 2019 to deal with depression.

> "In early 2018 I passed one of the most difficult phases of my life. Polemics, judgments, things going wrong and finally an absurd identity crisis that made me go back to therapy. I felt lost but desperate to get back on track." (Bianca Andrade)

"But in spite of all the good that has been happening to me, with all that I have achieved, I feel sad for some years. I feel anguish every day, every day, some laughs, some jokes and then there I am again with this bad feeling. I feel bad for not being able to help me, even though I sometimes help someone, I seek help from friends, family, but I feel so sad, so sad." (Whindersson Nunes)

Crises may also advent from the channel's specific context and the difficulty to create quality content and achieve a financial return from it. For example, Canal Nostalgia, a YouTube channel focused on longer videos about science topics, faces itself sometimes with challenges such as controversial themes requiring greater intellectual and technical effort.

"I'm sacrificing visualization, subscribers, engagement and money for quality (...) it's very hard to do what I'm doing here on YouTube, and why am I saying that? With each passing month, the number of bad things that are pumping on YouTube almost triples. (...) My goal is to keep doing the hard in a place where the easy prevails." (Felipe Castanhari)

Image repositioning: The channel of each digital influencer experiences several changes over time. The strategies adopted during these changes include the creation of secondary channels or new series, an increase or decrease in the periodicity of the posts, the insertion of new contents, and name alterations. The influencers feel a constant pressure on their careers to reinvent themselves, which is intensified by the high exposure of their private/public lives. Moreover, as human brands, when their personal opinions and perceptions change, their careers and media channels also reflect these changes. As reported by the influencers themselves in their videos, they are human beings who undergo changes as any other; hence, it is impossible for their channels to remain the same from the beginning until the end of their careers.

"We didn't want to be marked as a how-to channel because it leads to stagnation. Not only do we offer cooking tips, but also a lifestyle, which I would call a somewhat unpretentious chic, a way to lightly demystify some things in life without judging who doesn't know or who doesn't have. In the end, we are our product. And Dani is our brand." (Paulo Cuenca)

"We are always reinventing ourselves. We can not stop. We always think of new and different things to bring to the channel." (Danielle Noce)

"One of the most important projects of my content creator career, I'm talking about Nostalgia Science. It's a 100% original project, which means we have every step of the video, inserts, sound effects, soundtrack, motion, all original!" (Felipe Castanhari)

The image repositioning can happen after a crisis or gradually over time. In the channels of the influencers of the study, we noticed small and constant changes, followed by major transformations normally related to search of personal realization and dreams.

4.5 Fifth Stage: Maturity and Experience

After experiencing crises, the burden of fame and high exposure, the criticism of followers or from the media, and also learning how to deal with their own personal demands and expectations, the influencers reach a moment of professional maturity. In their study of bloggers, Erz and Christensen (2018) called this stage as the brand identity phase, i.e., the explicit understanding of the co-creational and reciprocal process of identity creation in a multi-stakeholder system. The influencers embark on a process of reconnection with their selves, while actively and continuously negotiating, adapting and reinterpreting internally and externally created meanings. As human brands, they start to choose more strategically with whom to collaborate, whether in the short- or long-term. It is a time of greater personal and professional balance, and even though their professional career is intertwined with their personal lives, they already know how to discern and partially separate the professional side from the personal one. Also, they are aware of the bonuses and burdens of their actions, what they speak, write, and the life they have chosen for themselves.

> "At first it bothered me a lot. If I had 20,000 good comments and one bad one, I read the bad and I was wondering all the time what I did for this person not to like. Today'm not even there." (Whindersson Nunes)

This maturity stage may still be marked by new crises, major changes, and repositioning. Despite their maturity and experience, the digital influencers are aware of the little chance of stability in their careers.

5 DISCUSSIONS

Through the analysis of the profiles of digital influencers and the content collected from their channels on YouTube, we could distinguish a common pattern of events in their trajectory to success. The results of our findings reveal five important moments in the influencers' career: 1) the initial stage, when they start a career as content creator; 2) the professionalization decision; 3) the image development, which includes career milestones such as the endorsement

from traditional media, product development, partnerships and increased revenue; 4) the positioning review, comprising a crisis period and the subsequent image repositioning; 5) and finally, maturity and experience.

The beginning of a YouTuber's activity is uncertain, they did not imagine that they could achieve the "digital influencer" status. All had an initial motivation, a unique style to create content and interact with the public. The initial phase is marked by the presentation and constant transformation of the influencer's identity and with attempts and learning concerning content format, sound quality, and video image. A feature of this profession is the speed of feedback from stakeholders, which stimulates the "always-on" status the influencers.

As the channel grows in engagement and monetization metrics, business partnerships emerge, and the influencer decides to make this activity their profession. With professionalism, are noticeable improvements in the content created, launch new projects and content series, this accompanied by the technical expertise of youtuber and its image.

Professionalization is marked by some milestones, influencers gain greater reach by participating in traditional media, they receive several invitations to TV shows, magazine reports. A moment of great visibility and identity consolidation supported by high consumer engagement. At this stage, they launch products with its own brand, structuring partnerships with other influential colleagues (*collab*), commercial partnerships, such as events, advertising, commercial content, act endorsing brands. An intense phase marked by high exposure by constant need to be unique and preserve their identity by which became famous.

There comes a time when they need to review their brand position, differentiate themselves from "competitors" (other influencers), this phase can be preceded or happen during personal and professional crises. Overwork, the pressure of criticism and fame, can shake their images and create some dissonance between the influencer's identity and image. As an example, there are periods of withdrawal from them in digital media, either by vacation or psychological treatment. This moment is marked by the comprehension for them "know who they really are". After this awareness, they seek to reinvent themselves and explain it to the audience.

Finally, influencers achieve some balance in their profession and in the level of self-disclosure they are willing to reveal. They have earned fame, money, already realized part of their dreams and are aware of the ephemerality and risks of their profession. However, it is noted that the influencers maintain a posture of constant learning, innovation, and interaction.

It is important to note that these phases in the professional career of a digital influencer cannot be considered linear, do not have the right sequence and time to happen, can simultaneously reveal themselves, and can be repeated.

The information exposed by influencers on their communication and interaction platforms revealed much of their professional career and milestones in their careers. The higher the influencer's self-disclosure level the greater the accuracy of the data collected. To that end, the more exposure (self-disclosure) more likely is the influencer of criticism and controversy. Also, a key point is that the digital influencer's market segment influences self-disclosure, in this case, Science and Humor market segments have less influencer's self-disclosure content.

Moreover, the influencer's level of professionalism impacts the relationship with fans and other stakeholders. And mainly benefits assist in managing the privacy of the influencer. This is noticeable in phase acquisition and experience. Career maturity emphasizes the influencer's role in a flexible, profitable, authentic, and highly engaged business model with his or her consumer audience. Perhaps traditional brand managers can learn from this form of human brand management.

6 THEORETICAL AND MANAGERIAL IMPLICATIONS

The study analyzed professional trajectory of the Brazilian digital influencers. Specifically, it was identified some turning points in the career of a digital influencer, from the moment they were anonymous on the internet to the current period, when they are at the pinnacle of their careers. An interpretative perspective was adopted, with qualitative analysis of the videos, descriptions, social media posts and extra materials from five Brazilian digital influencers.

The study identified common milestones in the professional career of influencers, i.e., there are similarities in the profession, despite differences in gender, age, market category, start date and personality of each one. However, the career paths analyzed have no direct influence on the number of subscribers to channels. Even in the face of controversy, crisis or image repositioning, the growth curve in subscribers on the YouTube channel remains constant.

Analysis has shown that as human brands, influencers satisfy human needs: autonomy, relatedness, and competence (Thomson, 2006), on their daily interaction. The competence or the expertise level may depend upon the extent to which the focal human brand fosters competence. For example, Science as a YouTube channel content category demands more

expertise than the humor category. Also, endorsing Loroz and Braig (2015) is proved that they create a strong attachment in their niche communities.

The study gives insights into new characteristics so far unexplored in previous studies, the level of personal maturity and professionalism of digital influencers. The influencer profiles analyzed have different levels of education, maturity, and professionalism. And despite all digital influencers face similar professional situations, the level of professionalism of each affects the future professional's directions. So that a higher level of professionalism gives greater support to react in times of difficulty, generating new business opportunities and influence in career longevity.

The human being behind the brand lends authenticity in a powerful way, and the cultural meaning of a human brand is co-created from what stakeholders reveal about the brand to the public (Centeno & Wang, 2017). To Fournier and Eckhardt (2018), this lends an intimacy to the consumer-brand connection and brand managers do not have control over this.

Considering the challenger consumer landscape, companies must operate in a market in which populations are becoming more demographically diverse, customer needs and expectations are becoming more and more, and the requirements of ethnic consumer groups are becoming more distinct (Kumar, 2018). Thus, digital influencers in partnerships with brands emerge as a great alternative to communicate in a personalized way with niches, in the right media and the right time. Digital influencers are human brands in constant transformation, continually creating and interacting with their audience, is a form of branding little explored until then.

The results contribute to the decision-making of marketing managers and advertising professionals in their communication strategies to have better understand the personal characteristics and performance of digital influencers as information disseminators and their power of influence with their audiences. The results are particularly important for companies that rely on the community gathered around these profiles of influencers, and to effectively incorporate social media as an integral part of integrated marketing communications. It is important to be well acquainted with the influencer's audience, as is their style, language and content format, to establish longer and authentic links between the digital influencer and the brand.

7 LIMITATIONS AND FUTURE STUDIES

Research has a number of limitations. The study analyzed five profiles of Brazilian influencers, the findings cannot be generalized to foreign influencers, nor to all market segments. Also, although the study checks various digital influencers, the focus was on YouTube. Future studies can make a of self-disclosure comparison of influencers on different platforms such as Instagram and Twitter and measure the consumer engagement between them.

Commercial partnerships, paid or not, were not analyzed along the influencers' trajectory. Early career advertising partnerships continue throughout the growth of the influencer? How does the influencer audience rate sponsored content? Understand how brands relate to these influencers, frequency, continuity and advertising format is a way to verify the effectiveness of advertising investment, future studies may address this issue.

This study selected influencers at the peak of their career, since they were selected from the rankings of major influencers in Brazil, future studies can identify and follow the stages of the career path of early influencers, such as micro influencers; Also examples of declining digital influencers to understand what are the professional strategies and challenges in these most critical phases.

The research could not relate the milestones and professional decisions of the influencers analyzed with the subscriber number in the channel, the results showed that the influencer's growth curve remained in constant growth, despite the differences in the number of subscribers. Future research can investigate what affects the subscriber's growth curve these influencers. Is there a period of higher growth? When is the stationary phase of the curve?

Each influencer has a unique style to communicate and relate to your niche, there are personal aspects that may promote or mitigate public engagement? What aspects? Can a more professional posture with lower self-disclosure be more favorable in the long run than a more amateur posture? Future studies may investigate these personal aspects of influencers' human brands.

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ARTICLE 3

- Summary version of the study presented at DM&C 2020 - 1st Digital Marketing & eCommerce Conference, June 25th-26th, Barcelona – Spain.

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TO ENGAGE OR NOT ENGAGE? THE FEATURES OF VIDEO CONTENT ON YOUTUBE AFFECTING DIGITAL CONSUMER ENGAGEMENT

1 INTRODUCTION

Social media have become an essential part of digital marketing strategies (Arora et al., 2019). Among social media platforms, YouTube has emerged as a leader in video sharing (Aggrawal et al., 2018). YouTube has over 2 billion monthly logged-in users over 100 countries around the world, who watch more than one billion hours of video every day, and more than 500 hours of content are uploaded to YouTube every minute (YouTube, 2020). Advertisers are predicted to invest 11.76 billion U.S. dollars in the platform in 2020 (Statista, 2019).

Digital marketers are interested in knowing what kinds of video content drive different forms of online customer engagement. The literature has focused on the contents of posts on Facebook pages (e.g., Sabate et al., 2014; Banerjee & Chua, 2019; Hughes, Swaminathan, & Brooks, 2019) and Twitter pages (Francalanci & Hussain, 2017). However, engagement in video-sharing platforms may have characteristics different from engagement in other social media. Moreover, while YouTube shares some engagement measures with other platforms such as likes and comments, it also includes views and dislikes, which have not been considered in previous studies.

These social media metrics show not only how effective a content/influencer is (Balabanis & Chatzopoulou, 2019) but also serve as a heuristic clue for new adopters. Moreover, different metrics of engagement must be analyzed separately in marketing campaigns, primarily because they do not all respond to the same influences. For instance, some studies show that the factors responsible for increasing the number of likes for a post do not necessarily increase the number of comments (De Vries, Gensler, & Leeflang, 2012; Sabate et al., 2014).

In this sense, message content can be a powerful tool for promoting digital engagement and diffusion. However, few studies have sought to determine which content elements affect popularity and how they influence audience engagement (Ladhari, Massa, & Skandrani, 2020). Therefore, the relationship between content conception factors on social media and their popularity constitutes a theoretically meaningful research gap (Banerjee et al., 2019). Our study investigates which video features drive popularity on YouTube. To elucidate this relationship, our study employs the Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986; Petty & Briñol, 2012). ELM is an appropriate model to predict attitude and behavior because it provides scholars and marketers with a conceptual framework for mapping out critical factors in affecting consumer behavior (Teng, Khong, & Goh, 2015). ELM has also provided practical guidelines for developing effective communications on a wide variety of topics (Hughes, Swaminathan, & Brooks, 2019; Kulkarni, Kalro, & Sharma, 2020).

To this end, we present and empirically test a conceptual model to determine how elements such as a video's linguistic style, category, and length influence various consumer engagement metrics, such as views, likes, dislikes, and comments. For this purpose, we analyze transcriptions of the contents of more than 11,000 videos from 150 digital influencers on YouTube across several categories.

This study aims to contribute to research on social influencer marketing and online advertising by providing managers with concrete insights into how to develop videos able to attract customer attention and promote online engagement. Specifically, it offers novel insights into when certain metrics of consumer digital engagement might be elicited over others. Finally, we also provide guidelines on how to choose the most appropriate channels for sponsorship and advertisements.

The structure of this paper is as follows. First, we briefly review the literature on digital consumer engagement and the drivers of online video popularity on social media, including linguistics attributes, content categories and some date of posting, in the light of the main cognitive dual-process model used to explain consumers' attitudes. Then, we develop our

research hypotheses and describe our model and methods. Finally, we present the results of the statistical model and a discussion of findings. We conclude the paper with a discussion of results, implications for theory and practice, as well as limitations and suggestions for future research.

2 CONTEXTUAL FRAMEWORK

2.1 Digital consumer engagement

Digital consumer engagement (DCE) refers to consumers' interactions with a brand in a digital environment; it strengthens their investment in the brand at different levels and phases to produce traceable reactions such as clicks, likes, comments, and shares (Gavilanes, Flatten, & Brettel, 2018).

Gavilanes et al. (2018) postulate a model that includes a continuum of steps for conceptualizing DCE in social networks. At the beginning of the continuum (i.e., a weak form of DCE), consumers click on posts merely to consume content, which requires little investment from them. In this weak form of DCE, consumers tend to incline toward low levels of involvement since the content is reviewed mostly for personal and entertainment purposes (Swani et al., 2017).

Clicking on the "like" button represents a moderate level of DCE and a more emotional investment from consumers, which is associated with a positive attitude toward the content (Gavilanes et al., 2018; Banerjee & Chua, 2019). The action of liking a message is more intuitive, reflexive, and less cognitive (Swani et al., 2017; Labrecque, Swani, & Stephen, 2020). A high number of likes may thus indicate that a post's content is of interest, increasing its capacity to disseminate its message (Sabate et al., 2014). The same is presumably true of the "dislike" button, except it signals a negative reaction to the video and an attitude of denial.

Writing a comment requires more time and cognitive resources, which are used to form a position and formulate a contribution. Therefore, this form of response is considered a stronger DCE (Gavilanes et al., 2018; Yoon et al., 2018; Labrecque et al., 2020). Writing a comment involves more emotions and feelings, as people usually comment when the content is meaningful for them (Sabate et al., 2014).

Though these digital actions can be conceptually regarded as consumer engagement, they reflect qualitatively different types of digital engagement (Yoon et al., 2018). We may expect different reactions to different content types, considering the effects of video content

characteristics (such as the emotions, content category, and linguistic elements) on the main engagement-related marketing outcomes. For this reason, a coherent understanding of digital engagement with YouTube video posts depends on several factors, such as the emotional, content category, and linguistic elements that elicit the most consumer engagement.

2.2 Drivers of online video popularity

The numbers of views, likes, dislikes, comments, and shares serve as usual metrics of YouTube video popularity, as well as consumer engagement behavior (Oh et al., 2017). They can strongly affect how the public perceives a YouTube post (Hong & Cameron, 2018). These online measures indicate viewers' satisfaction with post content and may suggest whether the product/service featured is going to be a hit in the market (Aggrawal et al., 2018). For instance, given that, on average, one unit of view for a particular video for US movies is related to $2.00 gross revenue (Oh et al., 2017), managers should allocate more resources on social media content and strategies that will generate personal consumer engagement.

Likes are indicative of the followership of social media influencers and are highly influential on consumer responses (Kay, Mulcahy, & Parkinson, 2020). Expressing a like or dislike of a video and commenting on or judging it all increase social resonance and video popularity (Ladhari et al., 2020). It is generally easier to convince users to like a publication than to share it (Banerjee & Chua, 2019). As cognitive misers, people prefer to read comments that other readers have "liked." The number of views and likes can become a heuristic cue, shaping online consumers' initial impressions of content (Hong & Cameron, 2018). Also, by liking the content/brand, users can associate themselves with it and feel a positive impact on their personal self-esteem and self-worth (Oh et al., 2017).

