The Digital Culture

Recent Users' Online Behaviour and Interactivity in Social Media

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Abstract

How and why do people use social media today, as opposed to six years ago? Over the years, there have been many researchers, who through their studies, have tried to investigate and understand the relationship between users and social media, since due to the development of the Web into an online platform that facilitates its users' participation, communication and engagement, users have the opportunity to participate actively in this digital environment, by not only consuming content, but also by producing it. Due to social media's continuously evolving features and structures, users are able to generate and disseminate content with other users all over the world, and connect with people who share similar goals, ideals, interests, or even personalities. Platforms like Facebook, Twitter, Instagram, YouTube and LinkedIn, as well as various online blogs and forums, have formed an expansive ecosystem of connective media, and have influenced human interaction on an individual, community and even a larger societal level, allowing for the increasing interpenetration of the online and offline world.

Tracking the digital culture and user interactivity leads to a particular user typology, which is characterized by the usage patterns that reflect certain types of user participation in social media. Research indicates that personality traits are highly related to social media usage, since individuals take particular actions in these online environments depending on their interpersonal characteristics. Consequently, the recent socio-technographics ladder typology distribution of digital interactivity based on users' reported behaviour and personality traits suggests an alteration since 2012, since more people participate actively on social media, and have now turned from "passive recipients" of digital content, to active contributors of the online participatory culture. Specifically, the particular research indicates that personality traits affect heavily users' online and digital behaviour, as social media users in 2018, have become increasingly involved in more variety of activities on social media, and therefore, create and circulate more content since 2012.

Keywords: social media, online behaviour, digital interactivity, social technographics ladder, online participatory culture

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Chapter 1: Introduction

Web 2.0 refers to the World Wide Web, which nowadays has been improved and developed technologically into an online platform that facilitates its users' participation, communication and engagement. Specifically, Web 2.0 pages' structures and features, unlike the past, offer users the opportunity to participate actively in this online environment by producing content collaboratively, thereby promoting digital interactivity and providing opportunities for mass distribution of their own published content (Blank & Reisdorf, 2012; Van Dijck, 2009; Ritzer & Jurgenson, 2010). Specifically, social online collaboration is accomplished when multiple users interact with one another and share information on the web, in order to achieve common goals. Unquestionably, the Web 2.0 provides its users the opportunity to interact with and provide information to various sites, while also being able to see those information collated and become available to other users, as a "bi-directional collaboration" (Goodchild, 2007, p. 27).

Through users' online behaviour, including their communicative acts and sharing of content, the digital culture has evolved through the years, allowing for the expression of individualization. Its members believe that their contributions matter and feel a social connection to others through these platforms, as Web 2.0 is more dynamic and interactive than its predecessor, Web 1.0 (Jenkins et al., 2009; Murugesan, 2007). From their need to exploit, but also contribute to, the revolution of new media technologies, today's users have become members of a digital participatory culture (Van Dijck, 2009, p.42). Web 2.0 and the digital culture facilitates the circulation of content, ideas and beliefs among its users through media sharing across online platforms, which invites users to participate and engage with others that share the same interests.

One example of how numerous Web 2.0 sites facilitate and enhance "*prosumption*" (that is, both consumption and production of content) is social media, which encourage the submission and distribution of content. Various academics use the term "*prosumer"* to describe the complexity of users' increased "production prowess", since they are now also producers and co-creators of content, rather than just consumers (Van Dijck, 2009, p. 42). User-generated content (UGC), as the term implies, is the content created by users and distributed/uploaded in various Web 2.0 websites, for instance social media; the UGC encompasses a variety of formats, including videos, photos, many different kinds of ratings, and textual content (Van Dijck, 2009, p. 42). Consequently, UGC produced by users can be consumed, viewed and shared by other users of the social media websites. This content that becomes available, publicly or privately, on social media and the internet overall, reflects the

creative efforts of the users, who create it “outside of professional routines and practices” (Moon et al., 2014, p. 347).

Given the tremendous exposure of internet users in social media today, the circulation of UGC on these websites is inevitable. Researchers suggest that social media employ various mobile and web-based technologies in order to create highly interactive platforms, through which users “share, co-create, discuss and modify user-generated content” (Kietzmann et. al, 2011, p. 241). These “internet-based applications” build upon the technological, as well as ideological, foundations of the Web 2.0, and thus, allow and enhance the creation and circulation of UGC (Van Dijck et al., 2013, p. 5). The digital culture emerged by the quick rise of social media in the first decade of this century, “where information and communication got increasingly defined by the affordances of web technologies, such as browsers and search engines” (Van Dijck & Poell, 2013, p.5).

As Van Dijck (2013) suggests, users appropriate social media for the quotidian habits, like talking to other users, showing images from their personal lives, sharing information and content overall, and so forth (p. 6). Through their social media usage, audiences have the opportunity to become actively involved in the online participatory and digital culture on a daily basis, by ‘*prosuming’* media content, and affect the rules and conditions of social interaction (Van Dijck, 2013, p.5). As Ritzer, Dean and Jurgenson (2012) suggest, *prosumption* on the internet has “increasingly occurred through user-generated content on Web 2.0 […] where the hegemony (control) of prosumers is clearest” (p. 385). Audiences have the opportunity through various social media to produce content collaboratively by creating social profiles that include photographs, videos and texts, but also through commenting on, editing and updating articles, reviewing and creating augmenting content overall.

Consequently, social media have evolved into a noteworthy communication device where users share content and “life experiences with one another” (Lukes, 2010,p. 416). Platforms like Facebook, Twitter, Instagram, YouTube and LinkedIn, as well as various online blogs and forums that have formed an expansive ecosystem of connective media, have influenced human interaction on an individual, community and even a larger societal level, allowing for the increasing interpenetration of the online and offline world (Van Dijck, 2013; Van Dijck & Poell, 2013). According to research, the average Facebook user is creating approximately 90 pieces of content each month, with over 30 billion pieces shared each month, such as photos, web links and news stories (Lukes, 2010, p. 415). Marwick and Boyd (2010) mention that in May of 2009 Twitter had approximately almost 18.2 million users, with a growth rate of 1448% since the same month the previous year (p.116). Consequently, social media websites such as Facebook and Twitter are indeed increasing

the ability of users to create and submit content online quickly and effortlessly, since these platforms have been developed and designed in order to promote audiences' participation.

Over the years, there have been many theories and studies that have investigated the relationship between users and social media. Since social media facilitates a new kind of interaction both in volume and variety, tracking the digital culture and user interactivity can lead to a user typology that, in turn, can characterize participation of users by their usage patterns. Forrester Research, released in 2012 their updated study (from 2009) regarding the ways by which people use social media (www.forrester.com). According to their "Social Technographics Ladder" (or STL for short), users' level of participation on social media depends on their approach and usage of these technologies (www.forrester.com). Forrester Research identified seven types of users based on their interaction with social media; these categories are naturally not exclusive, as users may fall under multiple categories, varying from Creators and Conversationalists to Joiners and Inactives.

The STL suggests that, in the past years, 33% of the online participatory audience have been Conversationalists - users who update their status on social networking sites and post updates on sites like Twitter at least weekly, while Joiners, who use and visit social networking sites in general and maintain a social media profile, represent a smaller proportion, only 19% of the online population (www.forrester.com; Li et al., 2007, p.4). Interestingly, Forrester's research suggests the most of the social media users (52%) were Inactives - social media users who own a social media profile, but they do not engage in any form of digital activity, varying from creating and sharing content, to even connect to social media platforms regularly (more than six months). Thus, a slight majority of did not participate at all in digital interactivities (www.forrester.com; Van Dijck, 2009). As a consequence and since participation is a relative term, Forrester's research further suggested that users' participation does not equate active contribution of user-generated content on social media. On the contrary, Forrester's research proposes that most social media users, inactives as well as other less active categories, are considered as "passive recipients" of content, and thus, they cannot be considered as digital contributors and members of the online participatory culture (Van Dijck, 2009, p. 44).

Additionally, changes and enhancements in the services and policies of various social media in the past years, as well as changes in the online participatory/digital culture, have affected users' digital interactivity (Berger & Milkman, 2012). Even more platforms have become more prominent since the past, such as for example Instagram, which indicates a growing positive relationship among users and social media (Boulianne, 2015, p. 524). Consequently, the distribution of users' digital interactivity (e.g. Creators, Conversationalists, and Joiners) will have likely mutated since 2012, when Forrester published their research, with higher numbers for the more participatory categories (non-Inactive). Thus, users' online

participation that did not equal their active contribution to UGC websites such as social media will have likely mutated as well, turning users from “passive recipients” of digital content to active contributors of the online participatory culture.

This typology of social media users in 2012 was based on the frequency with which users participated in various online activities, as well as their patterns of interaction. Additionally, users’ digital footprints and their social media usage have linkages to personality traits. To be more specific, studies have shown the relationship between users’ personality and the time spent on social media such as Facebook, Twitter and YouTube, as well as on various online blogs and forums, and also have shown that their use and content are highly related (Moore &McElroy, 2011; Correa, et al., 2009; Hughes et al., 2011). Consequently, researchers have recognized the importance of users’ personal factors in their technology adoption and usage (Moon et. al, 2014, p. 347). Moon, Kim and Armstrong (2014) report that internet users experience a “flow state” in which, through their actions and usage of technology, they influence their feelings, for instance by feeling a sense of exhilaration when they share user-generated content (p. 348). Personality traits refer to the characteristics and tendencies that “determine peoples’ commonalities and differences in thoughts, feelings and actions”, while being highly related to the ways in which they use social media technologies (Moon et al., 2014, p. 348).

The Five Factor Model (FFM), or “Big Five”, is a theoretical framework that links personality dimensions to online behaviour. These dimensions comprise five broad personality traits: “Neuroticism”, “Extraversion”, “Openness”, “Agreeableness”, and “Conscientiousness” (Moore &McElroy, 2011; Hughes et al., 2011). These traits relate to and influence to a certain extent users’ online participation in regards to their digital activities. Researchers suggest that people tend to build their online relationships with similar others in terms of common interests and even personality, a tendency known as homophily (Balmaceda et al., 2012, p. 150). Since the levels of social media usage are often voluntary and discretionary, rather than “mandated” and thus, reflect personal needs, values, preferences and other personality attributes, personality traits are related to a broad spectrum of types of behaviour and human activities in the social media (Landers et al., 2006, p. 284). Specifically, users are able to choose the types of social media platforms they prefer, the amount of time they spend on them, as well as the quantity and quality of content they create and distribute among these platforms, in relation to their personality traits, which are reflected through their use and interaction with others.

Consequently, personality traits affect the frequency and (types of) content of users’ online participation, and also the ways in which a person interacts with other users, for example through discussion threads (Balmaceda et al., 2012). Thus, personality plays an important role for enriching content-based websites, as users who are open to experiences

and extroverts tend to upload more content on social media and interact with others (Balmaceda et al., 2012). Since STL reports an online participatory gap (where a high percentage of Inactives exists in these online environments) on social media, it is important to understand personality traits, as they affect the online social climate.

1.1. Research Questions

This thesis endeavours to deepen our understanding of "**what ways**", "**how"**, and to "**what extent**" the usage of social media in today's European societies have changed, in relation to digital interactivity and users' participation. To be more specific, this thesis undertakes a comprehensive research study on various social media platforms, to explore the linkages between the antecedents of digital interactivity on social media and the changes in the typology, that have occurred in the intervening years, since the reporting of the 2012 STL. Specifically, this research will link social media users' interpersonal characteristics and their personality traits to their social media prosumption, thus accounting for some reasons of how they fall into one or more particular categories of the Social Technographics Ladder (www.forrester.com; Van Dijck, 2009).

The ongoing developments of the internet that facilitate and enhance the participatory culture, in terms of its structure and features, and the increasing recognition of how users' motivations and personality traits can affect their digital participation, lead to the following research question:

What is the recent socio-technographics ladder typology distribution of digital interactivity based on users' reported behaviour and personality traits?

The thesis aims at investigating how far users' online participation and digital interactivity has changed over the last years, since social media have altered ever since to enhance their users' engagement. Consequently, the hypotheses of this research endeavours to demonstrate the relationship between users' personalities and their current participation in social media, and also that there has been a significant change in users' behaviour in the past six years. Moreover, the research question can be more precisely specified with the following sub-questions:

Given the ongoing developments in both the affordances and usage of the social media:

i. Based on users' recent social media activity, what is the current typology distribution and to what extent does it differ from the STL as measured six years ago in 2012?

The developments demand an investigation into how personalities lead to this new typology, and therefore:

ii. How do personality traits now relate to each of the typology categories?

1.2. Academic and Societal Relevance

This research hopes to offer a sizeable contribution to both the scientific and social communities, since social media have "invaded" our lives and are widely used by millions of people on a daily basis all over the world. From a scientific standpoint this new investigation will contribute, and fill a gap in existing scientific knowledge, as there has not been any further investigation on the levels of participation of social media users' in Europe currently (in 2018). Some research reporting important increases in social media users' participation in the past years, primarily focus on US adults (Pew Research Center, 2017; Perrin, 2015). Still, there is still some indication that the participatory culture has been expanding within Europe. In fact, the Statistical Portal indicates that in 2016, over 50% of individuals in the European Union have used social networks on a frequent basis (www.statista.com). Thus, this research aims to provide a better understanding of the current European participatory culture through social media platforms, as well as users' active digital contribution in these platforms. Additionally, this research aims to contribute and fill in a gap in the existing scientific knowledge, as there has not been any further investigation to the linkages of personality traits and social media use in the last years. Through a purposeful and systematic process that aims at providing new understanding through the development and testing of previous theories, such as the Five Factor Model and its relation to the digital culture, this thesis aims to produce new knowledge regarding the topic under investigation, which will further contribute to science and, specifically, the ever expanding digital culture (Morrison, 2003, p.2).

In addition, from a societal standpoint, it is needed and useful to look at the typology today. To be more specific, emphasizing on one of the key challenges of the online participatory culture - that of the participatory gap (where a high percentage of inactives existed) on social media, allows for a better understanding of the current social climate. This thesis aims to serve as a knowledge base usable by institutions, organisations and the society overall, and also serve as a step for future investigations into understanding personality antecedents for why users choose, or not, to participate actively on social media. For instance, both social media users who are considered to be "extroverts" use social media frequently, as also "introverts", who use these platforms to communicate with others. As the distribution categories of users may have been changing, so may have these linkages between personality and social media usages, leading to implications of how technology has

been facilitating, or possibly suppressing, the expression of individual personality through social media channels.

Furthermore, and since this research will be restricted to Europe (albeit a wide audience within the content), the research could be extended beyond these boundaries (e.g. transatlantic, or Far East), or be used as a comparison point for a wider, more global understanding of the evolution of the participatory culture. It is expected that undertaking further research on the topic will also throw some light in understanding the relationship between social media and participatory culture of the users themselves. From a business or a political standpoint, we can understand and possibly predict the trajectory of digitalisation of culture, and so organizations and institutions can anticipate it and prepare for it.

1.3. Thesis Outline

In the theoretical framework chapter, particular concepts that are highly related to the topic under investigation and the research question are defined and described, as well as a broader background in terms of existing theories and previous studies is presented. The particular theoretical framework includes theories regarding the evolving Web 2.0 and the participatory culture; the categorization of the social media platforms along with their characteristics and functions; the ways by which users are able to participate on online environments through user-generated content (UGC); statistics in regards to their online participation on social media in the past years; the ways in which personality traits affect their social media usage; and finally, hypotheses are posed to research question and sub-questions.

The third chapter discusses the research method employed in the particular study, as well as the sampling technique that was used in order to collect appropriate and valuable data, and the data analysis process. Specifically, a quantitative approach was employed in order to collect relevant data that allowed accurate results in order to answer the research question and the associated sub-questions of the study. In order to achieve these objectives, surveys were distributed to European citizens who use social media in order to investigate the precise number of users who participate on online environments and take action through their digital interactivities in relation to their personality traits.

The fourth chapter focuses on the outcomes of the surveys, and thus, findings and results. More specifically, descriptive statistics are presented to describe the basic features of the data, and a summary of the results are presented. The fifth chapter includes an extended discussion of the findings, as well as the answers to the central research question, sub-questions and hypotheses of the particular thesis. Furthermore, it includes a reflection of the theoretical framework, the theories and methodologies that were used in previous

chapters, as well as the practical implications and limitations of the studies, as well as suggestions for future research are addressed.

In the Appendix, following the Reference list, the questionnaire and additional evidence that are not essential to explain the study, but support the analysis appear.

Chapter 2: Theory and Previous Research

2.1. Web 2.0 and the Participatory Culture

According to many researchers, Web 2.0 refers to the technological development of the internet that provided affordances for enhancing users' participation, engagement and digital interactivity (Blank & Reisdorf, 2012; Van Dijck, 2009; Ritzer & Jurgenson, 2010; Brake, 2014). After the Web's development from static pages where users were only able to consume content into the "Web 2.0", internet audiences are now able to both consume and produce content through various ways. As these researchers suggest, features and structure of Web 2.0 enable users' participation and digital interactivity (Blank & Reisdorf, 2012; Van Dijck, 2009; Ritzer & Jurgenson, 2010; Brake, 2014). Goodchild (2007) mentions that users exploit new technologies in order to disseminate and receive information through the web, and thus, Web 2.0 is a "bi-directional collaboration" (p. 27). As a consequence, Web 2.0's websites and platforms harness the abilities, opportunities and features of the web in a more collaborative and interactive manner, while emphasizing users' social interaction and "collective intelligence", as well as leveraging this new technology overall (Murugesan, 2007, p. 34).

Web 2.0's predecessor, Web 1.0, was considered and defined as a "tool for cognition and thought", where users were able to only receive information through the existing webpages and applications that existed (Fuchs et al., 2010, p. 41). On the contrary, Web 2.0 has been defined as "the wisdom web", "the people-centric web" and "the participatory web", since it was considered to be a "social novelty" as it enabled and enhanced online communication, community-formation and collaboration (Murugesan, 2007; Fuchs et al., 2010). The improvement of Web 1.0 into the Web 2.0 as a medium for human communication and interaction has allowed and enhanced the appropriation of global knowledge into local contexts, as users are able to find, organize, share and even create information that is globally accessible (Fuchs et al., 2010, p. 46). In contrast to Web 1.0, Web 2.0 offers a "radical decentralization and trust", where users are contributors and participate instead of receiving passively information while having control of their own data, and thus, there is a rich user experience (Fuchs et al., 2010, p. 48).