On the other hand, YouTube permits users to "dislike" videos (Oh et al., 2017), generating a negative popularity in the content created. Individuals might share disliked content if they believe that this content might help others (altruistic motivation), burnish their reputation (self-serving motivation), or help to connect them with others (social motivation) (Tellis et al., 2019). Thus, it is important to understand the impact of "dislikes" among users and the factors that can boost this negative metric of engagement.

Oh et al. (2017) showed that commenting/sharing content is a heightened form of engagement, encouraging a deeper relationship with consumers. In this sense, comments represent a higher level of engagement than "viewing" and "liking" (simply interfacing) because posting a comment requires a higher level of attention and involvement with the post

than simply 'liking' it (De Vries et al., 2012; Devereux, Grimmer, & Grimmer, 2020). Hence, a high number of comments can represent a metric of success or impact (Sabate et al., 2014).

2.3 Dual-routes models of information processing

Digital consumer engagement as a continuum can be elucidated in dual-process models of influence in attitude-behavior on social media. The main cognitive dual-process models used to explain consumers' attitudes and online decisions by identifying the process routes of persuasion are ELM (Petty & Cacioppo, 1986) and Chaiken's (1980) Heuristic-Systematic Model (HSM) (Teng et al., 2015).

ELM is one of the most frequently mentioned theories in communication and information processing (Le, Robinson, & Dobele, 2020). This theory has been cited as an appropriate theoretical background to examine the effects of two main factors: the message for a central processing route and the source for a peripheral processing route (e.g., Le et al., 2020; Sokolova & Kefi, 2020; Hughes et al., 2019; Srivastava & Kalro, 2019). This dual-process theory posits that, in high elaboration likelihood states, when both the motivation and ability to process are high, individuals are likely to engage in thoughtful processing of a message – the central route – and thus be more inclined to be persuaded by argument quality and message characteristics (Petty & Cacioppo, 1986). These can be manifest attributes such as word count, several sentences, which are easily observable; or latent factors, which are implied from the text and capture the quality of information embedded within the message, such as writing style, and message valence (Srivastava & Kalro, 2019).

By contrast, those in low elaboration likelihood states (i.e., lacking the ability or motivation to deliberate thoughtfully) are more likely motivated by peripheral cues, which in turn guide attitude formation (Petty & Cacioppo, 1986; Petty & Briñol, 2012). These peripheral cues may include the number of followers and the number of posts (Hughes et al., 2019), as well as reviewer identity (self-disclosure) and reputation/self-presentation variables, which together signal trust and expertise of the reviewers (Srivastava & Kalro, 2019).

Similarly, HSM (Chaiken, 1980) describes cognitive processing as either systematic or heuristic. While systematic processing entails a detailed processing of content and the role of message-based cognitions as judgment-relevant information, heuristic information processing needs minimal cognitive effort to reach conclusions based on the least effort principle, relying on simple rules/heuristics or non-content cues (Chaiken, 1980; Teng et al., 2015).

HSM and ELM shared fundamental similarities (Teng et al., 2015; Barcelos, Dantas, & Sénécal, 2019). For instance, both models assume that, when people have high motivation and resources to process detailed information, they follow the central/systematic route, considering and elaborating on all the available information and carefully evaluating all the available attributes. On the other hand, people follow the peripheral/heuristic route of processing when they look for simple cues signaling the value of the object and base their judgments on simple decision rules (Teng et al., 2015; Barcelos et al., 2019).

Considering these dual-routes models of information processing, we posit that consumers assessing views, likes and dislikes should unconsciously devote fewer mental resources to evaluate the message content and follow the "peripheral route," relying more on heuristics, simple inferences, and social cues (Schulze et al., 2014). Thus, the number of likes may signal people's credibility perceptions of the information (Hong & Cameron, 2018).

By contrast, such heuristics may be less relevant when consumers follow the "central route," in which argument quality exerts a greater impact on persuasion, and unconsciously devote more thought to the actual message (Hughes et al., 2019). This high involvement induces a more meticulous processing of the information accessed (Balabanis & Chatzopoulou, 2019); generally associated with behavior such as writing a comment. We adopt this dual process for two drivers of YouTube video popularity: linguistic style and video category.

2.4 Linguistic style

Language is the most common and reliable way for people to translate their internal thoughts and emotions into a form that others can understand (Tausczik & Pennebaker, 2010). Language's role is critical in culturally bound social cognition (Maass, Karasawa, Politi, & Suga, 2006). By going beyond the content features of an online review (i.e., what is said), the language style (i.e., how the content is conveyed) significantly affects how the message is received by readers (Liu, Xie, & Zhang, 2019). This happens because two types of words (content and style/function words) are processed differently in different brain regions (Ireland & Pennebaker, 2010). Moreover, certain linguistic characteristics stimulate the mechanics of content/brand relationship connections and self-presentation during the decoding process (Labrecque et al., 2020).

We, therefore, discuss the linguistic style of YouTube videos in terms of three word-level elements of language – function words, personal pronouns, and verbs – as well as three broader language factors: influencers' analytical thinking, subjectivity, and emotional valence. Based

on user-generated content literature, argument quality (represented by these linguistics elements) and message valence are the key latent content factors that determine persuasiveness (Srivastava & Kalro, 2019). In addition, since function words and pronouns consistently vary as a function of psychological state, measuring these words is important in order to get rough proxies of people's psychological worlds (Chung & Pennebaker, 2007). Moreover, many studies have pointed out that emotional appeals have a great influence on consumer engagement by inducing consumer interaction with the brand and driving contents to go viral (Kujur & Singh, 2018).

In linguistic analysis, *function words* have little lexical meaning, but they reflect how people are thinking, speaking, or writing more than what they are thinking about, and have a significant impact on how the communication is received by listeners or readers (Liu et al., 2019; Ireland & Pennebaker, 2010; Pennebaker et al., 2014). Function words provide important psychological cues to thought processes, intentions, and motivations (Tausczik & Pennebaker, 2010; Chung & Pennebaker, 2007). Such as pronouns, they provide the reader with auxiliary information such as who is the creator and intended recipient of the message (Cruz, Leonhardt, & Pezzuti, 2017).

Function words are not as explicit as content words, but they are context-dependent (Aleti et al., 2019) and are much more closely linked to measures of people's social worlds (Tausczik & Pennebaker, 2010). Hence, we propose:

H1: The higher (lower) the level of function words of video content, the more (less) popular the video is.

> **H1a: The higher (lower) the level of function words of video content, the more (less) views the video is.**
>
> **H1b: The higher (lower) the level of function words of video content, the more (less) likes the video is.**
>
> **H1c: The higher (lower) the level of function words of video content, the less (more) dislikes the video is.**
>
> **H1d: The higher (lower) the level of function words of video content, the more (less) comments the video is.**

Pronouns used in brand social media posts influence consumer engagement activities (Labrecque et al., 2020). Personal pronouns are useful linguistic elements that can help identify the attentional focus and shows the quality of a close relationship, which in turn can reveal

priorities, intentions, and processing (Tausczik & Pennebaker, 2010). Consumer responses differ according to the use of different personal pronouns.

For instance, Labrecque et al. (2020) find that the use of the first-person plural pronoun ("we") on Facebook has a positive effect on the number of comments and shares, the use of the second-person pronoun ("you") has a higher positive effect on comments than likes and shares, and the use of the third-person ("they") increases all three engagement actions. To Cruz et al. (2017), online brand messages that include a second person pronoun can increase consumer involvement and attitude toward the brand as a result of increasing the extent that consumers engage in self-referencing.

According to Pennebaker (2011), people who use "I" at high rates are focusing on themselves, are more insecure, and tend to be more self-focused (Jordan et al., 2019). While those who use "you" and "we" at higher rates are looking at or thinking about their audience. People who use this externally focused style usually have higher status and exert more influence in social interactions (Jordan et al., 2019). This style usually suggests that the author is speaking from a perspective of high expertise and confidence (Pennebaker et al., 2015; Hughes et al., 2019), which favors the consumer's engagement and decisions (Xu & Zhang, 2018; Aleti et al., 2019). At the same time, lower-status individuals consistently use first-person singular pronouns and impersonal pronouns. Based on this evidence, we propose:

H2: The higher (lower) the level of social personal pronouns in video content, the more (less) popular the video is.

> **H2a: The higher (lower) the level of social personal pronouns in video content, the more (less) views the video is.**
>
> **H2b: The higher (lower) the level of social personal pronouns in video content, the more (less) likes the video is.**
>
> **H2c: The higher (lower) the level of social personal pronouns in video content, the less (more) dislikes the video is.**
>
> **H2d: The higher (lower) the level of social personal pronouns in video content, the more (less) comments the video is.**

The content of a text refers to the basic information it conveys. At the word level, language content includes *regular verbs* (Ireland & Pennebaker, 2010). Verb phrases generally provide greater information about the social/physical context and/or appear best suited to express the relationship between the acting person and his or her immediate environment/object

(Maass et al., 2006). English verbs provide a remarkable amount of information about actions. They hint at whether an action is ongoing, partly completed, or completely finished. Whereas personal pronouns provide information about the subject of attention, verb tense can tell us how people are thinking about time (Pennebaker, 2011). Nouns and regular verbs are "content-heavy" in that they define the primary categories and actions dictated by the speaker or writer. In this sense, to have a conversation, it is important to know what people are talking about (Chung & Pennebaker, 2007).

Information-focused content is verbally rich. It typically deliveries arguments or factual descriptions about products, attributes, people, behaviors, and events. Thus, people with greater cognitive involvement may engage better in such verbal content. However, because of its argumentative or factual focus, information-focused content can be dry and uninteresting for most people with the same cognitive involvement. Rather than being shared, information-focused content may irritate consumers and be avoided (Tellis et al., 2019). Considering these arguments, we propose:

H3: The higher (lower) the level of verbs in video content, the less (more) popular the video is.

  H3a: The higher (lower) the level of verbs in video content, the less (more) views the video is.

  H3b: The higher (lower) the level of verbs in video content, the less (more) likes the video is.

  H3c: The higher (lower) the level of verbs in video content, the more (less) dislikes the video is.

  H3d: The higher (lower) the level of verbs in video content, the less (more) comments the video is.

Analytical thinking reflects the degree to which a text contains an analytical (rather than narrative) style (Pennebaker et al., 2015). Analytic thinking is a deliberate mode of thought wherein complex concepts are deconstructed into more manageable components and their interrelations (Jordan et al., 2019). An analytical style is argumentative and presents logical or associative ideas and facts and contains more references to complexly organized objects and concepts (Aleti et al., 2019). In this sense, a study of Pennebaker et al. (2014) shows that the ways prospective college students use an analytic style (more function words) in their admissions essays can even foretell their academic performance for up to four years.

Language containing high rates of articles and prepositions is necessarily "analytic" in nature due to the function of such linguistic devices, whereas language with low rates of articles and prepositions is generally more experiential and narrative in nature (i.e., diagnostic of a personable, intuitive way of communicating ideas and actions) (Jordan et al., 2019).

A narrative style structures events in time and space as stories, considered the core of human nature (Van Laer et al., 2018; Aleti et al., 2019). Stories increase the attention of consumers; thus, the quality of a post's narrative may determine whether consumers will share or disregard it, because stories are at the core of human nature (van Laer et al., 2018; Aleti et al., 2019). Moreover, as processing narrative-based messages require limited effort (as they are easier to process; Tellis et al., 2019), consumers on social media, generally in low elaboration, will evaluate these video contents highly. We thus propose:

H4: The lower (higher) the level of analytical thinking in a video post, the more (less) popular the video is.

> **H4a: The lower (higher) the level of analytical thinking in a video post, the more (less) views the video is.**
>
> **H4b: The lower (higher) the level of analytical thinking in a video post, the more (less) likes the video is.**
>
> **H4c: The lower (higher) the level of analytical thinking in a video post, the less (more) dislikes the video is**
>
> **H4d: The lower (higher) the level of analytical thinking in a video post, the more (less) comments the video is.**

Subjectivity refers to feelings, views, or beliefs, as opposed to objectivity, which reveals factual information about the world (Liu, 2012). The followers of trustworthy influencers who show expertise are more likely to purchase the featured products (Sokolova & Kefi, 2019). In this sense, informative videos with more objective sentences than subjective ones will be more highly evaluated by consumers. Informational content triggers the consumer's central processing route, which requires greater cognitive effort. Kulkarni et al. (2020) examine the use of informational appeal and find that individuals report higher sharing intentions for viral ads.

According to Burgess and Green (2018), the "most viewed" section on YouTube contains mostly informational material from broadcast and mass media sources – particularly news footage, political discussion, and interviews. Moreover, according to a survey with more than 12,000 people worldwide (Google, 2019), the best reasons given by people to watch YouTube

include the opportunity to learn something new and to dig deeper into one's interests. Hence, considering this preference for information and troubleshooting videos on YouTube and the arguments above, we propose the following:

H5: The higher (lower) the level of objectivity in a video post, the more (less) popular the video is.

> **H5a: The higher (lower) the level of objectivity in a video post, the more (less) views the video is.**
>
> **H5b: The higher (lower) the level of objectivity in a video post, the more (less) likes the video is.**
>
> **H5c: The higher (lower) the level of objectivity in a video post, the less (more) dislikes the video is.**
>
> **H5d: The higher (lower) the level of objectivity in a video post, the more (less) comments the video is.**

Emotional valence refers to the degree to which people express positive emotion or negative emotion (Tausczik & Pennebaker, 2010; Chen, 2020). The effect of valence is complex and leads to different perceptions depending on the context (Srivastava & Kalro, 2019). Even though the underlying psychological mechanisms of emotional expression influencing attitude formation are not fully understood, Chen (2020) suggests that online content exerts more cognitive effort when the emotions conveyed by the message are negative, compared to when the emotions conveyed are positive. Negative messages tend to include more diagnostic features associated with the product/service, and thus tend to be more informative (Chen, 2020). Besides, negative emotions can evoke an unpleasant state of mind and an emotional imbalance in the receiver, which can be rectified by engaging in the featured (desired) behavior (Kujur & Singh, 2018).

In opposition, contents that evoke positive emotional states (such as amusement, excitement, love, joy, warmth, inspiration and pride) should make the receiver feel a positive attitude toward the sharer, enhancing the sharer's opportunities for self-enhancement in the present and reciprocity by the recipient in the future (Kujur & Singh, 2018; Tellis et al., 2019). Moreover, advertisements that induce positive emotions have been shown to change attitudes toward the advertisements and increase purchase intentions and recall, reduce ad avoidance and affect sales (Kujur & Singh, 2018). In the same way, people usually feel more inclined to socialize with those who make them feel good (Aleti et al., 2019; Tellis et al., 2019). Thus,

contents with positive emotional valence should be associated with more sharing (Xu & Zhang, 2018).

Hedonic contents that incite positive emotions are usually effective on low-involvement, high-distraction social media platforms (Hughes et al., 2019). Since people with low involvement levels use peripheral routes to process information (Petty & Cacioppo 1986), we expect positive emotional content to be more salient to the consumer. We thus propose the following:

H6: **The higher (lower) the level of positive emotion in a video post, the more (less) popular the video is.**

> **H6a: The higher (lower) the level of positive emotion in a video post, the more (less) views the video is.**
>
> **H6b: The higher (lower) the level of positive emotion in a video post, the more (less) likes the video is.**
>
> **H6c: The higher (lower) the level of positive emotion in a video post, the less (more) dislikes the video is.**
>
> **H6d: The higher (lower) the level of positive emotion in a video post, the more (less) comments the video is.**

2.5 Video category

How a video is interacted with and commented on is often a result of its content's nature. For instance, the comments for a music video will be quite different from those for a comedy video (Yew & Shamma, 2011). Different video genre categories have different patterns and signatures of contextual interaction surrounding them. By identifying these patterns in the social metadata, it is possible to predict a video's specific genre category based on particular responses of social activity (Yew & Shamma, 2011).

Gavilanes et al. (2018) show that different content categories affect DCE metrics at different levels. Hence, different video categories should be associated with different patterns and interactions. Identifying these patterns in social metadata should enable us to predict a video's specific category based on the responses via social activity (Yew & Shamma, 2011). Hence, we propose the following:

H7: Content categories have differential impacts on the popularity of YouTube videos.

> **H7a: Content categories have differential impacts on the number of views of YouTube videos.**
>
> **H7b: Content categories have differential impacts on the number of likes of YouTube videos.**
>
> **H7c: Content categories have differential impacts on the number of dislikes of YouTube videos.**
>
> **H7d: Content categories have differential impacts on the number of comments of YouTube videos.**

2.6 Control variables

The *time* and *date of posting* have a significant influence on post popularity (Sabate et al., 2014). For instance, since YouTube is a platform based on audiovisual content, we posit that consumers will prefer to watch videos during non-business hours. Moreover, we investigate if there is a relationship between certain days of the week and higher levels of engagement. We expect that consumers visit channels more often on weekends than on weekdays, which can make videos posted during weekends more popular (De Vries et al., 2012; Hughes et al., 2019).

> **H8: Posting a video during non-business hours positively affects its popularity.**
>
> > **H8a: Posting a video during non-business hours positively affects the number of views.**
> >
> > **H8b: Posting a video during non-business hours positively affects the number of likes.**
> >
> > **H8c: Posting a video during non-business hours negatively affects the number of dislikes.**
> >
> > **H8d: Posting a video during non-business hours positively affects the number of comments.**

> **H9: Posting a video on weekends positively affects its popularity.**
>
> > **H9a: Posting a video on weekends positively affects the number of views.**
> >
> > **H9b: Posting a video on weekends positively affects the number of likes.**
> >
> > **H9c: Posting a video on weekends negatively affects the number of dislikes.**

H9d: Posting a video on weekends positively affects the number of comments.