Web 2.0's features of facilitating users' to contribute content and at the same time allowing them to engage with one another directly or through their shared or created content have paved for a participatory culture of social media. Indeed, new media technologies and more specifically social media have increased people's opportunity to share online their thoughts, beliefs and ideas with other users by allowing them to use the structures and features of the social media. These highly interactive platforms allow individuals and communities to share, create, discuss and modify user-generated content through their

tremendous exposure to these platforms on a daily basis (Kietzmann et al., 2011, p. 241). Social media users partake in the processes of manipulating these technologies, through which they become more actively involved, while their participation has become more than ever mediated (Livingstone, 2013, p. 25; Van Dijck, 2009, p.42). The participatory culture emerges from users' needs to manipulate the digital media in order to express themselves by creating content. Consequently, the development of the internet has contributed to and facilitated the expansion of the online participatory culture, since users are now able to both consume and produce content.

Van Dijck (2013) in his book mentions that due to the nature of social media and their characteristics that facilitate adoption, users are able to make connections and share expressive and communicative content with other users all over the world, while also build professional careers and enjoy online social lives (p.4). Thus, the online participatory culture that exists and grows through these websites and platforms refers to the web's potential to nurture connections, build communities where users share similar ideas and beliefs, and advance digital interactivity among them overall (Van Dijck, 2013, p. 4). Additionally, the online participatory culture is defined specifically by users' abilities and opportunities to create and share content in a global context, and thus have an active role as contributors and enhancers of the participatory culture in general.

The process of "*prosumption*" refers to the way in which previous consumers of content are no longer consume and absorb content uncritically but also produce their own (Ritzer, Dean& Jurgenson, 2012). Within Web 2.0, prosumers are not just consuming what media corporations distribute, but also produce their own media content in these online platforms. The nature and behaviours of prosumers have been well-studied, for example, how consumers evolved into both consumers and producers of content (McLuhan& Nevitt, 1972, p.4). The relationship between the participatory culture and the Web 2.0 has been co-evolutionary. The technologies have encouraged users' participation and their contribution in media creation, and as digital technology keeps developing, today's media audiences have the opportunity to create their own content, so their contributions can or may be accessed by a wide audience online. Consequently, new media technologies have increasingly allowed online participation of audiences by facilitating prosumption.

2.2. User-Generated Content

Researchers suggest that user-generated content (UGC) has seen a rapid growth in recent years, especially since the growth of the web into an interactive platform and tool of communication (Krumm et al., 2008; Kane et al., 2012). UGC is defined as the aggregated or collaborative efforts of multiple individuals who contribute data, information or media in a

voluntarily manner on the web, which manifest in useful or entertaining ways (Krumm et al., 2008; Kane et al., 2012). Krumm, Davis and Narayanaswami (2008) assert that user-generated content allows users to acquire a "glimpse into real data from other users, unsanitized by regular media outlets" (p. 10). Since the information is widely available to users from all over the world who not only receive passively information and data, but can also co-create, distribute and judge the quality of information they receive, UGC has not only allowed the forming of new content on a daily basis, but it has also affected the amount of information that users receive daily.

According to Kaplan and Haenlein (2010), UGC needs to fulfil three basic requirements in order to be considered as such. 1) It needs to show "a certain amount of creative effort"; 2) be created or published on a publicly accessible website or a social networking site "accessible to a selected group of people"; and, lastly, 3) be created outside of professional routines and practices (p. 61). Since the Web 2.0 and various social media platforms have allowed and enhanced users' digital participation through sharing user-generated content, users are able to distribute a variety of content and information in multiple platforms worldwide. UGC encompasses a multitude of types of content. Examples include the circulation of news stories; multimedia such as photographs, videos and audio files; ratings, reactions, and reviews; publication of blogs and webpages; contribution and editing of articles; the use of "tags" to photos or webpages, the reaction to other users' posts (through commenting on, liking or sharing); and the sharing of real time live streams on various social media platforms (Krumm et al., 2008; Kane et al., 2012; www.forrester.com).

Social media platforms and the Web 2.0 overall has been evolving to promote and enhance the distribution of user-generated content on various online platforms, where users contribute actively in the online participatory culture by formulating and distributing their own content.

2.3. Participatory Social Media

Social media are widely used daily by millions of users all over the world, in order to communicate, share information and resources. During the last 15 years, there have been rapid changes in the communication process of internet users as a result of the new technologies that have emerged, and were widely unavailable or even non-existent in the past (Lindsay, 2011). As a result, social media have evolved and widespread, serving a variety of purposes, depending on audiences' needs and usage such as exchanging news and information, to personal photos and videos (Foreman, 2017). Consequently, social media have become defined as a group of "internet-based applications, that build on the ideological and technological foundations of Web 2.0, and that allow the creation and

exchange of user-generated content (Kaplan et al., 2010, p. 61). Due to their social online presence and participation, as well as due to their overall digital interactivity on social media, users are able to share a great amount of information with other users based on the features and structures of each platform they choose to use (Kaplan et al., 2010, p.61). To be more specific, a classification scheme has emerged depending on and according to social media's features, functions and audiences' usage (Foreman, 2017). Thus, social media platforms categories include *social network sites, media sharing networks, discussion forums, bookmarking and content curation networks, consumer review networks, blogging and publishing networks,* and *anonymous social networks.*

Social networking sites refer to those online platforms that permit people to connect with other users. These platforms typically also feature facilities for sharing of user-generated content, such as photos, videos and audio files (Kaplan et al., 2010, p.63). Examples of widely used social networking sites include Facebook, Twitter and LinkedIn (Foreman, 2017; Kaplan et al., 2010). Facebook is one prominent social media site that has been viewed as a creative communication tool since its release in 2004 and remains one of the most successful networking sites, with 1.94 billion global, active users, with five new profiles created every second, and 293.000 statuses, 136.000 photos and 510 comments uploaded per minute (Kirkpatrick, 2010; Zephoria Digital Marketing Agency, 2016; www.statista.com). Facebook allow its users to share various forms of content, such as texts (in the forms of comments or status updates), photographs, videos, users' locations and live broadcasted videos. Additionally, users are able to participate in polls, especially due to Facebook's structure and features that include the "news feed" where users are exposed to content that is posted on the platform. The "wall" is used in order to post messages, photos, videos and so forth to users' profile space, while the "likes" and "reactions" enable users to interact effortlessly and quickly with status updates, photos or links shared by their online friends (www.facebook.com). Lukes (2010) points to the volume of users' engagement with the platform, noting that users spend more than 700 billion minutes per month on Facebook and interact to approximately 900 million media objects, like community pages (p.415).

Similarly, Twitter, another widely-used social networking site and also considered to be a microblogging site, promotes users' participation by allowing them to post short text updates ("tweets") of up to 280-characters to a network of other users worldwide. These posts can also contain links multimedia, images and videos. Its structure and features, including real-time streams of status updates, have contributed to its expanding and active participation user base, since its launch back in 2006 (Taprial and Kanwar, 2012). In fact, just between 2009 and 2010, the number of active users expanded from 18.2 million to 330 million users, an increase of over 1800% (www.statista.com; Marwick and Boyd, 2010, p. 116).

LinkedIn is another social networking site and one of the world's largest and most successful professional network on the internet, used by both job seekers and recruiters all over the world (Chiang & Suen, 2015, p. 516). The platforms has initiated "a new era of workforce recruitment" (Chiang &Suen, 2015, p. 516). Recruiters can use the site to "source and screen" job candidates, while on the other hand, job seekers use it to create "professional identities" in their profiles to enhance the likelihood to find a job (Chiang & Suen, 2015, p. 516). Due to the use of keywords ("tags"), the "Professional Gallery", the customization of a unique URL profile, as well as due to other features offered by the particular social networking site, users are able to create unique professional profiles that will lead them to successful careers (www.linkedin.com). Additionally, the affordances of LinkedIn include providing users the ability to "engage with their professional network, access shared knowledge and insights", while also giving them the means to find business opportunities that will enable them to be more "productive and successful" (Deagon, 2011,p.1).

While social network sites have not been around as long as other categories, they have come to define the participatory landscape by being "hubs that transform every aspect of modern life into a social experience", for example the way in which we read the news, share photos and videos, and even look for a job (Foreman, 2017). They have enabled people to "acquire information about others", while also they have the ability to "shape and modify interpersonal impressions" since users contribute photographs, comments, and/or content that persist on the platform for others to see, and thus, share their personal thoughts, beliefs and attitudes (DeAndrea, 2012, p. 511).

Media sharing networks refer to those networks that people use primarily to share media content online. To be more specific, users of media sharing networks are able to participate online and communicate with others through the distribution of photos, videos and live videos, and thus share media items that relate to their daily life moments or the live coverage of events (Foreman, 2017; Rizzo et al., 2012). While social networking sites also offer its users similar opportunities, this particular type of social media's primary purpose and function is more focused on media sharing. Additionally, another feature of media sharing networks that distinguish it from to social networking sites is that users communicate with one another only through textual annotations to media content, for instance captions, commenting or mentions of other users (Foreman, 2017).