Video length can also influence popularity. For instance, Banerjee and Chua (2019) have shown that the length of a Facebook post is negatively correlated to its likelihood of being shared. Though the effects of YouTube video length have not yet been explored, many researchers suggested a relationship between the length of the promotional message and the ability of viewers to learn the information contained in the advertisement, in the sense that longer messages should significantly and positively affect advertising/brand recall (Newell & Henderson, 1998). If the content is too short, it may be insufficient to arouse strong emotions. For this reason, advertisers should manage the length of the ad to both attract and sustain viewers' interest while not exceeding their levels of patience (Tellis et al., 2019). As YouTube users might use the platform mainly to relax and learn new things, we expect long and medium-length videos to be more popular than short videos.

H10: Length positively impacts a video's popularity.
    H10a: Length positively impacts the number of views.
    H10b: Length positively impacts the number of likes.
    H10c: Length negatively impacts the number of dislikes.
    H10d: Length positively impacts the number of comments.

Based on the above hypotheses, we propose the conceptual model depicted in Figure 8 for our study's empirical analysis. Even though all dependent variables (views, likes, dislikes, and comments) are shown together in the model, we tested their effects separately in different regressions.
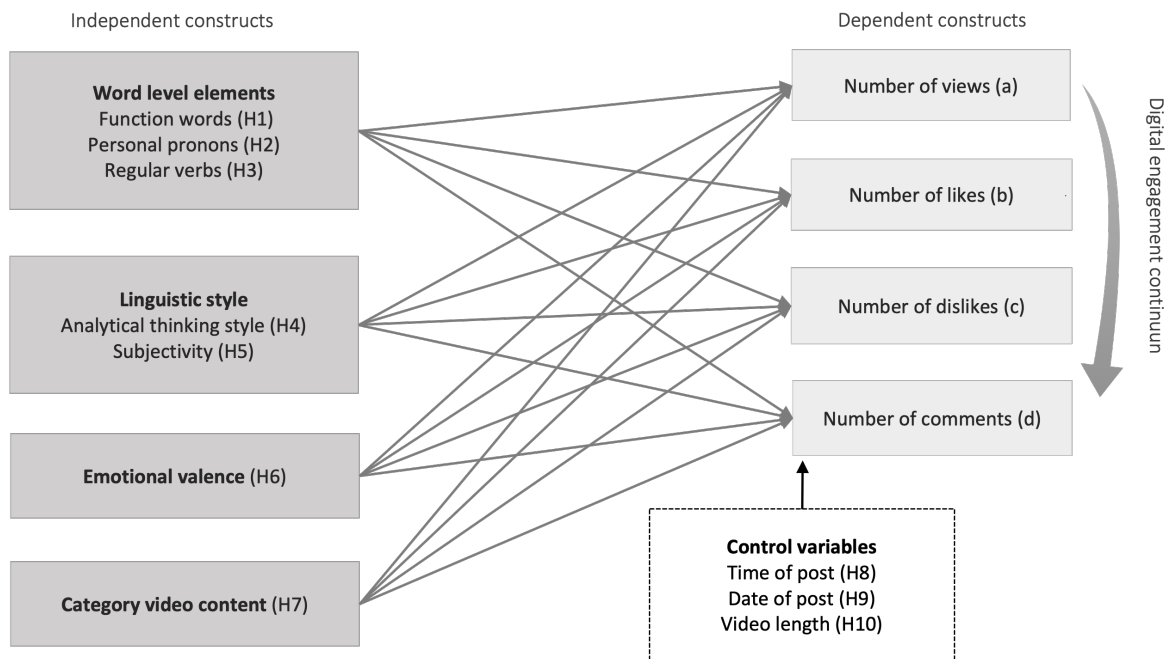
Figure 8. Conceptual framework.

3 METHODS

The context of this study is the videos uploaded on YouTube by digital influencers. So far, the literature in influencer marketing has focused mainly on the concept of influencers, while the relationship between content and influence remains rather unexplored (Francalanci & Hussain, 2017). YouTube is a content community founded in 2005 that allows users to post, view, comment on and link to videos on the site. Users can also set up personal profiles that display who they subscribe to, recent activity, comments, and favorite videos (Smith, Fischer, & Yongjian, 2012). Following the huge success of YouTube since its creation, many companies have found that own-branded channels are an excellent way to boost consumer engagement, reach new audiences and convert website visits into purchases (Kujur & Singh, 2018; Ferchaud et al., 2018).

3.1 Videos sampling and data collection

We investigated empirically data from about 150 digital influencers channels on YouTube from March 30, 2007, to July 15, 2019. We identified the top digital influencers channels by Forbes[3] list of 2017, which ranks influencers based on their reach, propensity for virality, and engagement to each influencers' area of expertise. Only influencers who made it

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[3] Forbes Top Influencers (https://www.forbes.com/top-influencers/#574bf4272dde).

big by building their fame and creating original content from the internet were included on the list. The influencers belong to eleven different product categories: beauty, entertainment, fashion, fitness, food, gaming, home, kids, parenting, tech & business, and travel.

For each one of the 11,177 video posts in the sample, we gathered the number of likes, dislikes, and comments, as well as the valence of the comments and other video post characteristics. We relied on the application programming interfaces (APIs) provided by major social media to extract the data. Data collection was conducted via the Python programming language, and data persistence was performed using a MySQL relational database.

We used the YouTube API (YouTube Data V3[4]) for the extraction process (except for the transcriptions). Additionally, we used an open-source tool from Python API called "YouTube-transcript-API[5]" to extract all available auto-generated captions from videos (the API converts audio data into textual data saved in Json files). The caption text was then processed by a machine-learning model and by the Linguistic Inquiry and Word Count software (LIWC) from Pennebaker et al. (2015) to generate variables for linguistic and emotional style. The default LIWC2015 dictionary is composed of almost 6,400 words, word stems, and select emotions (Pennebaker et al., 2015). Figure 9 depicts the whole data-acquisition process.
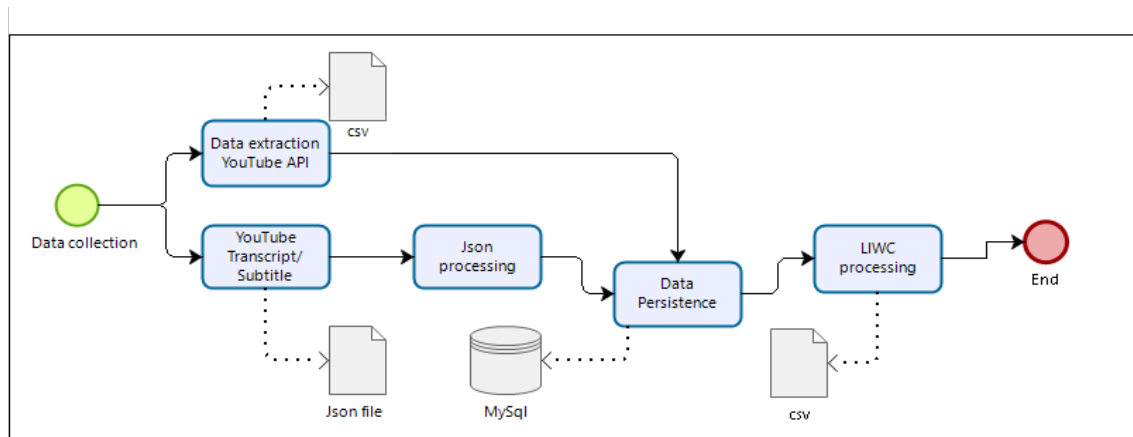
Figure 9. Data acquisition from YouTube

3.2 Variable operationalization

We used SPSS 26 software for statistical variables descriptive analysis and regression tests. Table 6 summarizes the information and descriptive statistics for the study's variables. We measured *video popularity* as the number of views, likes, dislikes, and comments, following

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[4] YouTube Data API: https://developers.google.com/youtube/v3.
[5] YouTube Transcript/Subtitle API: https://github.com/jdepoix/youtube-transcript-api.

similar studies (De Vries et al., 2012; Aggrawal et al., 2018; Arora et al., 2019; Hughes et al., 2019). Word-level elements and analytical thinking linguistic style were calculated through automated text analysis using LIWC. The program compares each word in an extract of text against predefined word categories, classified in dictionaries. It then calculates the number of words that match each dictionary (Pennebaker et al., 2015). The outcomes were standardized via conversion to percentiles (0 to 100) to represent the ratio of words corresponding to each style.

Function words represent the sum of nine different categories (articles, prepositions, personal pronouns, impersonal pronouns, quantifiers, auxiliary verbs, conjunctions, adverbs, negations). A higher percentage of function words indicates more thought processes, emotional states, intentions, and motivations (Tausczik & Pennebaker, 2010). *Personal pronouns* represent the sum of "I, we, you, she/he, they" words. A high number of we-words and social pronouns indicates a more outgoing, social style, while a high number of I-words indicates a more self-oriented, tentative, humble, and even anxious style (Pennebaker et al. 2015; Xu & Zhang, 2018). *Regular verbs* are measured as the percentage of verbs present in each video. A higher percentage of verbs indicates more contextual, informational content shared by the sender (Maass et al., 2006). *Analytical thinking* implies analytical/argumentative video content versus a more narrative style. A high level reflects formal, logical, and hierarchical thinking, while a lower level reflects more informal, personal, and narrative thinking (Pennebaker et al. 2015).

The next two elements, *emotional valence* and *subjectivity*, were obtained through a machine learning model trained to classify the valence and subjectivity of an input text. The model used for this classification employed a Naive Bayes Algorithm, a very common and effective classification method (Liu, 2012), with the open-source TextBlob tool. Python library was then used to process the textual data, based on the Natural Language Toolkit (NLTK). TextBlob uses a movie reviews corpus as labeled training data, which contains 1000 positive and 1000 negative processed reviews with sentiment polarity classification, and 5000 subjective and 5000 objective processed sentences labeled concerning their subjectivity status[6] (see Pang & Lee, 2004).

Positive emotions can be captured by the frequency of words such as happy, excited, and thrilled, whereas negative emotions are related to words such as anxious, tragic, and selfish (Aleti et al., 2019). The output values for valence ranged from -1 to +1, with +1 being an

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[6] Available at: http://www.cs.cornell.edu/people/pabo/movie-review-data/

extremely positive text and -1 an extremely negative one. For the analysis model, however, these values were normalized to a scale from 0 to +1 using the MinMaxScaler formula. The output values for subjectivity varied from 0 to +1, with +1 being a very subjective text and 0 a very objective one.

Video's category indicates the YouTube classification of a video based on its content. Similar to Ferchaud et al. (2018), our study sorted videos into one of 11 genres: beauty, entertainment, fashion, fitness, food, gaming, home, kids, parenting, tech & business, and travel.

Table 6. Variable information and descriptive statistics

Continuous variable	Notation	Minimum	Maximum	Mean	Std. Deviation
Number of views	y_{1j}	0.000	290631017	3019085.27	8860648.942
Number of likes	y_{2j}	0.000	8242848	71670.92	193350.981
Number of dislikes	y_{3j}	0.000	591233	1900.13	9502.193
Number of comments	y_{4j}	0.000	815963	6697.04	23146.8
Analytic thinking	$analytic_j$	0.000	99.00	31.972	19.619
Emotional valence	$emotion_j$	0.000	1.00	0.458	0.061
Subjectivity	$subjectivity_j$	0.000	1.000	0.514	0.068
Function words	$function_j$	0.00	71.88	55.356	6.176
I		0.000	18.75	5.310	2.632
We		0.000	12.50	1.603	1.264
You	$ppronoun_j$	0.000	37.50	3.624	1.937
She/he		0.000	8.97	0.614	0.841
They		0.000	7.50	0.594	0.527
Regular Verbs	$verb_j$	0.00	36.02	19.689	3.514

Categorical variable	Notation	Category	N	Percent
Time of video post	$post\_hour_j$	1 (Business hour)	3033	27.10%
		0 (Non-business hour)	8144	72.90%
Video length, min	$length_j$	Long duration (>20:00 min)	1415	12.70%
		Medium duration (10:00–19:59)	4274	38.20%
		Short duration (0:00–9:59)	5488	49.10%
Date of video post	$post\_weekd_j$	Wednesday	1806	16.2%
		Tuesday	1794	16.1%
		Thursday	1638	14.7%
		Sunday	1412	12.6%
		Saturday	1340	12.0%
		Monday	1678	15.0%
		Friday	1509	13.5%
Video categories	$category_j$	Travel	755	6.80%
		Tech & Business	914	8.20%
		Parenting	874	7.80%
		Kids	730	6.50%
		Home	906	8.10%

Gaming	1293	11.60%
Food	817	7.30%
Fitness	1129	10.10%
Fashion	1142	10.20%
Entertainment	1265	11.30%
Beauty	1352	12.10%

Control variables. Similar to Sabate et al. (2014), we categorized the *time of posting* into business hours (8 am to 6 pm on Monday to Thursday; 8 am to 3 pm on Friday) and non-business hours (any other time). We also presented the *date of video posting* specifying the day of the week, and not simply as a weekday or weekend (see Sabate et al., 2014; Hughes et al., 2019). *Video length* was operationalized through dummy variables representing three video durations: short videos (from 0 to 9:59 minutes long), medium-length videos (from 10:00 to 19:59 minutes long), and long-term videos (more than 20:00 minutes long).

Analysis model. Since many variables were overdispersed, we chose a negative binomial distribution (van Laer et al., 2018; Hughes et al., 2019) with maximum likelihood estimates (MLE). This distribution allowed a better goodness-of-fit of the model according to the Akaike and the Bayesian information criteria (AIC and BIC) than the Poisson-gamma mixture distribution (NB2) would have provided. The four dependent variables for video post popularity were the number of views, number of likes, number of dislikes, and number of comments per video post *j*. The model for each VD can be expressed as:

$$
\begin{aligned}
(log_{\lambda ij})\gamma_{ij} = {} & \beta_0 + \beta_1(function_j) + \beta_2(ppronoun_j) + \beta_3(verb_j) \\
& + \beta_4(analytic_j) + \beta_5(emotion) + \beta_6(subjectivity_j) + \beta_7(post\_weekday_j) \\
& + \beta_8(category_j) + \beta_9(length_j) + \beta_{10}(post\_hour_j) \in_{ij}.
\end{aligned}
$$

where $log_{\lambda ij}$ is the rate of the negative binomial distribution process, and $\in_{ij}$ is the distributed error terms for dependent variables y_{1j}, y_{2j}, y_{3j} and y_{4j}.

4 RESULTS

Table 7 reports the results of our analysis. To determine effect sizes, we used the incidence rate ratio (IRR) or the factor by which positive scores (>1) would be expected to increase the predictor variable by one standard deviation, ceteris paribus.

Number of views. The effect of function words and personal pronouns was not significant; thus, H1a and H2a were not supported. However, regular verbs had a negative effect on the number of views (β= -0.016, p=0.042, IRR=0.984); thus, more informative and time-focused content had a negative impact on views. This result supported H3a, i.e., information-focused content, rich in number of verbs, can be uninteresting and avoided (Tellis et al., 2019).

The effect of video's analytic thinking was significant and negative (β= -0.003, p=0.067, IRR=0.997), which shows that a more formal and logical style, with hierarchical thinking (i.e., references to complexly organized objects and concepts), reduced the number of views. This result supported H4a. Subjectivity influenced the number of views positively (β=0.523, p=0.003 IRR=1.688), which means that consumers viewed more subjective content (which relates to personal opinions) as opposed to a more objective content. This result did not support H5a. Emotional valence had a negative effect (β= -3.970, p=0.000, IRR=0.019), which suggests that a very positive language style was not as effective as one expressing more negative emotions. This result rejected H6a.

Concerning the effect of the video category, we compared the 10 categories with "beauty" used as the base dummy variable. The only category positively associated with a higher number of views was "entertainment" (β=0.187, p=0.007, IRR=1.205), which means that entertainment videos tended to receive more views than others. The categories "home'" (β= -0.139, p=0.062, IRR=0.870), "fitness" (β= -0.150, p=0.040, IRR=0.860), and "fashion" (β= -0.213, p=0.002, IRR=0.808) were negatively associated with the number of views relative to the base content, meaning that YouTube videos in these categories did not get as many views as the others. Thus, H7a was partially accepted, as the other categories were not statistically significant.

Regarding posting time, videos posted during business hours received significantly fewer views than those posted during non-business hours (β= -0.699, p=0.000, IRR=0.497). Thus, H8a was supported. Concerning the day of the week on which the video was posted (Friday = base dummy variable), videos posted on Thursday (β=0.152, p=0.015, IRR=1.164) and Monday (β=0.359, p=0.000, IRR=1.431) received significantly more views, while videos posted on Sunday (β= -0.292, p=0.000, IRR=0.747) received significantly fewer views. Hence, videos posted during weekdays seem to have had more views, rejecting H9a. Finally, medium-length videos (β= -0.312, p=0.000, IRR=0.732) and long videos (β= -0.309, p=0.000, IRR=0.734) received less views than short ones. Thus, H10a was rejected.

Number of likes. The effect of the video's function words on the number of likes were non-significant, rejecting H1b. The use of the second-person pronoun "you" had a significant and

negative effect on likes (β= -0.031, p=0.001, IRR=0.969), as did the use of the third-person pronoun "they" (β= -0.068, p=0.030, IRR=0.934), which suggests that a more tentative, humble, even anxious language style seemed to be more highly appreciated, rejecting H2b.

Regular verbs had a negative effect on the number of likes (β= -0.025, p=0.001, IRR=0.976), suggesting that more informative and action-focused contents tended to receive fewer likes, supporting H3b. The effect of the video's analytic thinking style on the number of likes were non-significant, rejecting H4b. Subjectivity influenced the number of likes positively (β=3.199, p=0.000, IRR=24.496), which means that viewers enjoyed when influencers expressed their opinions, beliefs, and feelings. Thus, hypothesis H5b was not supported. Emotional valence, on the other hand, had a negative effect (β= -5.629, p=0.000, IRR=0.004), that is, a positive emotion had an impact negative on number of likes, rejecting H6b.