One prominent example of a media sharing network is Instagram, a photo and video-sharing service that allows users to share photos, videos and as of lately, live videos. Instagram was launched in October 2010, and offers users the ability to capture and share various media content containing life moments (Hu et. al, 2014, p. 595). Instagram's features and structure allows users to follow other users' feed, upload photos and videos, "geotag"

their upload (that is, associate their content with a physical location), use hashtags and filters to their photos, and also upload multiple photos in the form of a "swipeable carousel, so fellow users could observe their photos at once" (www.instagram.com). Like Twitter and Facebook, Instagram experienced significant recent growth. In 2013 Instagram's monthly active users counted more than 150 million, with approximately 55 million photos uploaded by users each day all over the world, and an overall of 16 billion photos shared as of then. Within two years (2015), those levels doubled to 300 million users, of which 200 of them log on to their accounts every day (Hu et. al, 2014; Kuchler, 2015). Researchers suggest that the average user spends approximately 21 minutes logged on online daily and uploads photos, or "flick" through photos of others and commenting (Kuchler, 2015, p.1).

Another example of widely-used media sharing network is YouTube, which was launched in 2005 (Soukup, 2014, p. 3). According to Miller (2012), YouTube is a "free, public, online video archive with built-in social networking features, that has created a platform for countless virtual communities, many of which are focused on transmitting knowledge in users' areas of interest and expertise" (p.17). This particular media sharing network allows its users to upload original videos (meaning that the users have created or copied the videos themselves), view other users' videos, like or dislike them, share them, but also comment on them and subscribe to other users' channels in order to keep in touch with the content they upload. YouTube features are updated regularly in order to improve users' experience and participation on this popular platform (www.youtube.com). For instance, YouTube has been using a new ranking system in order to lower the visibility of "junk" comments, in order for users who upload their content on this media-sharing network to be able to participate on relevant online discussions with fellow users (www.youtube.com). YouTube has over 1.5 billion monthly active users worldwide, who spend over an hour daily watching its media content, which varies from music videos and movie trailers, to live streams, video clips, educational videos and short films (www.socialmediatoday.com).

The third type of social media refers to *discussion forums* where internet users are able to find, discuss and share opinions, information and news with other users. Discussion forums existed prior to social networking sites, and they were used by a significant number of users all over the world to gather information, but also to express themselves (Foreman, 2017). One advantage of discussion forums is that they allow for users' anonymity, and thus users are able to express themselves more freely on those platforms (Foreman, 2017). One example of a popular discussion forum is Reddit, where its members are able to both submit and view other users' media content which may contain images, text posts, or even links (www.reddit.com). Users' posts are organised by subject, with a large variety of categories varying from news, to movies, music, food, books and science (www.reddit.com). According to reddit.com, the most popular feature is the "Ask Me Anything" thread, where users are

able to ask any kind of question to fellow Reddit users and participate in online discussions regarding a vast variety of topics (www.reddit.com). In 2015, Reddit garnered over 82 billion page views and 73 million submissions from users, who actively participated on the platform with more than 725.85 million comments (www.reddit.com).

Bookmarking and content curation networks refer to the platforms that allow users to discover, share and save media content. These types of platforms help people who are seeking for information, ideas or even products to discover and share-mostly-visual content, for instance photographs (Foreman, 2017). Pinterest is a popular bookmarking and content curation network that allows its users to discover a variety of topics through images, save them and categorize them according to their preferences. According to Griggs (2012), Pinterest had over 11 million active monthly users in 2012, who spend approximately 100 minutes per month on the site (para. 5). Currently, in 2018, Pinterest has over 175 million monthly active users around the world (www.pinterest.com). What needs to be taken under consideration though is the fact that Pinterest gives users the opportunity to express themselves by uploading only media content in the form of images and share them with other users, rather than using textual content (www.pinterest.com).

In addition, *Consumer review networks* refer to the platforms that allow and urge users to both review businesses, products, services and travel spots, but also read other users' reviews (Foreman, 2017). These platforms were created in order for users to share their experiences, thoughts, feelings and opinions about various topics, varying from hotels, restaurants and cities reviews, to services and brands (Foreman, 2017). According to Foreman (2017), consumer review networks build networks "around the review as a core part of the value they provide", while 88% of users trust the reviews they read online "as much as a personal recommendation". These platforms' content can be "guidelines" for the purchase of products or services by users, since users trust other users' personal experiences and recommendations to make important decisions regarding a product, a hotel or a restaurant (Kaplan et al., 2010, p. 65).

An example of a consumer review network is TripAdvisor, a popular network that contains users' reviews regarding businesses and travel spots. In 2011, TripAdvisor had over 47 million monthly visits by online users, who used the platform to retract information (Lee et. al, 2011, p. 676). Users are motivated to post reviews regarding places that they have visited, in order to alert others to their own thoughts and opinions about those places. While it was originally designed as a "business-to-business" tool, once the "travel" community started using it as a platform to share information regarding cities, restaurants and so forth, it evolved to one of the most used review-networks worldwide (www.tripadvisor.com). Launching in early 2000, TripAdvisor has a continuously growing travel community that posts positive reviews on places they have visited over the years,

while its users can also “compare prices and availability” on restaurants and hotels all over the world (www.tripadvisor.com). Currently, TripAdvisor has over 600 million reviews and opinions regarding world’s travel listings all over the world, “covering approximately 7.5 million accommodations, airlines, attractions and restaurants (www.tripadvisor.com).

Online retail sites also host customer review facilities; that is, their platform embeds customer review networks. For example, Amazon.com is a leading online retailer that has enabled consumers to submit product reviews for many years (Mudambi et al., 2010, p. 186). Amazon.com provides valuable content that “consumers perceive to be valuable”, since through its rating system it allows users to make better decisions more easily based on the ratings of other users, and thus affect their attitudes toward online shopping (Mudambi et al., 2010, p. 186). Additionally, Amazon.com positions the most helpful reviews in more prominent positions on each product’s information page, allowing users to make informed decisions, while encouraging them to provide their own quality reviews (Mudambi et al., 2010, p. 186). Users are also able to participate in conversations with other users through the comments section, as well as with the sellers in order to obtain additional information on products (www.amazon.com).

Blogging and publishing networks refer to those platforms that allow and encourage users to create, publish, discover and comment on various online content. Blogs increase awareness on specific topic, since users participate on those types of platforms, either to create their own content, or to read and comment on other users’ blogs. Blog posts include texts, images and links, which enhances users’ engagement to the content (Foreman, 2017). According to Kaplan and Haenlein (2010), blogs represent the “earliest form of social media […] that usually display date-stamped entries in reverse chronological order” (p. 63). Additionally, even though a single blog is usually managed by one person, blog platforms provide the possibility of online interaction through commenting (Kaplan et al., 2010, p. 63). Users are able to use blogs as “personal diaries” where they describe their personal life, to “summaries of all relevant information in one specific content area (Kaplan et al., 2010, p. 63).

An example of a widely used blogging and publishing network is WordPress, which was launched in 2013 (www.wordpress.com). Currently, WordPress has over 22 billion monthly page views, and over 46 million comments per month (www.wordpress.com). As the popular platform indicates, WordPress “powers more than 30% of the web”, while its users are able to “get online and get publishing quickly by creating any type of website they like” (www.wordpress.com). Specifically, users are able to create “personal blog or websites, photoblogs, business websites, professional portfolios, government websites, magazines or news websites, an online community, and even a network of websites” (www.wordpress.com). Additionally, it offers the opportunity to its users to engage with their

content through its comment tools that enable them to “be a forum for discussion and to moderate that discussion” (www.wordpress.com). Castellucio (2013) mentions that blogs serve a number of functions, such as “news sources, commercial promotional sites, galleries, campaign headquarters, and even online diaries” (p. 59).

Lastly, *Anonymous social networks* allow users to post media content anonymously. Users are able to either hide their real name or use a pseudonym to share with others media content, such as photos and texts, or ask “embarrassing” questions that otherwise they would not ask (Foreman, 2017). An example of an anonymous social network is Ask.fm, founded in 2010 (www.ask.fm). The particular platform allows its users to ask all kinds of questions and receive answers that will build “blocks of conversation, self-expression and deeper understanding” (www.ask.fm). Currently in 2018, Ask.fm has over 32 million yearly active users and 215 registered million users, while, as the company states, more than 10.000 questions are asked every minute from all over the world (www.ask.fm). Further, many of the aforementioned social media categories also permit varying degrees of anonymity, so this classification has some overlap with the others.

2.4. Users’ Participation

Social media users have long been able to manipulate these platforms in order to fulfil their needs, express their thoughts, attitudes and beliefs on online environments through creating and sharing user-generated content. Because platforms like Facebook, Instagram, Reddit and so forth, offer their users a variety of functions and features to choose from in order to achieve their goals (for instance edit a personal photo through using filters and tags, and share it to their online friends or followers), users engage in particular actions in their “online world”.

According to Forrester Research (2012) social media users can be categorized into seven types based on the manner of their engagement with social media; naturally, there is overlap in this typology in that users may fall under multiple categories (Van Dijck, 2009): *Creators* publish on and create their own web pages, maintain blogs, write articles or stories, or upload videos to sites such as YouTube, and they have constituted 13% of the online population (Li et al., 2007, p.4; www.forrester.com). Overall, *Creators* are the individuals at the top of Forrester’s Social Technographics Ladder (or STL), since they create the content that other users consume through photos, blog posts, videos and music. Thus, since *Creators* are responsible for the creation and distribution of media content, their online participation can be defined as vital for both user-generated content and the social media platforms overall.

Conversationalists represented 33% of the online participatory audience. These are users who update their status on social networking sites and post updates on Twitter at least weekly (www.forrester.com). *Conversationalists* are those who spread the content of *creators*, since they drive the conversation, as their names suggests, in the online environments. Due to their actions, for instance by updating their statuses commenting on particular, trending topics, they are able to spread *Creator*'s content far and wide (www.forrester.com).

Critics represented 19% of online participatory audiences. They engage by either commenting on blogs, or contributing to online forums, or posting ratings and reviews on websites, like TripAdvisor. (Li et al., 2007, p.4; www.forrester.com). To some degree, *Critics* keep *Creator*'s contributions honest, since they serve as editors of content by "vetting" it.

Additionally, *Collectors* represented 15% of the online population. They engage by tagging webpages by saving URLs on social bookmarking services, by using RSS feeds to aggregate the best content on the internet, adding "tags" to web pages or photos, or creating metadata to share with the entire online community in order to organise the content being produced by *Creators* and *Critics* (Li et al., 2007, p.4; www.forrester.com). In a way, they play a similar role to *Critics*, but they engage in a more passive way, since they consume a lot of media content online without taking actions.

Joiners use and visit social networking sites like Facebook and LinkedIn, and represented only 19% of the online population (Li et al., 2007, p.4; www.forrester.com). According to Forrester's Research (2012), *Joiners* hold a passive role to social media, but they might engage with an interesting piece of media content (www.forrester.com).

Spectators held 33% of the online participatory audience. They engage by reading blogs and online forums, reading ratings and reviews, watch peer-generated videos on sites like YouTube, and listen to podcasts. *Spectators* can also be found on multiple social media, since they survey other users' profiles, read reviews and ratings and watch videos through these platforms (Li et al., 2007, p.4; www.forrester.com). Forrester's Research (2012) suggests that *Spectators* can be influenced with what they see online, even if their actions might not be measurable (www.forrester.com).

Lastly, *In-actives* do not participate at all in online social activities, and even though they do own social media profiles, they do not engage with them by, for example, uploading their own content. They are affected by the activity of others, for example when other users' content (e.g. user-generated videos) get covered in the news media (Li et al., 2007, p.4; www.forrester.com). As research suggests, *in-actives* usually include older individuals who are not comfortable with technology, even if they have social media profiles (www.forrester.com).

Forrester's "Social Technographics Ladder" (2012), along with other researchers, suggests that a slight majority (52%) of the digital media users are In-actives, which means that do not participate in any form of online activities and digital interactions among other users (Nielsen, 2006; Arthur et al., 2014; Van Dijck, 2009). Nielsen (2006) asserts the "90-9-1 rule", meaning, firstly, that 90% of users do not contribute online by sharing and uploading content, characterizing them as "*lurkers*" (para. 6). "*Lurkers"* convey numerous negative attributions, since they fail to contribute content and desire for anonymity, while in some cases they take advantage of other users' work (Wilkerson, 2016, p. 258). Lurkers on social media websites are the users who own a social media profile, but they do not participate actively by uploading content, rather than they observe other users' digital activity. In regards to Forrester's Research (2012), lurkers are those who are 'in-actives', 'spectators' and in many cases 'joiners'.

Additionally, Nielsen (2006) reports that approximately 9% of online users participate in digital interactivity from time to time, and only 1% of the online population participate in a frequent manner and contribute substantially to *prosuming* (Nielsen, 2006; Arthur et al., 2014). Wilkerson (2016) suggests that internet's overall capacity for storing information and the ability to retrieve those information at all times, has encouraged lurking behaviours from users (p. 259). The small percentages of highly engaged users indicate that lurking behaviours are present, and in fact increased on digital platforms, since users do not participate actively, even if they satisfy several of their needs (Whiting & Williams, 2013, p. 366). Additionally, personality traits (as discussed above) hold an important role in users' categorization according to their usage.

2.5. The "Five Factor Model"

According to many researchers, users' personality traits play a crucial factor in regards to their engagement with the online participatory social media across the various types of platforms, for instance social networking sites and media sharing networks (Correa et al., 2009, p.247). Specifically, users express their thoughts, beliefs and personalities overall through these digital platforms. Studies have shown that personality relates to frequency of social media usage, since it reflects users' communication habits and "pathologies", and thus, "directly relate to patterns of media consumption" (Zuniga et al., 2017, p. 540). For instance, for a person who is considered to be more talkative and adventurous, has many friends and tends to be more outgoing, being more active on social media platforms aligns with those personality traits (Zuniga et al., 2017, p. 540). Consequently, research suggests that individuals' personality traits indeed relate to spectrum of users' online behaviour.

The Five Factor Model (FFM) is described as the most useful taxonomy in personality research, since through five personality factors, it relates peoples' behaviour on online environments (Moore & McElroy, 2011, p.268). According to Landers and Lounsbury (2006), the Five Factor Model is a "unified, parsimonious conceptual framework for personality" that relates directly to internet usage and peoples' digital interactivity (p. 284). Many researchers support that personality traits are fundamental in explaining the characteristics that affect users' subsequent behaviours (Ngai et. al, 2014; Landers et al., 2006). For example, there is a tendency for people with a "certain personality dimension value to communicate with others in online environments […] through discussion threads, comments and so forth" (Balmaceda et al., 2012, p. 149). The Big Five finds its roots to personality psychology, where scientists have argued that there are five fundamental dimensions of personality that relate to their online behaviour: *neuroticism, extraversion, agreeableness, conscientiousness* and *openness* (Moore & McElroy, 2011; Hughes et al., 2011). As stated by Costa and Widiger (2002), these personality traits are defined as enduring dimensions of individuals' differences in regards to patterns of thoughts, feelings and actions (p.5). Personality traits are distinguished from moods or states, which are more "transient" (Costa et al., 2002, p. 5).

To be more specific, *neuroticism* is considered to be a measure of affect and emotional control, where low levels suggest good control over emotions and "stability" (Hughes et al., 2011, p. 562). As research suggests, those high in neuroticism are considered as "emotionally unstable, or neurotic, […] while experience anxiety, vulnerability, or even anger" (Langstedt, 2011, p.39). Additionally, individuals high in neuroticism will likely avoid situations that cause them any kind of tension, such as face-to-face communication (Langstedt, 2011, p.39).

In regards to online participation, *neuroticism* has been positively associated with social media usage (Blackwell et. al, 2017, p.69). Research supports that those high in neuroticism use social media frequently, mostly to avoid loneliness, and in order to receive feedback and reassurance from others, since "it is easier for them to communicate through a screen than face-to-face (Hughes et al., 2011; Blackwell et al., 2017). Additionally, users high in neuroticism "may have a lot of anxiety about personal relationships, and social media can be used to frequently stay in touch with others" (Blackwell et al., 2017, p. 72).

Extraversion refers to the extent where users are cheerful, social, active and talkative, while engaging much social interaction online on social media such as Facebook and Twitter (Moore & McElroy, 2011, p. 268). To be more specific, extraversion is related to excitement, experiencing joy and general happiness, while also those high in extraversion are more likely to seek for excitement, be positive and energetic (Langstedt, 2011, p. 25). As Langstedt (2011) suggests, those high in extraversion prefer to spend time with people both online and

offline, while being friendly and “have a general liking for, and comfort with, people (Langstedt, 2011, p. 25).

Extraversion has also been positively associated to social media usage, and even addictive tendencies, since user appear to use multiple online platforms to enhance their social connections to others (Blackwell et al., 2017, p. 69). Extraverted users “crave” social interaction online, despite the fact that they are comfortable with the face-to-face interaction, which may lead to usage addiction (Blackwell et al., 2017, p.72). Correa, Hinsley and Zuniga (2009) in their article mention that early studies of users’ online participation suggested that users high in extraversion and in neuroticism may be heavy online participants due to the anonymity offered on the internet (p. 248). However, more recent studies reflect a reversal, since there are restrictions to anonymity on certain types of online platforms (such as social networking sites). It is suggested that users might still engage heavily to connect with individuals they already know, and limit their engagement with strangers (Correa et al., 2009, p. 248). Thus, extraversion is positively correlated to various social media, and in particular social networking sites, since users have the opportunity to fulfil their desire of immediate contact with others (Ross, 2009, as cited by Correa et al., 2009, p.248).

Additionally, *agreeableness* refers to the measure of how sympathetic, courteous, kind, trusting, forgiving and, overall, friendly individuals are; individuals high in agreeableness are known to avoid conflict with other users online (Moore & McElroy, 2011; Hughes et al., 2011, Wehrli, 2008). Additionally, they are being seen as “straightforward, trusting, compliant and modest (Langstedt, 2011, p. 35). According to Wehrli (2008), agreeableness has favourable effect on social interactions and their perceived quality, while it also accelerates the adoption of social networking technology by the audiences (p. 5).