The only category positively associated with a higher number of likes was "entertainment" (β=0.144, p=0.033, IRR=1.155). The categories "travel" (β= -0.232, p=0.004, IRR=0.793), "kids" (β= -0.157, p=0.052, IRR=0.855), "home" (β= -0.169, p=0.019, IRR=0.844), "fitness" (β= -0.217, p=0.002, IRR=0.805), and "fashion" (β= -0.242, p=0.000, IRR=0.785) were negatively associated with the number of likes relative to the base content, meaning that YouTube videos in these categories did not get as many likes as the others. Thus, H7b was partially supported.

Videos posted during business hours received significantly fewer likes than those posted during non-business hours (β= -0.840, p=0.000, IRR=0.432), supporting H8b. Videos posted on Thursday (β=0.227, p=0.000, IRR=1.255) and Monday (β=0.356, p=0.000, IRR=1.427) received significantly more likes, while videos posted on Sunday (β= -0.202, p=0.001, IRR=0.817) received significantly fewer likes, thus rejecting H9b. Finally, medium-length videos were associated with a greater number of likes than short ones (β=0.139, p=0.000, IRR=1.150), and long videos received even more likes than medium-length and short ones (β=0.490, p=0.000, IRR=1.632). This result shows that YouTube viewers preferred long videos over short ones, maybe due to the possibility of learning more information. Thus, H10b was supported.

Table 7. Model results

Variable	Post Views	Post Likes	Post Dislikes	Post Comments
Intercept	17.399*** (0.299)	12.661*** (0.299)	11.464*** (0.315)	9.228*** (0.369)
Function words	-0.005 (0.004)	0.003 (0.004)	-0.008** (0.004)	0.014** (0.004)
I	0.001 (0.010)	-0.005 (0.010)	-0.007 (0.011)	0.002 (0.012)

We	0.021 (0.016)	0.001 (0.015)	0.009 (0.017)	0.019 (0.018)
You	-0.008 (0.010)	-0.031** (0.010)	-0.013 (0.011)	-0.025** (0.011)
She/he	-0.026 (0.020)	-0.011 (0.019)	0.064** (0.021)	0.038* (0.023)
They	-0.017 (0.032)	-0.068** (0.031)	-0.101** (0.034)	-0.108** (0.037)
Regular verbs	-0.016** (0.008)	-0.025** (0.007)	-0.045*** (0.008)	-0.035*** (0.008)
Analytic thinking	-0.003* (0.001)	-0.002 (0.001)	-0.006*** (0.002)	-0.002 (0.002)
Subjectivity	0.523** (0.179)	3.199*** (0.206)	-0.324** (0.164)	4.893*** (0.289)
Emotional valence	-3.970*** (0.227)	-5.629*** (0.253)	-4.107*** (0.226)	-6.954*** (0.302)
Category Travel	-0.084 (0.083)	-0.232** (0.079)	-0.058 (0.088)	-0.054 (0.094)
Category Tech & Business	0.025 (0.076)	-0.104 (0.073)	0.012 (0.080)	-0.008 (0.086)
Category Parenting	0.024 (0.077)	0.006 (0.075)	-0.096 (0.081)	0.010 (0.088)
Category Kids	0.007 (0.085)	-0.157* (0.081)	-0.011 (0.092)	-0.062 (0.093)
Category Home	-0.139* (0.074)	-0.169** (0.072)	-0.297*** (0.079)	-0.081 (0.084)
Category Gaming	-0.046 (0.069)	-0.051 (0.067)	0.021 (0.073)	0.164** (0.078)
Category Food	-0.097 (0.079)	0.040 (0.078)	0.011 (0.083)	0.290** (0.093)
Category Fitness	-0.150** (0.073)	-0.217** (0.071)	-0.099 (0.077)	-0.123 (0.083)
Category Fashion	-0.213** (0.069)	-0.242*** (0.067)	-0.274*** (0.072)	-0.210** (0.079)
Category Entertainment	0.187** (0.069)	0.144** (0.068)	0.114 (0.073)	0.270** (0.080)
Time post	-0.699*** (0.041)	-0.840*** (0.040)	-0.712*** (0.042)	-0.903*** (0.047)
Day of week: Wednesday	-0.084 (0.060)	-0.097 (0.059)	-0.343*** (0.064)	-0.248*** (0.070)
Day of week: Tuesday	-0.032 (0.061)	0.036 (0.060)	-0.222*** (0.064)	0.126* (0.071)
Day of week: Thursday	0.152** (0.062)	0.227*** (0.061)	-0.132** (0.065)	0.089 (0.073)
Day of week: Sunday	-0.292*** (0.063)	-0.202** (0.061)	-0.403*** (0.067)	-0.115 (0.072)
Day of week: Saturday	0.018 (0.064)	-0.006 (0.062)	-0.072 (0.068)	0.187** (0.074)
Day of week: Monday	0.359*** (0.061)	0.356*** (0.059)	0.049 (0.064)	0.167** (0.070)
Video length longer	-0.309*** (0.051)	0.490*** (0.050)	0.323*** (0.055)	0.972*** (0.060)
Video length medium	-0.312*** (0.036)	0.139*** (0.035)	-0.083** (0.037)	0.287*** (0.041)
Overdispersion (α)	2.819 (0.030)	2.672 (0.029)	3.105 (0.034)	3.696 (0.041)
AIC	340676.254	257701.377	172445.854	193242.871
BIC	340903.224	257928.347	172672.824	193469.841

Notes: For dummy variables, the results were compared with the baseline variables but are not reported in the table. Number of betas (β), standard errors are in parentheses. AIC = Akaike information criterion; BIC= Bayesian information criterion. * p < 0.10; ** p < 0.05; *** p < 0.001.

Number of dislikes. The impact of function words was significant and negative (β= -0.008, p=0.040, IRR=0.992), which means this way of expressing thought processes reduced the number of dislikes, supporting H1c. The use of the pronouns "she/he" had a significant and positive effect on dislikes (β=0.064, p=0.003, IRR=1.066), and the use of the pronoun "they" had a negative effect on dislikes (β= -0.101, p=0.003, IRR=0.904), suggesting that a more social-focused style was more greatly appreciated, supporting H2c.

Regular verbs had a negative effect on the number of dislikes (β= -0.045, p=0.000, IRR=0.956), supporting H3c. The effect of analytical thinking on the number of dislikes was significant and negative (β= -0.006, p=0.000, IRR=0.994); thus, a more formal and logical style attracted a smaller number of dislikes, rejecting H4c. Both subjectivity (β= -0.324, p=0.048, IRR=0.724) and positive emotional valence (β= -4.107, p=0.000, IRR=0.016) were significantly associated with fewer dislikes, supporting H5c and H6c.

Regarding video content category, "home" videos (β= -0.297, p=0.000, IRR=0.743) and "fashion" videos (β= -0.274, p=0.000, IRR=0.760) were negatively associated with a greater number of dislikes; H7c was thus partially accepted. Regarding the post time, videos posted during business hours received fewer dislikes than those posted during non-business hours (β= -0.712, p=0.000, IRR=0.491), rejecting H8c. Videos posted on Wednesday (β= -0.343, p=0.000, IRR=0.710), Tuesday (β= -0.222, p=0.000, IRR=0.801), Thursday (β= -0.132, p=0.043, IRR=0.876), and Sunday (β= -0.403, p=0.000, IRR=0.669) received fewer dislikes, rejecting H9c. Medium-length videos received fewer dislikes than short ones (β=0.083, p=0.028, IRR=0.921); however, long videos received more dislikes (β=0.323, p=0.000, IRR=1.382), perhaps because a long time spent watching the video induced consumers to manifest more discontent. Thus, H10c was partially supported.

Number of comments. The impact of function words were significant and positive (β=0.014, p=0.002, IRR=1.014), supporting H1d. The use of the pronouns "you"' (β= -0.025, p=0.030, IRR=0.976) and "they" (β= -0.108, p=0.004, IRR=0.897) had a significant and negative effect on comments. Meanwhile, using "she/he" increased the number of comments (β=0.038, p=0.095, IRR=1.039), partially supporting H2d. Regular verbs negatively impacted the number of comments (β= -0.035, p=0.000, IRR=0.966), supporting H3d.

Analytical thinking was not significantly associated with the number of comments, rejecting H4d. Subjectivity was significantly associated with more comments (β=4.893, p=0.000, IRR=133.302), rejecting H5d. Positive emotional valence was significantly associated with fewer comments (β= -6.954, p=0.000, IRR=0.001), rejecting H6d. Regarding video category, "gaming" (β=0.164, p=0.036, IRR=1.178), "food" (β=0.290, p=0.002, IRR=1.337), and "entertainment" (β=0.270, p=0.001, IRR=1.310) received more comments, while "fashion" (β= -0.210, p=0.008, IRR=0.811) received fewer. Thus, H7d was partially accepted.

Videos posted during business hours received fewer comments than those posted during non-business hours (β= -0.903, p=0.000, IRR=0.405), supporting H8d. Videos posted on Saturdays (β=0.187, p=0.011, IRR=1.206), Tuesdays (β=0.126, p=0.075, IRR=1.135), and

Mondays (β=0.167, p=0.017, IRR=1.181) received more comments than those posted on Wednesday (β= -0.248, p=0.000, IRR=0.780), partially supporting H9d. Finally, both medium-length videos (β=0.287, p=0.000, IRR=1.332) and long videos (β=0.972, p=0.000, IRR=2.643) received more comments than short ones, supporting H10d.

5 DISCUSSION

5.1 Theoretical implications

The results of our study show that not all factors that help to boost the number of views and likes to have similar effects on the number of comments or dislikes. Thus, the choice of digital influencers or channel on YouTube should be based not only on the number of views and subscribers but also on how they communicate and engage with users.

Following ELM, this study shows that the specific linguistic style used in social media content elicits different routes of information processing. Using the dual-process model for online consumer behavior as the background and drawing upon information processing, the results help to improve the understanding of different attributes that contribute to the popularity of online content. For instance, marketers can employ the ELM framework to map out possible variables and assess their impact on attitude change (Teng et al., 2015). In this sense, YouTube offers a comparatively rich and long content format for analysis, which helps to highlight information about influencers/brands even if the brands are peripheral to the video's main focus (Smith et al., 2012). The results of our analysis contribute to the understanding and application of ELM theory in social media content research, advancing previous studies that focused mostly on the message and its source only (Le et al., 2020).

Another contribution of our findings is in expanding growing research on the viability of linguistic elements in marketing communication, i.e., not only the informational content itself but how it is presented. We tested the effect of several elements of language on DCE variables and, for instance, the use of function words was shown to have a positive impact on comments and a negative one on dislikes. As expected, a greater cognitive processing favored the assessment of these linguistic latent elements of communication. Writing style influenced how readers evaluated the content, corroborating the conclusions of Liu et al. (2019).

The overuse of the pronouns "you" and "they" negatively affected digital engagement via likes and comments, suggesting that content creators should avoid addressing their content directly to "others." This might be explained by the arguments of Cruz et al. (2017), who

propose that second-person pronouns do not enhance consumer involvement and brand attitude when directed at consumers that are more (vs. less) collectivistic, as these tend to subordinate their own personal goals to the goals of their in-groups. The result of using "she/he" seems contradictory, as it encouraged dislikes while also having a positive effect on the number of comments. Unlike previous studies (Pennebaker et al., 2015; Xu & Zhang, 2018; Aleti et al., 2019), our results do not suggest that videos using an externally focused style (i.e., we-words, which usually demonstrate a higher confidence and expertise), are less likely to be liked. It is possible that YouTube users experience a greater sense of closeness and identification with influencers who show weaknesses and uncertainties, as suggested by Jordan et al. (2019).

The previous argument is also supported by the finding that subjectivity positively affected DCE variables. Hence, even if the consumer goal on YouTube content is to learn something or help deepen some personal interest, it is important that the video adopts a more personal tone of voice, with informal language, closer to the reality of the consumer. This finding also suggests that self-disclosure may be an effective strategy for encouraging post popularity. This corroborates predictions from ELM, as factors as content creator identity (self-disclosure) and reputation/self-presentation acting as peripheral factors, and thus, are processed through the peripheral route (Srivastava & Kalro, 2019).

Our results also show that viewers react negatively to the use of a large number of verbs, which indicates denser informational content, as well as more actions and temporal events, and demand higher message elaboration. Given that function words and a subjective style are good indicators of the broad ways people connect to others, verbs may also distance the speaker from the behaviors and occurrences described. Pennebaker (2011) also notes that people who use verbs at high rates tend to be more deceptive than people who use fewer verbs. At the same time, they reduce the number of dislikes.

Our findings also show that the most argumentative/informative are less viewed than others, perhaps because of their increased cognitive complexity. Moreover, these videos received fewer dislikes, contradicting the literature on the effectiveness of narrative content on social media (van Laer et al., 2018; Aleti et al., 2019). This may indicate that people are more focused on problem-solving information when on YouTube than when on other platforms, like Facebook and Instagram.

Regarding emotional valence, our results corroborate those of Labrecque et al. (2020), in the sense that positive emotions impact negatively the number of views, likes and comments. It is possible that extremely positive emotions are considered unrealistic or associated with dishonest behavior. Tellis et al. (2019) also suggested that sharing negative ad content might be

consistent with an altruistic motive, i.e., individuals may want to share content that warns others of fear, shame, or sadness-inducing outcomes that may befall them when using (or not) a given product. Another explanation for our results is the possibility that cognitively involved readers prefer double-sided reviews or even that the degree of the persuasiveness of the information is driven by underlying psychological factors like consumption goals of the content creator (Kujur & Singh, 2018). In this sense, negative messages tend to include more diagnostic features associated with the product/service, and thus, tend to be more informative (Chen, 2020).

The previous argument is aligned with ELM theory since high engagement in information acquisition leads to higher elaboration and to the central processing route. Overall, our findings suggest that consumers prefer videos with moderate levels of emotion and low levels of arousal. Discrete positive emotions are helpful as they associate with socializing motivations for consumer engagement (Tellis et al., 2019). Nevertheless, consumer engagement on YouTube is evidently a more complex behavior than just emotional valence and depends on several other factors, such as consumption goals and previous experience/relationship with the channel/digital influencer.

Regarding the date and time of posting, our analysis shows that videos posted during non-business hours during weekdays receive a greater number of likes and views (and fewer dislikes), especially on Mondays, Tuesdays, and Thursdays. This may be a particularity of user behavior on YouTube, as consumers need more time to watch a video than to read a post on Facebook, Instagram, or Twitter. However, this strategy should be taken with a grain of salt because, as shown by Sabate et al. (2014), the decision of the most effective time is still context-dependent and controversial.

Finally, regarding video duration, consumers seem to like medium-length and long videos (i.e., 10 minutes or longer) more than short ones. This means that those willing to watch more than a few minutes of a video are more prone to like and comment on it.

This study highlights the importance of several content factors in information processing, such as argument quality (i.e., the linguistic construction and word choice) and message valence. Deliberation and cognitive processing are an integral part of message evaluation/adoption and hence, these factors contribute significantly to consumer engagement. However, it is important to note that our findings represent general tendencies and that different consumers can use their own combinations of quality content and creator attributes when processing and evaluating videos. Each consumer adopts a cognitive resourceful strategy based on their own personal characteristics, as well and the video content and embedded sentiments for purchase decision and engagement (Srivastava & Kalro, 2019).

5.2 Practical implications

This study is useful for digital influencers and brands alike who wish to engage users in their social media activities. Our findings provide insights into how influencers should better perform their social media communication strategy, not only by focusing on content but also on the linguistic style, as shown by the summary of our findings in Table 8. Overall, these results suggest that managers wanting to boost the number of likes and comments should focus on medium-length and long videos that are less action- and tense-focused and have subjective content.

Table 8. Summary of findings

Variable	Post Views	Post Likes	Post Dislikes	Post Comments
	Low elaboration likelihood ⟵⟶ High elaboration likelihood			
Linguistic elements	Regular verbs (-) Analytic thinking (-) Subjectivity (+)	You (-) They (-) Regular verbs (-) Subjectivity (+) Positive emotion (-)	Function words (-) She/he (+) They (-) Regular verbs (-) Analytic thinking (-) Subjectivity (-) Positive emotion (-)	Function words (+) You (-) She/he (+) They (-) Regular verbs (-) Subjectivity (+) Positive emotion (-)
Content category	Home (-) Fitness (-) Fashion (-) Entertainment (+)	Travel (-) Kids (-) Home (-) Fitness (-) Fashion (-) Entertainment (+)	Home (-) Fashion (-)	Gaming (+) Food (+) Fashion (-) Entertainment (+)
Posting and duration	Business hour (-) Thursday (+) Sunday (-) Monday (+) Video longer (-) Video medium (-)	Business hour (-) Thursday (+) Sunday (-) Monday (+) Video longer (+) Video medium (+)	Business hour (-) Wednesday (-) Tuesday (-) Thursday (-) Sunday (-) Video longer (+) Video medium (-)	Business hour (-) Wednesday (-) Tuesday (+) Saturday (+) Monday (+) Video longer (+) Video medium (+)

Notes: (+) = Marketing managers should consider these elements to increase digital engagement actions; (-) = Marketing managers should avoid these elements. For number of dislikes, the analysis is the opposite.

Unlike users of other social media sites (e.g., Facebook, Twitter), YouTube users seem to favor medium and long videos. The more time viewers have to process information within the content/advertisement, the more familiar they become with the product and other

information contained (Newell & Henderson, 1998). As a result, longer videos become more popular (as shown by the number of likes and comments, as well as, partially, by the number of dislikes). Thus, managers can improve viewer recall of brand messages by concentrating their efforts on these videos.

Moreover, as shown by our results, the use of function words seems to be associated not only with higher information processing, but also with more comments and a reduced number of dislikes. Hence, using more function words in YouTube videos may have positive impacts on marketing campaigns since, as shown by Yoon et al. (2018), a higher number of comments can foster an increase in company's revenues. In the same way, a more personal and closer conversation can help to build a relationship with users.

Marketing managers should avoid videos loaded with extremely positive emotion, which are shown by our results to lead to less engagement. In order to entice consumers' attention and, consequently, increase the chance they will consider the brand's product or service, it is helpful to balance these videos with moderate emotion, and even some negative ones (e.g., sadness, anger and shame). However, despite the fact that negative emotions may increase consumer engagement, their level of influence in the effective experience of people may be also comparatively low when compared to positive emotions (Kujur & Singh, 2018; Xu & Zhang, 2018; Aleti et al., 2019; Tellis et al., 2019).

Posting during non-business hours also helps to increase the number of views, likes, and comments, possibly because most people are working or busy at that time and cannot dedicate enough time to watch long videos (even if they get notifications of new video posts during business hours). This is a particularity of YouTube, in the sense that content on its platform requires more effort and attention from consumers than contents posted on other social media such as Facebook, Instagram and Twitter.

In the other hand, our analysis revealed that videos posted on certain weekdays (Monday, Tuesday and Thursday) were significantly more popular than those posted during the weekend. Since previous literature (for instance, Sabate et al. 2014; Devereux et al., 2020) has found no effect of day of posting on video popularity, it is possible that this finding is very context dependent. For this reason, managers should not focus so much on the day of posting and instead prioritize the attributes of language style and emotion previously discussed, as well as video length. For instance, if the main objective is to avoid dislikes, managers should prioritize videos with medium duration, whose contents are associated with positive valence emotions, and use more subjective language and a narrative style.

Finally, managers may want to prioritize sponsoring or associating their ads with categories such as entertainment, gaming, and food rather than others like fashion and fitness. However, the increased engagement with these videos may also bring a higher number of dislikes.

For managers and content creators, the key to creating and sustaining consumer engagement may come from the ability to adequately use cohesive social media strategies across different channels (Oh et al., 2017). Given the advancements in machine learning and natural language processing in marketing, managers should learn to use these techniques in order to better understand which features of social media content signal good quality content to their specific customers. Thus, brands will be more prepared to improve communication and aggregate value to their own consumers.

5.3 Limitations and further research

This study is subject to several limitations. First, our computerized technique extracted all available autogenerated captions from the videos in our sample as textual data. Relying on these captions is not always ideal, as they are the products of an automatic conversion of audio into text, and the quality of this process is dependent on several factors, such as the presence of noise, and semantic errors. We executed the preprocessing phase in sentiment analysis to clean up the dataset, but flaws may remain.

Second, the current version of LIWC's word dictionary is not fully able to capture the diversity of internet slang and codes, as well as various types of sentiment expressed using emoji. Moreover, since linguistics studies often present controversial findings, future studies should investigate more deeply the use of personal pronouns, function words, and other grammatical categories in YouTube videos.

Third, the unit-level of analysis in this study was the video rather than the content creator, which leaves room for further investigation into how the characteristics of digital influencers influence video popularity. Finally, the study's conceptual model focused only on video aspects and ignored audience profiles. Hence, future research could examine if different audience profiles, personal goals, and involvement levels react differently to different language styles.

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ARTICLE 4

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DOES YOUR STYLE ENGAGE? A TAXONOMY OF SOCIAL MEDIA INFLUENCERS AND ENGAGEMENT REACTIONS

Introduction

A social media influencer (SMI) is a person who consistently creates contents for a given audience on a social media platform, establish relationships with the audience, stand out as an opinion a leader in a community, and ultimately are able to influence people to adopt certain behaviors, such as purchasing the products of a sponsoring brand (Sette & Brito, 2020). Due to the increasing popularity of social media over traditional media and other sources of influence, SMI's have been gained increasing popularity across several domains, including marketing planning. For brands, working with an influencer that speaks to their target audience has become pivotal to the success of any campaign, regardless of sector or niche (Hughes, 2020). According to the Digital Marketing Institute, businesses earn an average of $5.20 on every dollar spent on influencer marketing.

However, most marketers find sourcing relevant influencers for their campaigns a real challenge. A recurring question is the criteria for choosing the SMI that appeals the most to a particular target group and it is able to engage them the most (Djafarova & Rushworth, 2017). Due mostly to the recency of the topic, marketing literature still lacks solid guidelines to help managers identify and select different SMIs profiles for their campaigns. There are many types of influencers on social media, not only in terms of reach, but also of personal attributes and communication style. Marketing literature has already provided some evidence on the impact of certain characteristics such as attractiveness, expertise and originality on online consumer responses, but these findings do not provide a clear picture of SMI's profiles and their efficacy for the outcomes of marketing campaigns, such as consumer engagement.

Hence, to solve this gap, our study investigates the impact of different profiles of digital influencers, integrating a series of factors that help them establish relational bonding with their followers: their personal characteristics – i.e., attributes such as trustworthiness, originality, expertise, and self-disclosure – and the linguistic style used in their posts – the emotional tone,

the analytical or narrative style, among other (Ki, Cuevas, Chong, & Lim, 2020; Vrontis et al., 2021). We draw on the existing findings on influencer marketing, as well as concepts of human brand and parasocial relationship theories, to select both personal characteristics and elements of linguistic style for investigation. We then show the results of an empirical research designed to identify how these attributes are present in successful digital influencers in the form of specific profiles. Finally, we propose a taxonomy of these SMI profiles and show how each one has different impacts on digital consumer engagement. In this sense, we also consider "engagement" as a series of passive or active behaviors (likes vs. comments, for instance) to present a more precise description of the influence of digital influencers on their audience (Francalanci & Hussain, 2017; Vrontis, Makrides, Christofi, & Thrassou, 2021).

The present research also distinguishes itself by the use of speech transcripts from more than 11,000 published videos in 134 different YouTube SMI's channels from March 30, 2007, to July 15, 2019, to provide a more accurate portrait on the linguistic style and personal characteristics of influencers. YouTube is the largest video-sharing site in the world – official YouTube statistics (2021) states that there are more than 2 billion users who watch YouTube videos every month, and every day people watch over a billion hours of video. Further, over 70% of viewers say that YouTube makes them more aware of new brands, and viewers are four times more likely to use YouTube versus other platforms to find information about a brand, product, or service (Google/Talkshoppe, 2020).

The results of this study contribute to the human brand literature and parasocial relationship theory by revealing six SMI profiles and their respective influence on their audience. In addition, our research offers important contribution to marketing practice, especially on the planning of influencer marketing strategies and social media advertising. Based on the proposed typology of SMIs, managers may select the most appropriate profile of influencers for the desired objective, especially when considering long-term partnerships.

2   Conceptual Background

2.1 Digital Engagement with Social Media Influencers

Digital consumer engagement refers to consumers' interactions with a brand or influencer in a digital environment; it strengthens their investment in the sponsored brand at

different levels and phases to produce traceable reactions such as impressions, clicks, likes, comments, and shares (Gavilanes, Flatten, & Brettel, 2018).

Gavilanes et al. (2018) postulate a model that includes a continuum of different levels of digital engagement on social media. At the beginning of the continuum, consumers click on posts merely to consume content (e.g., to read more, play a video, participate, follow up), which requires little investment from them. Clicking on the "like" button represents a moderate level of engagement and a more emotional investment from consumers, which is associated with a positive attitude toward the content (Gavilanes et al., 2018; Banerjee & Chua, 2019). The action of liking a message is more intuitive, reflexive, less involved, and less cognitive (Labrecque, Swani, & Stephen, 2020). A high number of likes may thus indicate that a post's content is of interest, increasing its capacity to disseminate its message to a broader audience (Sabate et al., 2014). The same is presumably true of the "dislike" button, except it signals a negative reaction to the video and an attitude of denial.

Writing a comment involves more emotions and feelings, as people usually comment when the content is really meaningful for them or demanding immediate action (Sabate et al., 2014). Therefore, this response is considered a stronger form of engagement (Gavilanes et al., 2018; Yoon et al., 2018; Labrecque et al., 2020).

Though these digital actions can be conceptually regarded simply as "consumer engagement", they reflect qualitatively different types of digital engagement (Yoon et al., 2018). We may expect different reactions to different content, considering the effects of content video characteristics on the four engagement-related marketing outcomes: views, likes, dislikes, and comments. For this reason, a complete understanding of digital engagement with social media influencers depends on considering the effects of posts' characteristics on different user behaviors – or in the case of YouTube videos, the four main engagement-related marketing outcomes: views, likes, dislikes, and comments (Munaro et al., 2021). These metrics not only show the online popularity of videos and SMI's on YouTube, but also the viewers' satisfaction with its content. Hence, digital engagement may suggest whether the product/service featured is going to be a hit in the market or not (Aggrawal et al., 2018).

Finally, a complete understanding of digital engagement also depends on the understanding of the influence of several factors on that engagement (Aggrawal et al., 2018). Among these factors, we can highlight communication and psychological attributes such as the linguistic style used in videos and the personal characteristics of the SMI that elicit the most consumer engagement.

2.2 The Role of SMI's Personal Characteristics

YouTube influencer status seems to arise from a blurring between the creator's private and public life, and a sense of authenticity that arises often from perceived amateur status (Jerslev, 2016). Then, we assume SMIs as a type of human brand in that they showcase brandable persona-driven qualities and content curation skills, both of which allow them to perform as a brand influencer in marketing efforts (Erz & Christensen, 2018; Ki et al., 2020).

The literature on SMI's has shown evidence that some characteristics of influencers play an important role in consumer's perception of information credibility and usefulness, brand attitude, intention to buy, and information adoption (Martensen, Brockenhuus-Schack, & Zahid, 2018; Ismagilova, Slade, Rana, & Dwivedi, 2020; Munaro et al., 2021).

Among the SMIs' personal characteristics that have been mostly often found to affect the popularity and credibility of influencers, as well as the effectiveness of their endorsements, we list their trustworthiness and expertise (Munnukka, Maity, Reinikainen, & Luoma-aho, 2019; Weismueller, Harrigan, Wang, & Soutar, 2020; Ismagilova et al., 2020), their social and physical attractiveness (Sokolova & Kefi, 2019; Wiedmann & von Mettenheim, 2020), and their the perceived authenticity and self-determination (Ilicic & Webster, 2016; Hudders et al., 2021). Other personal characteristics include originality (Casaló, Flavián & Ibáñez-Sánchez, 2018), self-disclosure (Reinikainen, Munnukka, Maity, & Luoma-aho, 2020), closeness (Ferchaud, Grzeslo, Orme, & LaGroue, 2018; Hudders, De Jans, & De Veirman, 2021; Kim & Song, 2016), and the information quality of their content (Balabanis & Chatzopoulou, 2019; Ki et al., 2020),

The influencers' trustworthiness has been often associated with their power to impact consumers' perceptions, attitudes and even purchase behaviors (Uzunoğlu & Kip, 2014; Weismueller et al., 2020). Trustworthiness refers to a source's honesty, credibility, and integrity (Erdogan, 1999; Ismagilova et al., 2020), or in other words, the receiver's perception of the probability that an endorser communicates the claims that he/she considers most truthful (Munnukka et al., 2016). Consumers tend to believe that influencers are trustworthy sources (especially in comparison to advertising and traditional media) who express their genuine liking for a brand, and thus, are more persuasive (Erdogan 1999; Ohanian, 1991; Martensen et al., 2018).

Expertise describes a person's level of knowledge and experience in the given domain, as well as the extent to which that person can provide correct information (Chung & Cho, 2017; Munnukka et al., 2016; Ismagilova et al., 2020; Sokolova & Kefi, 2020). An expert source is

usually readily acknowledged by consumers as someone with the experience and problem-solving skills within a given domain (Chung & Cho, 2017; Wiedmann & von Mettenheim, 2020). Influencers who are perceived as experts and who share intimate and authentic information with their followers may attract more followers and have a stronger impact on those followers' decision-making (Ki & Kim, 2019; Hudders et al., 2021).

Attractiveness refers to both the physical and social attractiveness of the source (Ohanian, 1990; Wiedmann & von Mettenheim, 2020). To Martensen et al. (2018), physical appearance is of particular importance for SMI's in fashion, as people find it essential to be able to see themselves in the outfits worn by the influencers. To Ki and Kim (2019), the attractiveness of SMI's is the quality that most affects online peers' attitudes toward them as taste leaders, while also having a significant effect on brand image and brand trust (Wiedmann & von Mettenheim, 2020). The more attractive followers find the influencer, the more likely they are to have positive attitudes toward the influencer and likely to buy products promoted by that influencer (Taillon, Mueller, Kowalczyk, & Jones, 2020).

The perceived authenticity of SMI's refers to how consumers see them as behaving autonomously and self-determined in relationships (Ilicic & Webster, 2016). An authentic SMI creates content by intrinsic and self-gratifying motivations and can encourage a sense of freedom and connectedness with others (Jun & Yi, 2020). The influencer's authenticity is thus highly valued by followers and has a positive effect on photo attitudes and purchase intentions ((Pöyry et al., 2019; Hudders et al., 2021). Moreover, authenticity mediates the effect of interactivity on emotional attachment and directly affects brand trust (Jun & Yi, 2020).

Self-determination is a characteristic intimately connected to authenticity (Ilicic & Webster, 2016). As the SMI does not make followers feel controlled and pressured to be certain ways, self-determined influencers can satisfy basic human needs for freedom, connection, and strong emotional bonds (Ilicic & Webster, 2016). The SMI's interactivity enhances their authenticity and long-term brand equity, and these characteristics seem to influence consumer's trust and loyalty to sponsored brands (Jun & Yi, 2020).

Originality could be defined as the degree of newness and differentiation that some individuals achieve by performing certain actions, or as the extent to which these actions are perceived as unusual, innovative, and sophisticated (Casaló, Flavián & Ibáñez-Sánchez, 2018). The perceived originality and uniqueness of SMI's content may increase consumers' intention to interact with them, recommend them to others, and follow their published advice (Casaló et al., 2018).

The SMI's self-disclosure seems to be the key to a successful career, enabling followers to perceive them as the kind of person they would like to be (Ki et al., 2020; Reinikainen et al., 2020). Accordingly, SMI's often address their audience directly, sharing their experience and opinions but also featuring themselves in action during their daily lives (Sokolova & Perez, 2021; Chung & Cho, 2017). Thus, SMI's who self-disclose more often may be able to build deeper parasocial relationships with their viewers, encouraging viewers to not only like them but to self-disclose in return (Ferchaud et al., 2018; Martensen et al., 2018; Reinikainen et al., 2020).

Closeness is a characteristic usually associated with self-disclosure on social media (Barcelos et al., 2018). Through social media interactions, influencers can create a feeling of connectedness, perceived friendship, understanding, and identification with influencers (Chung & Cho, 2017). The more interactions an SMI's has with the audience, the higher probability of forming parasocial relationships with followers, increasing not only the perceived closeness, but the perceived authenticity (Chung & Cho, 2017; Hu, Min, Han, & Liu, 2020). Moreover, encouraging a sense of closeness with their followers seems to be an effective way to increase persuasive outcomes (Ki et al., 2020).

Finally, information quality is a known significant predictor of perceived credibility (Xiao, Wang, & Chan-Olmsted, 2018). Social media followers satisfy their needs for competence when they perceive an SMI's content to be informative, affecting consumer perceived information credibility on YouTube (Xiao et al., 2018; Ki et al., 2020). In addition, an organic content strategy that prioritizes quality over quantity (for example, content originality and creativity over the number of posts) is positively associated with increased engagement with the influencers (Tafesse & Wood, 2021).

2.3 The Role of SMI's Linguistic Style

The literature on social media communication has suggested that the linguistic choices of messages can play a critical role on their emotional contagion and social influence (Francalanci & Hussain, 2017; Lee et al., 2018; Aleti et al., 2019; Burton et al., 2021; Lee & Theokary, 2021). Hence, by aligning elements such as analytical thought, clout, emotional tone, and temporal focus, SMI's should be able to enhance authenticity in their interactions, thereby enhancing communication effectiveness and engagement.

Since text-based language is a central component of marketing communications on social media, its essential to understand aspects of language that drive engagement (Pezzuti,

Leonhardt, & Warren, 2021). Language is the most common and reliable way for people to translate their internal thoughts and emotions into a form that others can understand (Tausczik & Pennebaker, 2010). In this sense, the use of certain linguistic characteristics stimulates the mechanics of brand relationship connections and self-presentation during the decoding process, leading viewers to engage with the brand post through various actions (Barcelos et al., 2018; Labrecque, Swani, & Stephen, 2020).

The linguistic style reflects how people convey a message and is critical to understanding a person's state of mind (Tausczik & Pennebaker, 2010; Liu, Xie, & Zhang, 2019). For instance, the use of function words (articles, conjunctions, prepositions, quantifiers, auxiliary verbs, and a few other categories) has little lexical meaning, but has a significant impact on how the communication is received by listeners and readers (Liu et al., 2019; Ireland & Pennebaker, 2010). Moreover, pronouns are useful linguistic elements that can help identify the attentional focus, which in turn can reveal priorities, intentions, and processing (Tausczik & Pennebaker, 2010). Pronoun choices can also drive different types of social media engagement with branded content (Barcelos et al., 2018; Labrecque et al., 2020).