Users high in *agreeableness* share positive emotions through their text comments and reactions, contrarily to those low in agreeableness who exhibit aggression and use more anger words (Gosling et al., 2011; Tripathi, 2010). As Tripathi (2010) mentions “agreeableness is positively correlated with the number of friends, groups and likes a social media user has” (p. 11). Langstedt (2011) suggests that “agreeable people actively avoid expressing disagreement”, but will be “more inclined to engage a person with this attribute in dialogue on online environments” (p. 35).

Conscientiousness refers to individuals’ orderliness, thoroughness, reliability, responsibility and self-discipline (Moore & McElroy, 2011; Hughes et al., 2011). According to Langstedt (2011), “people scoring high in conscientiousness have been described as motivated, careful and purposeful in their actions” (p. 36). Consequently, it has been related to being organized and higher self-efficacy, and thus, internet users may use media content in a particular manner to “gratify diversional needs or motives” (Langstedt, 2011, p.37).

Research suggests that conscientious individuals are inclined to avoid social media, since they do not “drive efficiency or production” (Moore & McElroy, 2011; Hughes et al., 2011). To be more specific, Alan and Kabaday (2016) suggest that individuals high in conscientiousness may reject all kinds of social media since they serve as distractions to them (p. 597). Additionally, these users have a smaller number of online friends, upload less photos and spend less time than other on social media (Tripathi, 2010, p. 4).

Lastly, *openness* refers to individuals’ curiosity, willingness to explore new ideas and things, and open-mindedness (Moore & McElroy, 2011; Hughes et al., 2011). Individuals high in openness to experience have a preference for variety, are “intellectually curious and imaginative, while they seek for information and new experiences, showing their willingness to undertake things that may be unfamiliar to them (Langstedt, 2011, p. 30).

Openness correlates with the usage of social media and their features, as well as information seeking (Moore & McElroy, 2011; Hughes et al., 2011). Individuals high in openness are frequently adding and replacing their photos, and engage in a wide range of activities, while using social media as communication tools to express their appreciations towards new ideas (Gosling et al., 2011; Tripathi, 2010). Additionally, openness can be measured through the number of status updates, photos, groups and likes that individuals use to participate on social media (Tripathi, 2010). Consequently, these personality traits are interrelated to users’ online participation and affect their usage and digital footprint, as well as the digital culture overall.

2.6. Hypotheses

After identifying the general research area and reviewing the existing literature, a list of testable hypotheses can be posed.

Given the ramifications of the distribution of users’ categories and the continuing evolution and expansion of the participatory culture, and since the landscape has changed permitting more opportunities for some of the roles, (e.g., YouTube has brought on a generation of vloggers, and thus, Creators), we can hypothesize that the current distribution is no longer relevant. For instance, because the number of active users on Instagram has increased over 50% just between 2013 and 2015, we can hypothesize that the distribution of the 2012 user typology has altered (Hu et. al, 2014; Kuchler, 2015). Additionally, since 2012, a noticeable number of individuals has become actively involved with various social media platforms, by creating personal or professional profiles and uploading various forms of digital content such as photos, videos and so forth. Research suggests that users share over 55 million photos every day on social media platforms like Instagram and Facebook, and thus,

we can assume that the percentages of users' categories according to Forrester's Social Technographics Ladder (2012) have altered. Consequently:

H1: Given the evolving online participatory culture, the distribution of the user typology is no longer that observed in 2012, according to Forrester's Social Technographics Ladder (2012).

At the same time as the rapid growth in user participation, social media has altered their features and structure to enable various user types to participate more actively on the variety of platforms, so we can hypothesize that user typology across platform types has altered since 2012 (Wimmer & Dominick, 2014, p.55). Specifically, research suggests that certain platforms such as Facebook and Instagram have grown ever since 2012, and thus, a lot more users participate actively on them (Foreman, 2017; Kaplan et al., 2010). Thus, increase use of their affordances would lead to higher representation of the STL categories that are described by those affordances and given the differences in the affordances of the participatory social media categories across the different social media platform types:

H2: The current typology will also differ across platform types, such as social networking sites, media sharing networks, and so forth.

Furthermore, as research suggests, personality traits affect social media behaviour and usage, since users engage through various ways on multiple social media platforms according to their personalities (Correa et al., 2009, p.247). To be more specific, personality traits relate directly to "patterns of media consumption", and thus, what types of social media users choose, and in what activities they engage online (Zuniga et al., 2017, p. 540). For instance, people with a "certain personality dimension value to communicate with other in online environments […] through discussion threads, comments and so forth" (Balmaceda et al., 2012, p. 149). Based on findings that the FFM effects on social media behaviour, we can expect the following:

Since extraversion has been positively associated to social media usage, as extroverts use for instance social networking sites to communicate and interact with other users, by creating and circulating content to enhance their social interaction:

H3a: Extraversion will be positively associated with the categorization of individuals (based on their social media behaviour) as Creators or Critics (STL categories).

Individuals high in neuroticism use social media frequently, mostly to avoid loneliness, and in order to receive feedback and reassurance from others, thus, they have a “passive role” to social media even if they use them

H3b: Neuroticism will be positively associated with the Joiner category.

Additionally, individuals high in openness are active social media users, who frequently engage in online activities on these platforms, such as read blogs, online forums, ratings and reviews:

H3c: Openness will be positively associated with the Spectator and the Collector categories.

Agreeableness is also positively associated to social media usage, since individuals high in agreeableness use and visit frequently social networking sites:

H3d: Agreeableness will be positively associated with the Conversationalist category.

Lastly, individuals high in conscientiousness use social networking sites to gratify their needs and spread the online content of others through posting for instance:

H3e: Conscientiousness will be positively associated with the Collectors category.

Chapter 3: Research Design and Argumentation

3.1. Research Method

A quantitative approach was employed in order to collect relevant data that would answer the research question and the associated sub-questions, and permit accurate results. To achieve these objectives, surveys were employed to investigate how users are currently participating on online environments and digital interactivities (typology), and examine the reasons why (personality traits).

As research suggests, there are two main types of surveys. Descriptive surveys attempt to capture an overview of current attitudes, behaviours and conditions, while analytical surveys attempt to explain why current situations or conditions exist (Wimmer and Dominick's, 2011, p. 185). By considering these two types of surveys together, a wider, more representative sample of valuable data was collected for this research. Moreover, surveys allow for the collection of a large amount of data from a variety of respondents and can include supplementary information, such as demographic information in addition to the targeted characteristics and behaviours, in this case personality traits, and their online participation behaviour on social media.

Additionally, in order to be able to construct an effective and readily understandable survey for this research, question phrasing was kept to short lengths and specialized words were avoided. Still, certain definitions of particular concepts (for instance, respondents were provided with the definition of "active social media users" based on the theoretical framework) were provided to the respondents, in order to help them understand the questions more precisely and provide truthful and meaningful answers. Naturally, "double-barrelled" and leading questions were entirely avoided, another necessity of an effective survey (Wimmer & Dominick, 2011, p. 190).

In conclusion, surveys provided a wide range of advantages, such as the fact that the questions can be written with more complete descriptions without too much space-constraints; that the special formatting of the questions and multiple-choice answers can make responses easily distinguishable, and to emphasize them the critical aspects of the questions; and lastly and more importantly, that, in conjunction with an online delivery service, they allowed for a wide reach to a great number of European respondents who were able to complete the surveys from different locations, on different dates and times.

3.2. Unit of Analysis and Sample

The units of analysis comprised active social media users, who were defined as those who logged in to the platform/ website, and/or completed some action, for instance reading,

liking, sharing, posting, and so forth, within the previous 30 days. Furthermore, since research suggests that most active social media users are above 18 years old while the number of older individuals continuously increases, the survey focused on social media users aged between 18 to 65 years old (www.statista.com; www.jetscram.com).

Since the scope of the thesis is Europe, the sample contained exclusively European participants, whose nationality refers to one of the 28 EU member countries. In order to insure that users' nationality was appropriate for the research, respondents were asked twice to indicate it; firstly by answering if they are European citizens and then, by indicating specifically their nationality through a list provided to them including the 28 EU countries. Additionally, the survey allowed users to be able to identify themselves as males, females or "other", while also giving them the opportunity to not answer the particular question.

In order for the results to be as representative and unbiased as possible, more than 300 online survey responses were sought. A relatively high number of respondents was also desirable, so that inappropriate or uncompleted survey responses were excluded, as those would affect the reliability and validity of the research. Thus, a "purposive sampling strategy" was used, where participants were selected based on the aforementioned criteria and shared specific characteristics, for instance being active social media users (Wimmer & Dominick, 2011, p. 190).

3.3. Survey Formulation and Distribution

The survey was implemented on Qualtrics, a research software that allows the capture of users experience insights (www.qualtrics.com). A number of Qualtrics' options and tools were used in order to formulate an effective survey, for instance "Skip Logic" that allowed to direct users at the end of the survey if they did not fulfil any of the particular requirements, or the display of particular questions depending on individuals' answers. As a consequence, 32 questions were formulated that allowed to collect users' responses regarding their online behaviours on various social media platforms, as well as their personality traits that relate to those behaviours.