Analytical thinking reflects the degree to which texts contain a narrative versus analytical style (Pennebaker, Boyd, Jordan, & Blackburn, 2015). Stories have been established to be more persuasive than facts, and this is also often the case when it comes to the writing style (Aleti et al., 2019). Furthermore, directly informative content seems to be associated with lower engagement on social media than narrative content, but certain types of informative content can also induce higher click-throughs (Lee et al., 2018).

Another element of linguistic style, clout, means the degree which a communicator is in a position of knowledge, authority, and confidence (Tausczik & Pennebaker, 2010). Clout in language can be reflected in the use of more first-person plural pronouns (i.e., we) and second-person pronouns (i.e., you), since the opposite communicator puts focus on themselves through the increased use of first-person pronouns (e.g., "I" and "me") when they describe their challenges and appropriately disclose their vulnerability (Lee & Theokary, 2021). Aleti et al. (2019) argue that consumers prefer stories from celebrities that exude an elevated social status and are focused on the audience. Hence, clout should be a desirable characteristic of brand ambassadors as it helps establish credibility.

Finally, the emotional tone in language refers to the use with high levels of positive, negative, or neutral emotions (Tausczik & Pennebaker, 2010). In this sense, the presence of positive emotional content of messages is frequently associated with higher consumer engagement (Lee et al., 2018). However, Burton et al. (2021) suggests that SMI's should tone

down their positivity, especially in private exchanges, to enhance authenticity and increase persuasiveness. Moreover, Munaro et al. (2021) found that the use of negative or low-arousal emotion can also help to promote general interest in YouTube videos. Hence, it is possible that the effect of different emotions in messages depends on contextual factors, such as the topic of discussion, the audience, or the influencer's profile.

3 Method

To identify the influence of different SMI's profiles on audience engagement, we adopted a mixed-method approach combining data collected from 134 YouTube channels of digital influencers with primary data from manual evaluations of the same channels by human evaluators. Figure 10 shows all steps of data collection and analysis in both methods, including the machine learning process, the clustering stage, and statistical tests.
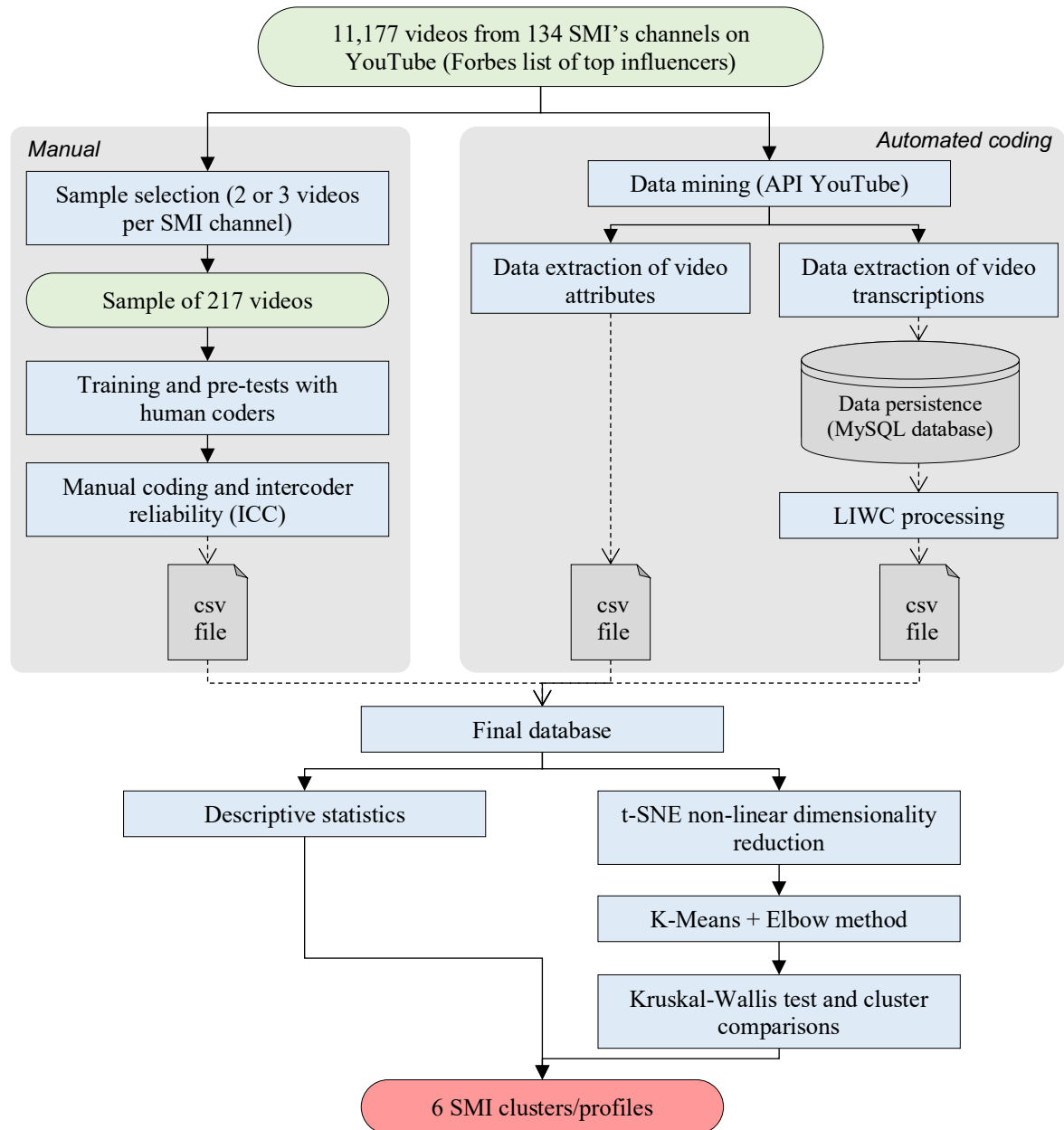
Figure 10. Method: data collection and analysis.

3.1 Data Collection

The data initially collected included the channels' information, the number of views, likes, dislikes, and comments, and other video post characteristics supported by the chosen API (application programming interface). We selected 134 SMI channels on YouTube from the Forbes' top influencers list of 2017 and collected all videos from March 30, 2007, to July 15, 2019. The resulting database consisted of a total of 11,177 published videos.

Data mining and automated coding. We relied on the application programming interfaces (APIs) provided by major social media to extract the videos' information on YouTube. The algorithm for data mining was developed in the Python programming language and the data persistence in a MySQL relational database. We used the YouTube API (called YouTube Data V3[7]) for most of the extraction process. For the transcriptions of videos, we used an open-source tool from Python API called "youtube-transcript-API[8]" which extracts all available auto-generated captions or automatic speech recognition (ASR) present in the videos and converts them into textual data (JSON file).

The text from captions was then processed and coded by the LIWC program from Pennebaker et al. (2015) to generate scores for several variables of linguistic and emotional style. LIWC (Linguistic Inquiry and Word Count) compares each word in an extract of text against an empirically validated base of nearly 6,400 words, word stems, and selected emoticons, and predefined word dictionaries. It then calculates the number of words that match each dictionary and assigns a percentile score (0–100) to represent the ratio of words corresponding to each category (Pennebaker et al., 2015). For example, the category "positive emotions" includes words such as "love", "loyal", and "fun", while the category "negative emotions" includes words such as "hate", "dislike", and "boring". Each category then represented a variable associated with the videos and channels of our database. One major advantage of using LIWC over other automated coding solutions is the fact that both the program and its categorizations have already been empirically validated by several studies across different domains (e.g., Pennebaker et al., 2015; Tausczik & Pennebaker, 2010; Labrecque et al., 2020; Delbaere et al., 2021).

Also in this stage, we used a machine learning model trained to classify the emotional valence and the subjectivity of an input text, thus complementing our database with two other variables of linguistic style. The model used for this classification employed a Naive Bayes Algorithm, a very common and effective classification method (Liu, 2012), with the open-source Text-Blob tool. The Python library was then used to process the textual data, based on the Natural Language Toolkit (NLTK). The positive valence of emotions in text can be captured by the frequency of words such as "happy", "excited", and "thrilled", whereas the negative valence of emotions is related to the frequency of words such as "anxious", "tragic", and "selfish" (Aleti et al., 2019). The output values for emotional valence ranged from −1 to +1, with +1 suggesting an extremely positive text and −1 an extremely negative one. For the

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[7] YouTube Data API: https://developers.google.com/youtube/v3
[8] YouTube Transcript API: https://github.com/jdepoix/youtube-transcript-api

analysis model, however, these values were normalized to a scale from 0 to +1 using the MinMaxScaler formula. The output values for subjectivity ranged from 0 to +1, with +1 being a very subjective text and 0 a very objective one.

Manual coding. In the manual coding stage, our objective was to evaluate the influencers themselves and not merely the content of each video. For this goal, we selected 217 videos in total – an average of two short videos (up to 5 min) and/or one longer video (10-15min) for each one of the 134 YouTube channels – that were later evaluated by three paid human experts. The selected videos in our sample responded to the following criteria:

- being representative of the main topic of the influencer channel (for example, a video in a gaming channel should be focused on games and not on any random theme which is not usually discussed by the influencers).
- being centered on the influencers themselves (and not on special guests or virtual influencers) and containing monologue or dialogue (hence no videos containing music clips or images only).

Three paid human experts in marketing coded the data independently. We gave each one a list with all channels and the selected videos in our sample and instructed them to all of them and then rate the influencers on a series of attributes that corresponded to the eight personal characteristics of interest. The scales chosen to evaluate each personal characteristic are all validated by psychology and communication literature: expertise (Ohanian, 1990; Ki & Kim, 2019), attractiveness, and trustworthiness (Ohanian, 1990) were measured by a 7-point semantic differential scale; authenticity and self-determination (Ilicic & Webster, 2016), originality (Casaló et al., 2018), closeness (Barcelos, Dantas, & Sénécal, 2018), information quality (Balabanis & Chatzopoulou, 2019), and self-disclosure (Kim & Song, 2016) were measured by 7-point Likert scales. All scales have high reliability (Cronbach's alpha ranging from 0.92 to 0.98 for the eight scales).

We created a guidebook to explain the definition of each personal characteristic and the rating scales. Next, we trained the coders using pre-test videos not included in the selected sample. We then discussed the results of the pre-test with the coders and reviewed the definitions to minimize future discrepancies. To assure the reliability of manual coding, we tested the results with the intraclass correlation coefficient (ICC), which is equivalent to the kappa statistic for continuous variables and serves to measure the degree of resemblance among raters (Cicchetti, 1994). After coding the 134 digital influencers, the three coders achieved an intercoder reliability of 0.781, which is considered high (Cicchetti, 1994).

Final Database. The data collected by the YouTube API and processed by LIWC and the machine learning model was then combined with data from the manual coding stage. During data collection, the automatic speech recognition (ASR) of some videos fail to provide a transcript of the audio, thus resulting in some missing values in our database (around 0.1% of all videos). Since the percentage of null values was very small and the data distribution was not normal (as shown by Kolmogorov-Smirnov tests and Q-Q plots analysis), we decided to fill in the missing variables with the mode value. Finally, the database containing values for all videos was aggregated to the channel level (n=134) for the analysis.

3.2 Data Analysis

Data analysis began with a descriptive statistical analysis on variables to check characteristics of the data distribution (histogram analysis) such as normality and missing values, as previously mentioned. Next, we proceeded to the clustering stage and finally to the test of statistically significant differences in the dependent variables (engagement metrics) among the obtained clusters.

Clustering stage. The clustering technique included all variables of linguistic style and personal characteristics from the influencers. An unsupervised learning technique was used for the clustering phase, combining the K-Means algorithm with the elbow method to determine the actual number of clusters (Bholowalia & Kumar, 2014; Syakur et al., 2018).

The K-Means algorithm is one the most common clustering methods (Syakur et al., 2018) and it uses the Euclidean distance between points to find similarities among the data and group them according to the defined cluster number (k) (MacQueen, 1967). The K-means algorithm has the limitation of requiring a predefined number of groups (k) and, since data has no classes *a priori* to discover, there is no optimal number of groups to find out (Syakur et al., 2018). Hence, the K-means technique finds a "pseudo-ideal number" of groups (k) to better represent the data set.

Moreover, clustering algorithms in general tend to be sensitive to the high dimensionality of the database (i.e., a large number of variables). For this reason, we decided to reduce the dimensionality of data before clustering, using the Principal Component Analysis (PCA) and the t-distributed stochastic neighborhood embedding (t-SNE) algorithm. The t-SNE algorithm' is a non-parametric clustering technique that captures much of the local structure of the high-dimensional data, while also revealing global structures such as the presence of clusters

at several scales. Moreover, the t-SNE determines the local neighborhood size for each datapoint separately based on the local density of the data. As a result, t-SNE generates a dataset with less attributes, but preserving the characteristics of the input database (Van der Maaten & Hinton, 2008).

Next, we used the K-means clustering technique on the database with reduced dimensionality and trained the data with different values of k (from 2 to 50 clusters). Due to the random initialization of the K-Means algorithm, this process was repeated ten times with different random seeds. After ten simulations, we identified the most frequent pseudo-k optimal for that dataset through the "elbow" criterion, which is based on the idea that one should choose a number of clusters so that adding another cluster does not give much better modeling of the data (Bholowalia & Kumar, 2014). For this goal, the percentage of variance explained by the clusters is plotted to show how much information is added by the insertion of new clusters. When the marginal gain from new clusters drops (represented by an angle in the graph), the optimum k can be chosen (Bholowalia & Kumar, 2014). As a result, our clustering stage resulted in six clusters.

Kruskal–Wallis test and statistical comparisons. Next, the Kruskal–Wallis rank-sum test for medians of several groups was used to identify statistically significant differences among the cluster characteristics – for both the variable used in the clustering stages and the engagement measures of interest. The Kruskal-Wallis test does not assume the normality of the data and works with unpaired samples, hence we considered it appropriated for our needs. Further, Bonferroni's *post hoc* pairwise tests were used to examine the significant differences for each of the personal characteristics and elements of linguistic style across the six generated clusters. Once all differences were between the generated clusters found, we looked at the descriptive data of each cluster to identify patterns. Finally, we proposed six profile names to categorize the different groups of social media influencers on YouTube.

4 Results

Table 9 shows the six clusters generated, including the model parameters and the results of the Kruskal-Wallis test of differences among clusters for all variables used in the clustering process. The names suggested for each cluster serve to describe the most distinctive attributes of each one, and to facilitate discussion.

Table 9. Cluster characteristics

Variable	Clusters						Kruskal-Wallis Test		
	Expert	Motivator	Attractive	Productive	Perfectionist	M-O-T-R	H	df	Asymp. Sig.
Personal characteristics of influencers									
Attractiveness	4.716	5.142	5.862	4.420	5.524	5.504	52.660	5	.000
Authenticity	4.732	5.440	4.871	4.639	5.317	4.833	48.377	5	.000
Self-determination	4.303	4.484	4.286	4.006	4.756	4.341	28.491	5	.000
Originality	4.375	4.853	3.717	4.259	5.023	3.972	46.592	5	.000
Expertise	6.037	5.035	5.287	5.363	6.120	5.969	49.281	5	.000
Closeness	4.571	5.320	4.891	4.812	5.164	4.659	36.606	5	.000
Information quality	5.682	4.885	5.130	5.019	5.689	5.578	45.120	5	.000
Self-disclosure	3.718	4.917	4.351	3.919	4.372	3.810	46.640	5	.000
Trustworthiness	5.837	5.512	5.337	5.085	6.061	5.782	37.748	5	.000
Linguistic style (Machine learning)									
Valence	.118	.129	.158	.136	.170	.153	18.401	5	.002
Subjectivity	.370	.433	.450	.451	.471	.418	9.148	5	.103
Linguistic style (LIWC)									
Word count (number)	1136.754	1475.756	2066.333	1724.720	1869.328	1741.295	18.361	5	.003
Analytic score	58.424	21.916	23.850	26.480	33.496	36.510	60.688	5	.000
Clout score	69.739	69.854	5.546	68.769	7.405	75.843	53.991	5	.000
Tone score	64.306	75.747	81.608	74.015	79.019	76.289	18.318	5	.003
Function words	47.153	56.131	58.024	53.372	56.277	55.067	42.618	5	.000
Pronouns	14.251	21.503	2.509	2.445	18.834	18.619	70.923	5	.000
Personal pronouns	7.778	13.652	12.436	12.570	11.107	11.355	76.121	5	.000
I	2.294	6.207	7.346	5.805	4.559	4.086	86.183	5	.000
We	1.089	1.564	1.046	1.766	2.103	1.788	38.158	5	.000
You	3.522	3.986	2.999	3.589	3.253	4.521	26.736	5	.000
They	.509	.664	.499	.477	.579	.487	7.126	5	.211
Articles	6.085	4.923	5.178	5.070	6.078	5.266	37.699	5	.000
Prepositions	11.399	1.302	11.699	9.781	11.594	12.538	60.022	5	.000

Aux verbs	7.317	11.001	1.331	1.739	1.351	9.223	45.084	5	.000
Adverbs	5.522	6.625	7.839	6.610	7.057	7.054	35.933	5	.000
Conjunctions	6.398	6.465	8.087	4.837	7.233	7.855	54.935	5	.000
Negations	1.065	2.211	1.596	2.303	1.554	1.263	66.825	5	.000
Verbs	13.999	21.166	2.079	21.485	19.664	19.486	54.715	5	.000
Adjectives	4.490	3.962	4.564	3.938	4.524	4.753	47.052	5	.000
Comparisons	2.106	2.399	3.138	1.964	2.544	2.504	42.586	5	.000
Interrogations	1.237	1.901	1.482	1.810	1.592	1.277	40.263	5	.000
Numbers	2.100	1.357	1.306	1.749	1.591	2.655	42.284	5	.000
Quantities	2.415	2.048	2.479	2.107	2.573	2.673	49.139	5	.000
Affection	3.985	6.133	5.243	6.551	5.192	4.635	62.956	5	.000
Positive emotions	3.166	4.554	4.298	4.698	4.196	3.770	38.530	5	.000
Negative emotions	.799	1.529	.902	1.786	.965	.790	51.129	5	.000
Anger	.199	.450	.166	.704	.211	.167	37.567	5	.000
Sadness	.151	.273	.168	.269	.180	.220	36.638	5	.000
Socialness	7.995	12.627	8.654	11.312	1.068	9.826	69.345	5	.000
Friendship	.240	.562	.617	.841	.468	.388	43.745	5	.000
Cognitive processes	9.359	11.395	12.039	1.192	11.256	9.872	30.098	5	.000
Differences	2.742	3.095	3.516	2.74931	3.134	2.787	28,100	5	.000
Seeing	1.517	1.606	2.343	1.66341	1.777	1.190	43.057	5	.000
Feelings	.629	.666	1.058	.639	.732	1.228	57.752	5	.000
Drives	5.902	7.405	6.201	8.456	7.742	7.978	53.017	5	.000
Affiliation	1.721	2.943	2.080	2.999	3.138	2.498	46.740	5	.000
Achievements	1.012	1.020	1.085	1.161	1.178	1.285	13.138	5	.022
Power	1.866	1.810	1.603	2.187	1.782	2.515	40.418	5	.000
Focus on the past	1.794	3.127	2.891	3.198	3.133	1.960	45.292	5	.000
Focus on the present	1.834	15.813	14.603	16.174	14.437	15.062	49.944	5	.000
Focus on the future	1.407	1.824	2.086	1.894	1.893	2.554	38.610	5	.000

Note. n=134.

The 6-cluster model proposed by our analysis can be considered the best solution for several reasons. In the comparative tests between the dimensionality reduction algorithms, we have already noticed that the t-SNE algorithm provided a better way to visualize this real-world dataset, grouping local data points closer to each other, which in many cases better matches human reasoning (Mounce, 2017). Once the clustering algorithm was selected, the simulations of clusters generated with different combinations of data showed that the six clusters solution was the one that best represented the digital influencers' channels, considering the influencer's main content and the personal characteristics' perception. Moreover, the 6-cluster model proposed shows statistically significant differences among clusters for almost all variables regarding personal characteristics and linguistic style (except for the videos' subjectivity average and the use of the personal pronoun "they"). Appendix A provides the list of SMI's YouTube channels in each cluster and their respective categories.

Table 10 compares the digital engagement metrics for each cluster, and also the results of the Kruskal-Wallis test of differences among clusters. The analysis shows statistically significant differences among the metrics of engagement for all variables. We can also notice that no cluster performs better than the others in all forms of engagement.

Table 10. Online engagement for each cluster

Variable	Clusters						Kruskal-Wallis Test		
	Expert	Motivator	Attractive	Productive	Perfectionist	M-O-T-R	H	df	Asymp. Sig.
Online engagement (DVs)									
Views per channel	362.573M	416.956M	151.260M	801.020M	158.378M	84.696M	22.557	5	.000
Likes per channel	4.349M	11.687M	4.794M	17.069M	4.534M	1.117M	18.050	5	.003
Dislikes per channel	346.306K	245.372K	95.110K	454.106K	145.716K	23.333K	26.958	5	.000
Comments per channel	446.622K	994.035K	522.674K	1575.440K	56.573K	75.260K	22.647	5	.000
Views per video	427.087K	562.603K	316.926K	340.819K	254.382K	132.919K	7.500	5	.186
Likes per video	5.123K	15.770K	1.045K	7.262K	7.283K	1.754K	11.174	5	.048
Dislikes per video	.407K	.331K	.199K	.193K	.234K	.036K	11.025	5	.051
Comments per video	.526K	1.341K	1.095K	.670K	.900K	.118K	15.637	5	.008
Views per subscriber	62.500	54.666	36.702	39.523	5.918	37.122	12.639	5	.027
Likes per subscriber	.750	1.532	1.163	.842	1.458	.490	22.533	5	.000
Dislikes per subscriber	.060	.032	.023	.022	.047	.010	10.434	5	.064
Comments per subscriber	.077	.130	.127	.078	.180	.033	21.470	5	.001
Other characteristics									
Subscribers per channel	5.801M	7.627M	4.121M	20.267M	3.110M	2.281M	24.880	5	.000
Videos per channel	848.944	741.120	477.273	2350.278	622.600	637.200	22.617	5	.000

Note. n=134.

Next, we describe and discuss each one of the six clusters. Supplemental files (available under request) present more detailed comparisons among all clusters, including Bonferroni's post-hoc pairwise tests between two clusters at a time.

The Experts. Influencers who are considered experts in their domains (6.04) and focus on high-quality information (5.68). Among all profiles, experts are the ones who speak with the most analytic, objective style (58.42% score) and the least emotional tone (64.3% score), while also disclosing the least of themselves (3.71). However, their informational videos are considered very trustworthy (5.84) and attract high interest (427.08K views per video). Their audience is also very loyal (62.50K views per subscriber), but do not engage as actively (5123 likes and 526 comments per video), suggesting that they consume videos more for utilitarian reasons and not to interact with the influencers. Experts also have the highest average ratio of dislikes per video (408) and per subscriber (0.060), which may be due to a very demanding audience. They account for 13.4% of the influencers in the sample, and come from various backgrounds, such as technology, business, and others.

The Motivators. Influencers who are not necessarily experts in their fields and do not invest in high-quality information (4.89, the lowest scores among all clusters) but are able to create a strong personal connection to their audience, as seen by their high levels of closeness (5.32), self-disclosure (4.92) and authenticity (5.44). Motivators prefer a very narrative style (the lowest analytical percentage among all clusters, 21.91%) and a very emotional tone, which includes both positive and negative emotions (4.55% and 1.53% score respectively). They also like to share their own thoughts and experiences, as seen by their high score of function words (56.13%) and personal pronouns (13.65%), which may help them look more empathetic. They attract a large audience (7.627M subscribers per channel, the second largest on average of all clusters), and on average, present the best performance metrics per video (562.60K views, 15.77K likes and 1341 comments per video). They account for 18.7% of the influencers in the sample and produce videos mostly in categories like entertainment and parenting.

The Attractive Ones. Influencers who are considered the most attractive (5.86), but also the least original (3.71). They speak eloquently (2066 words per video on average, the highest count of all clusters), and like to describe images and sensations (23.8% analytic score, meaning a very narrative tone) while keeping a friendly, positive tone (81.6% score) and a self-focused style (50.5% clout score) and avoiding controversy or negative emotions. They publish fewer videos than any other group but still succeed in having a very engaged audience for each of

them, as seen by the number of likes and comments per video (10.05K and 1.09K respectively). They account for 24.6% of the influencers in the sample, mostly from the categories of fashion and beauty.

The Productive Ones. Influencers who focus strongly on emotions, both positive and negative (4.70% and 1.79% respectively, the highest scores among all clusters), adopt a narrative style (26.47% analytical score) and like to share about thoughts and personal experiences (as the Motivators) but fail in creating the same level of connection and trust with its audience. That may be due to their lower levels of self-disclosure (3.91) and authenticity (4.63). As a result, they have relatively low engagement ratios per subscriber (0.84 likes and 0.08 comments per subscriber). However, they compensate this deficiency by publishing more videos than any other cluster (2350 videos per channel on average), and thus achieve the highest absolute engagement metrics (801.02M views, 17.07M likes and 1.57M comments per channel). They account for 13.4% of the influencers in the sample and produce mostly videos on gaming and entertainment.

The Perfectionists. Influencers who are highly evaluated in all personal characteristics and have the best scores in trustworthiness (6.06), expertise (6.12), self-determination (4.75), and originality (5.02). They also produce high-quality content (5.69) and speak in a confident, positive tone (79% score), with a high percentage of "we" words (2.10% score), which suggests a great effort towards empathy and sociability. They have the most engaged audience in terms of comments (0.18 per subscriber) and the second highest in terms of likes (1.46 per subscriber). However, as a possible trade-off of their commitment to perfectionism, they also produce comparatively fewer videos than other influencers and have a smaller reach (3,11M subscribers per channel). They account for 18.7% of the influencers in the sample and are found in several topics such as home, travel, technology, and business.

The Middle-of-the-Road. Influencers who rank average in most personal attributes and are generally seen as relatively reliable (5.78), attractive (5.50) and expert (5.97) in their domains. However, they are the least successful in attracting subscribers or eliciting engagement from their audience (as the by the lowest engagement ratios among all clusters). That may be due to a lack of a unique positioning in comparison to the other groups. Moreover, they usually prefer a more analytical style (36.51% score), avoiding strong emotions or sharing much of themselves, and keeping a position of distance and power (75.84% clout score, the

highest among all groups). They account for 11.2% of the influencers of the sample, acting mostly in the fitness and food channels.

5 General Discussion

By drawing on previous literature and on empirical data, our study showed how different SMI profiles – as defined by their personal characteristics and linguistic style – impact digital consumer engagement on YouTube videos. Our clustering analysis revealed six general SMI profiles on YouTube: The Experts, The Motivators, The Attractive Ones, The Productive Ones, The Perfectionists, and The Middle-of-the-Road. These profiles differ mainly regarding personal characteristics like attractiveness, expertise, information quality, and self-disclosure, as well as some key linguistic variables such as analytic style, emotional tone, pronouns, and functional words. Kruskal-Wallis tests of differences among clusters showed that the effectiveness of digital influencers depends not only on specific combinations of personal characteristics and linguistics features, but also on the type of engagement metrics chosen – absolute metrics vs. ratios per video or per subscriber; passive engagement (views) vs. active engagement (likes, dislikes, and comments).

5.1 Theoretical Contributions

This paper contributes to the extant literature in three main ways. First, we extend prior findings on SMI literature. Our results help to understand which profiles of digital influencers' personal characteristics and linguistic style attract more consumers, thus shedding light into the operating dynamics of engagement in virtual social networks. In this sense, our results contribute to the discussion about the typology of SMIs and the need to consider several personal characteristics of these human brands in the planification of marketing strategies, and not only traditional recommendations from celebrity endorsement theory (Chung & Cho, 2017; Weismueller et al., 2020). For example, although we confirm that personal characteristics such as attractiveness and expertise are important drivers of social influence, we show that other characteristics such as self-disclosure can be greater factors for engagement depending on the influencer's profile. In other words, it isn't always the most attractive or the most expert influencer who is able to draw more engagement from consumers. In addition, in response to the calls of Tafesse and Wood (2021) and Vrontis et al. (2021), this study helps to clarify which

traits predict successful influencers, as well as how their content strategies can affect followers' engagement.

Our research also provides insights to human brand literature by revealing specific qualities of SMI's that appear to influence the extent to which online peers view them as opinion leaders. Moreover, while traditional categorizations of SMIs are usually limited to the number of followers – celebrity influencer, mega-influencer, macro-influencer, micro-influencer, and nano-influencer, etc. – we present a new form of categorization that takes into account their personal characteristics, linguistic style and provides a richer panorama of different SMI profiles resulting in varied levels of consumer engagement. That perspective aligns itself to the understanding that social influence is a complex phenomenon and depends on how influencers present themselves to the public, develop relationships with users, and communicate with them through messages (Aleti et al, 2019). The outcome of social influence is also complex and should be understood through different engagement metrics – and not a single, absolute one such as the number of subscribers to the influencer's channel. Finally, our discussion on the six SMI profiles also suggests a particular behavior of human brands, i.e., the possibility that they manage and adapt their identity to derive greater user engagement, in a process of constant negotiation and re-interpretation (Erz & Christensen, 2018).

Finally, this study also contributes to the parasocial relationship theory. Our results are consistent with the field's literature by showed not only that influencers with greater self-disclosure are usually also perceived as more authentic, but also that this self-disclosure can encourage the formation of parasocial relationships (Ferchaud et al., 2018). Moreover, the increased performance in digital engagement of some SMI profiles may be explained by the identification created between the media persona and users looking for social interactions and companionship. Despite this, it is likely that influencers deliberately manage their performances to create the illusion of reciprocal interaction and may even perform in such a way they can appear to be adapting their performance to their audience's response (Ferchaud et al., 2018).

5.2 Managerial Implications

Our study offers some important implications for marketing practitioners and advertising managers who are planning and executing influencer marketing strategies. We provide insights on how influencers can focus on improving certain personal characteristics and linguistic style to better perform in their social media communication strategy. In this sense, we identified and tested the effects of eight personal characteristics (expertise, attractiveness,

trustworthiness, authenticity, originality, closeness, information quality, and self-disclosure) and several elements of linguistic style (analytic/narrative style, emotional tone, clout, and others) on their audience's engagement.

According to our findings, is no single attribute is universally more desirable than others, and no specific profile is necessarily better for any engagement outcome. Instead, marketing practitioners should consider partnering with different SMI profiles depending on the most relevant engagement metrics for their marketing plan – for instance, passible or active engagement, better notoriety of each given video or the SMI's channel as a whole. In this sense, marketers should also look for influencers whose personal characteristics and linguistic style align with the desirable outcomes, especially when trying to stablish long-term partnerships. The right combination among the sponsoring brand, the influencer, the content topic, and style may improve not only consumer engagement but also lead to a fruitful cooperation which can bring other benefits than money for all parties involved (Reinikainen et al., 2020). Table 11 presents some managerial indications, and some examples of SMI's channels for each influencer profile.

Table 11. SMI's profiles and opportunities for influencer marketing

SMI profile	Brief description	Opportunities for influencer marketing
The Experts	Influencers who are considered experts in their domains and focus on high-quality information. They speak with the most analytic, objective style and the least emotional tone, and disclose the least of themselves. However, their informational videos are considered very trustworthy and attract high interest (views), but not much active engagement likes and comments).	When marketers are planning to implement influencer marketing strategies for high-tech products that appeal to consumers' competence needs, they might want to focus more on curating informative social media content. Focus on product knowledge in their social media efforts. This could be achieved by social media influencers ensuring they post testimonials or 'how to' videos demonstrating the utility and functionality of the product, increasing sales prospects/leads, and customer engagement.
The Motivators	Influencers who are not necessarily experts in their fields but are able to create a strong personal connection to their audience. They prefer a narrative style and a very emotional tone, and focus on	Creates bonds with consumers, through their friendly attitude, and empathic storyteller. Focuses on the affective aspects to build your arguments. Suitable for improving brand awareness, increasing customer engagement. Recommendations to

	building closeness, self-disclosure, and authenticity. They attract a large audience, which is also very engaged.	Corporate Social Responsibility (CSR) campaigns, donation campaigns.
The Attractive Ones	Influencers who are considered the most attractive, but also the least original. They speak eloquently, like to describe images and sensations, and use a friendly, positive tone, avoiding controversy or negative emotions. They publish fewer videos than any other group but still succeed in having a very engaged audience for each of them.	Campaigns with the goal are to maximize the adoption of new products (increasing sales prospects/leads), particularly in the fashion or cosmetic industries, we recommend collaborating with this cluster to increasing customer acquisition, especially as they post visually appealing, apparently sophisticated content. Marketers can explore a branded content that provides detailed information about the product usage or unique product features. Also with a focus on creating relationships and loyalty, increasing customer engagement, due to the profile of a trusted friend they explore.
The Productive Ones	Influencers who focus strongly on emotions, both positive and negative, and like to share about thoughts and personal experiences, but fail in creating the same level of connection and trust with its audience as the motivators, maybe due to their lower levels of self-disclosure and authenticity. They have relatively low engagement ratios per subscriber but publish more videos than any other cluster and thus, achieve the highest absolute engagement metrics.	It focuses on affective aspects to build its arguments, in addition to a more narrative discourse focused on actions, recommended to improving brand awareness. However, with less engagement due to the lack of connection they create with users. They are the largest producers of videos in quantity, endorsing the frequency and constant presence, indicated for communications focused on scalability and product launches (focusing on capture prospects/leads).
The Perfectionists	Influencers who are highly evaluated in all personal characteristics. They produce high-quality content and speak in a confident, positive tone. They have the most actively engaged audience but, as a possible trade-off of their commitment to perfectionism, produce comparatively fewer	Campaigns with goal is to maximize coverage of corporate initiatives increasing sales prospects/leads, as these SMIs post informative, interactive content that showcases expertise. Due to the high acceptance, high perception of personal characteristics, and quality of information, it is recommended to communicate more premium products/lines, with greater

	videos than other influencers and have a smaller reach.	assertiveness for niche communication. Then, suitable for increasing customer acquisition.
The Middle-of-the-Road	Influencers who rank average in most personal attributes but are the least successful in attracting subscribers or eliciting engagement from their audience. That is possibly due to a lack of a distinctive positioning in comparison to the other groups. They prefer a more analytical style and avoid displaying emotions or sharing much of themselves.	It is recommended to use these influencers for maintaining campaigns to preserve the brand image and keep customer engagement, especially for low-priced products. It could be a group to test new web user experience and results in measurability tools.

In addition, the correlation between high levels of self-disclosure and closeness with the profiles whose audiences are the most actively engaged – Motivators and Perfectionists – suggests that the selection of SMIs for influencer marketing campaigns should focus on their ability to build and maintain personal bonds with fans. That should be especially true when influencers are looked for their potential in helping the brand to develop customer relationships and not only as visible outlets for publicity and advertising. Focusing on the follower count alone (i.e., the number of users of each influencer) is not ideal for a relational objective, which corroborates the argument of Tafesse and Wood (2021) that follower count and follower engagement are negatively associated. In this sense, a conversational communication style, responsive, and direct should be considered as an important endorser selection criterion (Chung & Cho, 2017). In the other hand, influencers from the Productive profile, with their large number of subscribers, may not be as useful to improve the brand relationship with its audience, but may be perfectly adequate if the goal is to increase brand notoriety and visibility quickly. These results also imply that influencers should consider carefully their own branding efforts and not aim exclusively at increasing their follower base as a means of driving engagement metrics and attract partnerships with brands.