In order to ensure adequate coverage of Europe, the survey was distributed through "Prolific", a website that "helps researchers find the participants they need" (www.prolific.ac). The Prolific platform allows for the distribution of the survey to only European citizens, by offering demographic screening, and through micropayments, ensure a certain level of data quality (www.prolific.ac).

3.4. Operationalization

In order to collect meaningful and valuable data for the particular research and enhance the reliability of the answers, the survey was divided into categories, and thus, sets of questions and sub-questions. These questions emerged from previous literature regarding users' attitudes that were used to infer personality traits, their online participation and activity, as well as their engagement with social media websites.

Since the survey aimed at collecting quantitative data, close-ended questions were used. Respondents were able to select an answer based on a provided list, which provided greater uniformity in responses, while the answers were easy to quantify (Wimmer & Dominick, 2014, p. 188). Some question types provided dichotomous responses ("Yes" or "No"), while others were of multiple-choice, including all possible responses, and at the same time being "mutually exclusive" where one response option per question would apply for each respondent (Wimmer & Dominick, 2014, p.192).

Furthermore, a number of Likert scales were required in order to enhance the reliability of the answers. A Likert scale refers to a number of statements or queries in regards to a topic, to which respondents can answer on an ordinal range: either strongly agree, agree, be neutral, disagree or strongly disagree with the statements; thus, each response is added to produce a single score on the topic under investigation (Wimmer & Dominick, 2014, p.55). Additionally, another technique that was applied to the survey was semantic differential scaling that is "used to measure the meaning an item has for an individual", and thus the activity and the evaluation of users' in regards to social media's features and structures that enhanced their online participation was measured (Wimmer & Dominick, 2014, p.55). Specifically, through semantic differential scales, attitudes towards social media could be measured.

3.4.1 Outline of Survey Questions

The first question (Q1) solicited a response for consent, after informing the respondents about the research, its risks and benefits, the time involvement, as well as participants' rights. In order to proceed to the survey questions, each respondent should agree with the consent form.

The first (A) main category of questions (Q2 to Q5) refered to users' demographics to reassure respondents' appropriateness/suitability for the research. Respondents needed to indicate their age range in regards to the seven age groups that were provided. Respondents below 18 years old and above 65 years old were not taken under consideration for the particular research, and they were directed to the end of the survey. Additionally, respondents were asked if they were European citizens, and if yes, to indicate

their nationality from a list of European countries that were provided to them. Even though "Prolific" would reassure that respondents were European, the particular question would provide more credibility and reliability to the analysis.

The second main (B) category of questions referred to users' online participation and behaviour on social media platforms (Q6 to Q13) and was used to infer users' categories and consequently a new typology distribution. At first, respondents were provided with the definition of "social media" stemming from the literature, and they were asked to indicate if they use them. In the case of a respondent's negative answer, he or she was excluded from the research and redirected at the end of the survey. Through this process, a number of Inactive users could be measured, since their answer would indicate that they use the Web 2.0, but no social media.

Secondly, respondents were provided with the definition of "active social media users" and were asked to indicate in which of the following types of social media categories stemming from the literature they are active members. Specifically, users were able to provide multiple-answers, varying from social networking sites and media sharing networks, to discussion forums, bookmarking and content curation sites, anonymous websites, consumer review networks and blogging and publishing networks. Each social media platform type included examples to allow users' better understanding, for instance, in regards to social networking sites, users where given the examples of Facebook, Twitter and LinkedIn.

Additionally, respondents were asked to indicate for what reasons they use social media (personal or professional) and how many followers/friends/connections they have, in order to capture to an extent their online behaviour. Specifically, users were asked if they use social media to keep in touch with friends and family, be entertained, share personal content, search job opportunities, and so forth, and thus, for personal reasons. Similarly, users where asked to indicate if the use social media as a business/organisation/individual to maintain professional identity, communicate with audiences, influence and inform consumers, and so forth, and thus for professional reasons, while they also had the choice to choose both. Additionally, users were provided with scales in regards to the number of their online friends/followers/connections; 0 to 100, 101 to 500, 501 to 1000, 1001 to 2000, or more than 2000 in regards to their personal social media. Similarly, users were provided with scales in regards to the number of their friends/followers/connections on their professional social media; 0 to 100, 101 to 1000, 1001 to 10.000, 10.001 to 100.000, 100.001 to one million, or more than one million.

Further on, users were asked if they use any anonymous profiles and on which social media platform(s), as well as what social media do the use on a typical week. Additionally, users were asked to indicate the frequency in which they engage on a number of activities

on their most used social media platforms on a weekly basis, and lastly, to indicate their overall activities across all the social media platforms they use on a typical month.

These questions were based on Forrester's Social Technographics Ladder (2012) which divided users into seven categories based on their social media behaviour and online participation and interactivity overall. Thus, users were asked if they engage in any one of the specific activities that qualifies them as a Creator (e.g. publishing on blogs, upload videos they created and so forth), while the category label itself was not exposed to the respondents. One operationalization of category instantiation was if any one of several behaviours for a given category is engaged by the respondent. For example, if the user publishes or uploads any created content, he or she would be considered a Creator, coded by an indicator of 1, and 0 otherwise.

The third main (C) category and last question (Q14) solicited responses used to derive participants' the FFM personality traits: neuroticism, extraversion, agreeableness, conscientiousness and openness. Donnellan, Oswald, Baird and Lucas (2006) developed and validated an abridged survey instrument for the Five Factor Model, called *The Mini-IPIP Scales* (*Figure 1*; p. 192). The authors mention that their method can be used in studies where participants will be completing "a considerable number of items (e.g., large-scale panel studies) or whenever use of participants' time must be very brief (e.g., experience sampling studies)" (Donnellan et al., 2006, p. 193). The method consists of 20 statements, which every one of them relates to one of the FFM (Donnellan et al., 2006, p. 193). Specifically, the particular survey question includes the 20-item scale and a 7-point Likert scale, where users are able to indicate whether they "Strongly Disagree", "Disagree", "Somewhat Disagree", "Neither Agree or Disagree", "Somewhat Agree", "Agree", "Strongly Agree". As Donnellan, Oswald, Baird and Lucas (2006) suggest, in order to measure Extraversion, one needs to take under consideration the items 1-6-11-16 from the *Mini-IPIP*. Additionally, in order to measure Agreeableness, one needs to take under consideration the items 2-7-12-17. For Conscientiousness the items 3-8-13-18, for Neuroticism 4-9-14-19, and lastly, for Openness 5-10-15-20. Additionally, the authors indicate that particular items on the scale need to be reversed in order to have meaningful results. For instance, in order for someone to be considered as an extrovert, he/she must indicate that he/she is "the life of the party" and "talks to a lot of different people at parties". Additionally, an extrovert must indicate that he/she "talks a lot" and "does not keep in the background", as opposed to "do not talk a lot" and "keep in the background" that was used in the Mini-IPIP scale. As a result, extroverts should answer in a positive manner questions 1 and 11 in the Mini-IPIP scale and negatively questions 6 and 16 (the reader is referred to *Figure 1.*Mini-IPIP Scale, p.35). Through this procedure, respondents are expected to give more truthful answers, since they are expected to pay more attention to the statements (Donnellan et al., 2006).

	Mini-IPIP 7 point Likert-Scale ranging from (1= Very Inaccurate, 7=Very Accurate)
1	I am the life of the party
2	I sympathize with others' feelings
3	I get chores done right away
4	I have frequent mood swings
5	I have a vivid imagination
6	I don't talk a lot
7	I am not interested in other people's problems
8	I often forget to put things back in their proper place
9	I am relaxed most of the time
10	I am not interested in abstract ideas
11	I talk to a lot of different people at parties
12	I feel others' emotions
13	I like order
14	I get upset easily
15	I have difficulty understanding abstract ideas
16	I keep in the background
17	I am not really interested in others
18	I make a mess of things
19	I seldom feel blue
20	I do not have a good imagination

Figure 1. Mini-IPIP Scale *(Donnellan et al., 2006, p.193)*

The above responses to the social media participation questions allowed us to determine the categories/types a user falls under, as enumerated by previous literature (i.e. the STL of Forrester's Research in 2012). Categorizing respondents ultimately allowed for the comparison of the distribution of categories across time (H1) and across some prominent social media platforms (H2), and, in conjunction with the Mini-IPIP, also allow for the inference of the relationship between personality traits and each of the user categories (H3s).

3.5. Pre-Testing

In order to ensure that questions' errors were identified and eliminated from the research, a pre-test was occurred prior to the survey's official distribution, in order to detect and remedy problematic questions before data collection (Ornstein, 2014, p. 2). In order to assure the quality of the questionnaire and to improve the existing questions, the particular survey was distributed through Facebook to the group "European Citizens", with the aim of collecting answers from 20 individuals who fulfil the requirements of the survey.

These Facebook group's users were asked to complete a draft of the survey that was finally used in the research, with additional open-ended questions that allowed them to provide feedback of the survey, including the time involvement and the particular questions, as well as make additional comments on the research overall. Through the pre-testing

phase, questions that were problematic or confusing to the respondents were identified and altered for the final version of the survey.