Finally, our findings also show that, while useful, the volume of published videos does not necessarily imply a greater engagement of the follower base. Owing to the massive amount of content that users are exposed to on social media, content originality and the right linguistic style are crucial – and maybe more important than the number of videos – for influencers aiming to motivate their audience to engage with the published content. There seems to be a

trade-off between quantity and quality, as suggested by Tafesse & Wood (2021) and by the distinctive results of Perfectionists and Productive influencers in our findings. As it seems, trying to produce too many videos may compromise the influencers' creativity and originality.

Limitations and Further Research Suggestions

This study is not free of limitations. First, our data collection is largely based on automatic speech recognition (ASR) from video texts that are usually noisy due to the text extraction scheme employed. For instance, this speech transcript has no punctuation, resulting in transcriptions with some errors and language and accent barriers.

Second, the data used to propose our model and the six clusters was collected exclusively on YouTube. It is possible that user engagement on this platform differs qualitatively from other popular social media, such as Instagram, Facebook, and Twitter. Hence, it would be interesting for future studies to examine whether the results of our research can be applied on other social media venues, or if they will present distinctive SMI profiles.

Third, we focused only on personal characteristics that are usually considered positive and desirable (attractiveness, expertise, originality, etc.). Hence, future research could also include negative characteristics (such as arrogance, narcissism, etc.), to refine the proposed profiles and investigate their impact on consumer engagement and the image of the endorsed brand. It is possible that some negative characteristics may even be desirable for the success of influencers – for instance, Ferchaud et al. (2018) argue that negative self-disclosure may be useful since it may lead to perceptions of greater authenticity. Additionally, it would be interesting for future research to explore the potential differences within SMI profiles related to culture and geography, for example.

Finally, as another limitation of the study, we did not consider the effects of sponsored content disclosures on the engagement results of the influencers' content. Thus, future research should focus on sponsored content disclosure and its impact on the performance of each SMI profile, as well as the possible differences in linguistic style adopted by influencers to conciliate the brand's sponsoring and their own authenticity.

Appendix

Appendix A
List of SMI's channels in each cluster

Cluster	Category	YouTube channels
Experts (18)	Tech & Business (6)	Jonathan Morrison, Linus Tech Tips, Marques Brownlee, Tim Ferriss, Unbox Therapy, Vsauce
	Food (5)	Binging with Babish, Fit Men Cook, Natashas Kitchen, SweetAmbsCookies, The Protein Chef
	Fitness (2)	Michelle Lewin, OmarIsuf
	Travel (2)	Brian Kelly, The Planet D
	Beauty (1)	Wayne Goss
	Gaming (1)	The Game Theorists
	Kids (1)	Kids Diana Show
Motivators (25)	Entertainment (13)	Baby Ariel, emma chamberlain, FBE, Gabbie Hanna, IISuperwomanII, JennaMarbles, Lele Pons, Miranda Sings, MyHarto, shane, Simply Nailogical, Smosh, Tyler Oakley
	Parenting (6)	AmandaMuse, Ellie and Jared, MamaKatTV, Mommy Shorts, The Mom's View, The Parenting Junkie
	Kids (3)	Annie LeBlanc, Brooklyn and Bailey, McClure Twins Family
	Gaming (2)	OMGitsfirefoxx, SSSniperWolf
	Travel (1)	soniastravels
Attractive Ones (33)	Fashion (16)	Inthefrow, Bethany Mota, Chriselle Lim, Ingrid Nilsen, Jenn Im, Jessi Malay, Kalyn Nicholson, KathleenLights, Lydia Elise Millen, Negin Mirsalehi, Patricia Bright, Samantha Maria, Sammy Robinson, Song Of Style, Tanya Burr, Tess Christine
	Beauty (12)	AlishaMarie, Christen Dominique, Huda Beauty, Kandee Johnson, Laura Lee, Melissa Alatorre, NikkieTutorials, Safiya Nygaard, Sarah Betts, Shaaanxo, Tati, Zoella
	Home (2)	Ilikeweylie, LaurDIY
	Kids (2)	Sophia Grace, Wengie
	Fitness (1)	Heidi Somers
Productive Ones (18)	Gaming (11)	CaptainSparklez, DanTDM, jacksepticeye, Lachlan, LazarBeam, Markiplier, Ninja, PewDiePie, Sky Does Everything, theRadBrad, TheSyndicateProject
	Kids (4)	EvanTubeHD, Gabe and Garrett, KittiesMama, Ryan ToysReview
	Entertainment (3)	Dude Perfect, Jake Paul, Logan Paul Vlogs

Perfectionists (25)	Home (8)	Live Your Style, Mary Elizabeth, Jenna Sue, Karin Bohn, Mr. Kate, Studio McGee, TheSorryGirls, Three Birds Renovations
	Travel (7)	Hey Nadine, Mark Wiens, DamonAndJo, Fearless & Far, FunForLouis, Kristen & Siya, The Endless Adventure
	Tech & Business (4)	Marie Forleo, GaryVee, iJustine, Tai Lopez
	Beauty (3)	Manny Mua, James Charles, jeffreestar
	Food (2)	Rosanna Pansino, SORTEDfood
	Parenting (1)	WhatsUpMoms
Middle-of-the-Road (15)	Fitness (10)	blogilates, Bradley Martyn, FitnessBlender, HASfit, Lyzabeth Lopez, Natalie Jill Fitness, Simeon Panda, Steve Cook, The Body Coach TV, Zuzka Light
	Food (4)	How To Cake It, Inspiralized, Laura in the Kitchen, MyCupcakeAddiction
	Parenting (1)	Cute Girls Hairstyles

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PART 3

It makes me so happy. To be at the beginning again, knowing almost nothing...
The ordinary-sized stuff which is our lives,
the things people write poetry about—clouds—daffodils—waterfalls...
these things are full of mystery, as mysterious to us as the heavens were to the Greeks...
It's the best possible time to be alive,
when almost everything you thought you knew is wrong.
Tom Stoppard, Arcadia

Part 3 presents the main conclusions of this thesis, as well as limitations and directions for future work. In addition, it covers the references used in this document.

CONCLUSIONS

The presented studies began by identifying the state of art of literature and the determining factors from social media influencers that helping information diffusion on social media and affecting marketing' strategic decisions (study 1). The second study deepens this knowledge by better understanding the successful professional trajectory of influencers, through a qualitative content analysis (study 2). Following, it was measured which variables from SMI's have the greatest impact on online consumer engagement on YouTube (study 3). Finally, the authors identified different profiles of social media influencers proposing a taxonomy based on the similarities of attributes derived from the linguistic content of the videos and personal traits of the influencers and the impact of these variables on consumer digital engagement (study 4).

Social media influencers are seen as "pinnacle" for marketing campaigns, social media platforms and for thousands of people who aspire to be influential, in addition to being an ascended topic for the academy. To obtain a clear insight into the general tendencies in the research on social media influencers (SMIs) and to grasp current knowledge on the strategic use of influencers, the first study was a review article that summarizes 110 relevant papers on the SMI literature and their contributions. As result, we can categorize the six main axes of research in SMI literature so far: (1) The place of SMIs in the social network; (2) The celebrification of SMIs; (3) The characteristics of SMIs; and consequences: (4) The role of SMIs on information diffusion; (5) The relationship between SMIs and their followers; and (6) The impact of the characteristics of SMIs' on marketing. These thematic axes are then further subcategorized and related to five strategic influence marketing factors. Finally, we present our conclusions and propose an agenda to guide future research on SMIs.

The second study analyzed the professional trajectory of Brazilian digital influencers by identifying the milestones in their career from anonymity to stardom. To this end, we adopted an interpretative exploratory approach based on the observation and analysis of digital influencers' self-presentation videos on YouTube. As a result, five important moments emerged from data representing the main stepstones in the influencer career: 1) the initial stage, when they start a career as content creator; 2) the professionalization decision; 3) the image development, which includes career milestones such as the endorsement from traditional media, product development, partnerships and increased revenue; 4) the positioning review, comprising a crisis period and the subsequent image repositioning; 5) and finally, maturity and experience. These five stages describe the main events at the trajectory of professional influencers who evolve from ordinary YouTubers to become human brands.

Popularity on YouTube is an important metric for influencers and brands. It is linked to video relevance, content, and features that attract audience attention and interest. In the study 3, we present and test a model of YouTube video popularity drivers that trigger several engagement actions (i.e., number of views, likes, dislikes, and comments). These drivers include characteristics—such as language elements, linguistic style, subjectivity, emotion valence, and video category—that influence online video popularity on YouTube. An analysis of a database comprising more than 11,000 videos from 150 digital influencers shows that several factors help to boost the number of views, likes/dislikes, and comments. We find that medium-length and long videos posted during non-business hours and weekdays and those using a subjective language style, less-active events, and temporal indications are more likely to receive views, likes, and comments. Moreover, the use of negative or low-arousal emotion helps to promote a general interest in a YouTube video.

Social media influencer has become a global phenomenon. Several brands are investing huge budgets in influencer marketing, social media companies invest to build the best platforms for these influencers and more and more people want to follow this career. The fourth study identifies different profiles of social media influencers based on the personal traits and linguistics style of video content of the influencers and their impact on digital engagement behavior. We collected real data from 134 channels of top world influencers, using machine learning techniques and clustering analysis. We identified six different digital influencers' profiles on YouTube, presenting a new form of categorization that considers their personal characteristics, linguistic style and provides a richer panorama of different SMI profiles resulting in varying levels of consumer engagement. The results offer important implications for marketing practitioners to find out the right combination among the sponsoring brand, the

influencer, the content topic, and style to improve consumer engagement and other benefits for all parties involved.

4.1   Theoretical contributions

The pursuit to find patterns in complex relationships and situations is not new, let alone an ordinary activity. The studies carried out in this thesis contribute to better understand the phenomenon of social influence on social media. From the initial theories whose concepts were based on epidemics and contagions, such as the spread of viruses, advancing to the diffusion of innovation theory that focuses heavily on the position of the opinion leader (seed/propagator) within a network of relationships and considers dichotomous decisions of the adopting innovation agents (imitators). We see that the process of disseminating messages and influencing people in their decisions on social media has incorporated new elements to embrace its own complexity.

This research provides a notion for understanding the processes underlying the development of influencer success in social media environments. With its multi-method approach, the current research offers a theoretical explanation for how social media influencers develop/maintain their influence relationships in these environments.

Thus, throughout the studies, we developed a greater understanding of the dimension of the role of social media influencers today, endorsing their great relevance for relationships with people and organizations on digital platforms. The main research gap developed was to find patterns/profiles of influencers on YouTube, which shed light on influencer marketing and social media influencer theories.

We found six profiles that behave and engage followers in different ways. These profiles, based on real data from more than 130 top world influencers, bringing together linguistic variables of content and personal traits, indicate that we can predict paths of social influence (digital engagement) on social media.

Moreover, this research brings theoretical advances explaining intrinsic aspects of content on social networks and how they can affect consumer responses on the networks. Better understanding how the audiovisual content (videos) through the adopted language engages is still little studied in the literature, we demonstrate that the choice of style/function words instead of content words is crucial in the public's perception and attitudinal responses. Thus far, academic research mainly focuses on online behavioral advertising and social media advertising

(van Noort et al., 2020). In this way, our studies contribute to theories of communication persuasion, such as ELM.

Another important theoretical contribution of the study was to raise personal characteristics of influencers beyond those widely explored by celebrity endorsement theories from traditional media (expertise, trustworthiness, attractiveness, credibility). Our study adds variables specific to influencers born in a digital environment, such as authenticity, closeness, originality, and self-disclosure. Thus, we deepened studies on social media influencers, in addition to considering these personal traits as part of the factors that affect digital engagement.

These personal characteristics so representative of social media influencers help establish strong and close ties with his followers, referring to parasocial interaction (PSI) theory, which is used to help explain the brand's success in developing strong ties with consumers through social media. The influencers have assumed this role to create and maintain strong ties with the user, they know how to say, what to say, when/how much to speak to their audience, the daily exposure of their lives, allows them to develop an almost familiar relationship. Thus, our study, by relating content features and personality traits to engagement outcomes, provides insights on how to preserve intimate, transparent, and authentic relationship feelings considering the increasing movement towards response automation.

4.2 Managerial contributions

Focusing on social media influencers, this study helps to figuring out what factors lead to individual information dissemination behavior and other digital engagement responses, and that can help understand the driving force behind viral contents and devise effective online marketing strategies.

Our study highlights some linguistic aspects of the language spoken, such as emotional words, the pronouns choice, number of verbs and adjectives, by social media influencers with the audience, and the impact of these content elements on digital engagement. Brands can choose SMI's who create a sense of PSI through crafting messages to include elements that signal that the brand is listening and responding to followers and by creating content that expresses openness in communication (Labrecque, 2014).

As users are more likely to rebroadcast content that matches their interests, organizations can tailor content to match the audience's interests to increase rebroadcasting activity from them rather than simply disseminate viral content (Zhang et al., 2017). Our study

helps managers to find the most suitable content for their needs, also considering the personal aspects of social media influencer as the issuer and creator of the content.

Understanding the strategy of brand/influencer content on social media is crucial. There is something that does not change: high-quality content (organic and relevant) is imperative for brand communication (Voorveld, 2019). The content is elastic and is much broader than advertising (van Noort, Himelboim, Martin, & Collinger, 2020). And we still do not understand precisely what kinds of content work better for which companies and in what ways (Lee et al., 2018). This reinforces the importance of the study for influencer marketing strategies. More importantly, we suggest that brand marketers and social media influencers need to be mindful in crafting their content, as it is their main bridge of communication with fans (Aw & Chuah, 2021).

Another important managerial contribution is the one that derives from the understanding of influencers as human brands and, therefore, they bring inherent characteristics of human beings, such as sadness, mood swings, anger, anxiety. Those Emotions are not common in brands' communication with their consumers. By better understanding the personality traits of social media influencers, managers can act more strategically in their marketing choices and communication campaigns. The study highlights eight main characteristics (expertise, attractiveness, trustworthiness, Celebrity brand authenticity, originality closeness, information quality, and self-disclosure) that give us indications of the effect they have on the results of engagement with the consumer.

Thus, through the six identified social media influencer profiles, managers can choose which SMI is most appropriate with the company's marketing and positioning/values objectives. Before any strategic decision, we know the importance of collecting the right data, our study comes to fill this crucial need for information about digital influencers. More than that, the literature reinforces that the congruence between the influencer, the product, and the company is a fundamental factor for more effective results, long-term partnerships and positive consumer feedback from both actors (company/influencer).

We further advocate that influencer marketing should focus on activating parasocial relationships. The identified SMI profiles help managers in this choice for stronger ties with consumers, social media influencers engage in a more interactive manner with their followers through their personal channels (Aw & Labrecque, 2020; Chung & Cho, 2017).

In an increasingly competitive scenario and consumers increasingly aware of the role of brands and their impact on the environment in which they operate, it is essential that marketers realize the potential pitfalls and opportunities of these influencers as communication channels.

Understanding the underpinnings of the relationships they create with consumers will be the key to success.

LIMITATIONS AND FUTURE STUDIES

This research has several limitations. First, the study focuses on analyzing the content of the speech transcription from videos of social media influencers, without considering the textual descriptions of the videos, or other sound elements, such as music tracks, vocal characteristics, and sound effects. Future studies may also consider the textual descriptions of videos on YouTube as a complementary factor to the video content, as well as analyzing the other sound elements and the relationship with the present imagery elements (e.g., facial expressions). While text information has been widely studied and used, academic research has lagged in analyzing visual information and provides little guidance on how to design an effective online video (Li et al., 2019; Ma & Sun, 2020).

Second, our studies consider only the YouTube video sharing platform, further studies may consider the relationship of content and digital engagement on other social media platforms such as Instagram, TikTok, and Twitter. A better look at how this relationship between digital influencers and followers plays out across different platforms in comparative analysis provides relevant insights to distinguish the effect of medium, sender, and message.

Third, the analysis of the studies does not distinguish sponsored content and advertising and/or merchandising formats present in the influencers' videos. Influencers, throughout their trajectories, form partnerships with different brands and communicate to their audiences in different formats, language styles, content categories, and often insert advertising in an integrative way in the program's storytelling. Analyzing the attitudinal, intentional, and behavioral results of these types of advertising/sponsored content that are so intrinsic to the influencers' profiles is a theme for future studies. Also, researchers can further explore whether there are linguistic differences in paid content from organic content within the same influencer channel.

Fourth, the data collection of social media influencers considered only influencers with content published in English, new studies can use influencers from different languages as a basis and compare differences in language, since language is intrinsically linked to the culture of their country/region.

Fifth, concerning personal traits, the variables selected were measure by coders' perception through validating scales from literature. A deep analysis could explore these personal traits in a qualitative data collection phase with the social media influencers, to get the influencers' self-perception. Further, the studies do not distinguish the stage of the life's trajectory of SMI's. Perhaps, influencers in an initial phase engage less than in a mature one,

understand the life' trajectory nuances and its impact on influencers' result is an intricate question for future works.

Finally, our study brings a more complete approach in the literature of joining factors derived from the influencers' content measured from secondary data collection, with the influencers' personal data, measured from the perception of human evaluators. Future studies may explore other additional features coming from the influencers and/or its contents may help define the profiles of influence. Besides, studies could explore the followers' data and include it in a holistic model of influence, it is helpful to incorporate individual heterogeneity into the analysis of videos, this development could also be important for practitioners: with the ability to personalize recommendations, firms could deliver different video content to different users (Li et al., 2019).

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