In particular, respondents indicated that particular questions that included confusing, yet well-known, terms required for further clarification, such as the provision of definitions. Consequently, definitions in regards to “social media” and “active social media users” were provided to the respondents in order to ensure their understanding of the terms. Additionally, respondents expressed their dissatisfaction regarding their time involvement with the questionnaire, since it contained many similar questions that, according to their opinion, were unnecessary and needed to be excluded from the survey. As a consequence, a small number of questions that did not compromise the quality of the data and results overall were excluded from the survey in order to reduce the time involvement of the participants.

Overall, the pre-testing of the questionnaire prior to its official distribution indicated questions’ errors that either were confusing to the respondents or required further clarification, and thus, allowed for the incremental improvement of the questionnaire.

3.6. Reliability and Validity

In order to provide a more accurate reflection of the truth, and thus reliability, and in order to lower the chance of random error, a larger and more representative sample of 300 European respondents was selected; respondents who did not fulfil the requirements of the research were excluded from the analysis. Additionally, statistics were used to calculate and compare the probability of the results to Donnellan et al.’s (2006) findings. According to Litwin (2013), “measurement error refers to how well or poorly a particular instrument performs in a given population”, and so “the lower the measurement error, the closer the data are to the truth” (p.2). In order to achieve reliability, the survey’s data needed to be reproducible. The particular thesis used reworded questions and responses, with similar vocabulary and difficulty level, in order to collect similar (but not identical) data, while measuring the same attributes (Litwin, 2013, p. 6).

Moreover, in order to achieve the credibility and accuracy of the research, and thus validity, a number of necessary steps needed to be followed. Firstly, the research aimed at measuring specific “instruments” regarding users’ personality traits and social media participation. Thus, an organized review of the survey’s content was necessary, “to ensure that it includes everything it should” (Litwin, 2013, p. 3). According to Litwin (2013), “concurrent validity requires that the survey instrument in question be judged against some other method that is acknowledged as a “gold standard” for assessing the same variable”, and therefore the established Mini-IPIP was used for assessing same variables in regards to personality traits (Donnellan et al., 2006). Additionally, since other researchers (Forrester

Research) have already come up with valid indicators, pre-established scales and items were used to accomplish the validity of this research. To be more specific, the Social Technographics Ladder was used in the particular thesis, but was augmented for the purposes of this research. Lastly, it was conducted a reliability analysis of each *Mini-IPIP* scale via Cronbach's alpha (α).

3.7. Data Analysis

The software IBM SPSS Statistics 25 was used for the analysis of the data obtained from the online questionnaires. Specifically, data from the software Qualtrics were exported to SPSS in order to conduct the appropriate and necessary tests to answer the hypotheses, as well as the thesis' main research question. Descriptive statistics were used in order to determine and analyse respondents' social media usage and demographic information, such as their age groups and their gender.

Other SPSS tests that were conducted included crosstabulation among specific questions, Chi-square goodness-of-fit tests, Reliability tests using Cronbach's alpha, as well as Binary Logistic Regressions in order to answer the hypotheses.

Chapter 4: Findings and Results

Data was collected through the distribution of surveys online. Responses were gathered during April 2018, since the questionnaire was online for the whole month. Overall, 352 responses were collected. Out of them, 241 were used for the analysis, since 111 respondents were excluded from the research for one or more of the following criteria: they did not qualify in terms of their age (e.g. below 18, or above 65 years old); their nationality (since they did not have a European nationality out of the 28 EU members); they did not use social media; or they did not complete the survey. Through the use of the Prolific platform and its respondents' screening, higher data quality was ensured. The descriptive statistics on the demographics and primary questions are reported first:

4.1. Descriptive Statistics

4.1.1. Demographic Results

The demographic data that were gathered from the research process through the distribution of online surveys in regards to participants' demographic information in April 2018, where *N*=241, indicate that the ages of the respondents are primarily in the lower ranges, with 34% (18-24) and 32% (25-34). The rest of the age categories have roughly equivalent representation: 10% (35-44), 13% (45-54), and 11% (55-65). Additionally, in regards to the gender distribution of the respondents used in this research, 51% were male, 43% were female, while 6% of them preferred not to answer the particular question.

In regards to respondents' nationality, 100% of them were European citizens. Even though the United Kingdom has voted to leave the European Union, it was still included in the EU countries' list, since it will "depart" on March 29, 2019 (www.bbc.co.uk). Consequently, data indicate that most respondents were from France, Portugal, the Netherlands and Greece. Specifically:

- 1% of the respondents were from Romania, Hungary and Croatia
- 2% were from Slovakia, Austria, Luxembourg, Cyprus, Malta, Bulgaria and Spain
- 3% were from Slovenia, Latvia, Germany and Belgium
- 4% were from Sweden, Poland, Lithuania, Estonia
- 5% were from Finland, Denmark, Czech Republic, United Kingdom, Italy and Ireland
- 6% were from Portugal, the Netherlands and Greece
- 7% of the respondents were from France

4.1.2. Social Media Usage

Data indicate that all respondents who participated on the survey (where *N*=241) were social media users, and thus, use websites that enable them to read, create and share digital content such as photos, videos and textual content with other users, on platforms like Facebook, Reddit, WordPress and so forth. Specifically, data indicate that 91% of respondents use social networking sites (such as Facebook and Twitter), 77% use media sharing networks (such as Instagram and YouTube), 40% use discussion forums (such as Reddit), 13% use bookmarking and content curation websites (such as Pinterest), 32% use consumer review networks (such as TripAdvisor and Amazon.com), 10% use blogging and publishing networks (such as WordPress), and lastly, only 3% use anonymous social networks (such as Ask.fm).

Data indicate an overlap between the social media categories that respondents are active users, since they are actively involved with multiple social media platforms simultaneously. For instance, data reveal that that 168 users (where *N*=241), and thus 70% of them, are actively involved with both social networking sites and media sharing networks. Additionally, a noticeable percentage of respondents (32%, where *N*=241), use both social networking sites and discussion forums, and 15% use both discussion forums and consumer review networks. Consequently, data indicate an overlap between the social media categories that users are active members and use their features and structures for different purposes.

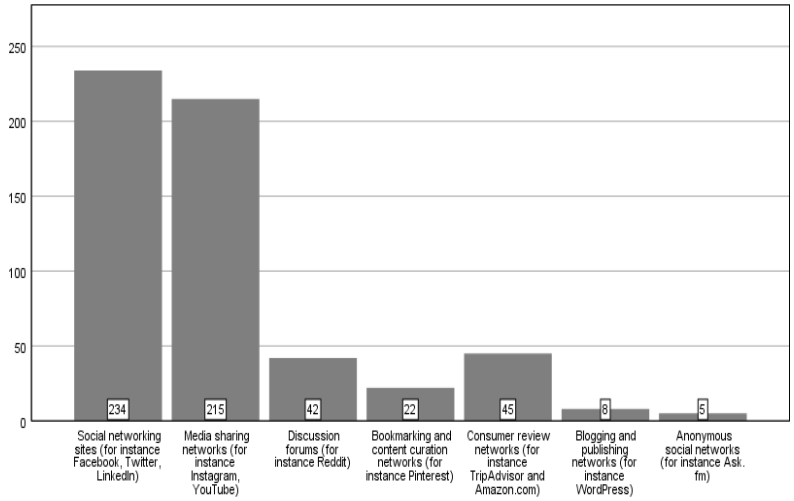

Figure 1. Respondents' social media distribution on a typical week (April 2018)

Figure 1 indicates the social media usage of respondents on a typical week. To be more specific, 97% of the respondents use social networking sites on their typical week, 89% use media sharing networks, 17% use discussion forums, 9% use bookmarking and content curation networks, 19% use consumer review networks, 3% use blogging and

publishing networks, while only 2% use anonymous social networks on a typical week (where *N= 241)*. Consequently, as data reveal, social media users are actively involved with multiple social media categories on a typical week. For instance, as data indicate, 86% of users use both social networking sites and media sharing networks on a typical week of their lives.

Specifically, data indicate that 83% of respondents use Facebook on a daily basis, while 6% of them use the particular social networking site most days of their week. Similarly, 20% of respondents use Twitter daily, while 10% of them use it either most days or a few times of the week. LinkedIn users indicate that they use it mostly daily (34%) or most days of their week (22%). Additionally, 60% of the respondents use Instagram daily, and 51% of them use YouTube also on a daily basis. Data reveal lower percentages to the less prominent social media categories, where only 10% use Reddit daily, 2% use Pinterest and Amazon.com, while only 1% of the respondents use TripAdvisor, WordPress and Ask.fm on a daily basis.

4.2. Computed Variables

New variables were transformed from the data on SPSS in order to answer the first two hypotheses of the research. Specifically, 6 new binary variables were created; Creators, Conversationalists, Critics, Collectors, Joiners, and Spectators. A value of 1 for Creator was assigned for a respondent who exhibited any of the *creator* activities. Similarly, a value of 1 for Conversationalist was assigned for a respondent who exhibited any of the *conversationalist* activities, and so forth, in order to create the new variables that were used for the hypotheses. Given that users can exhibit multiple kinds of activities, these indicator variables are not mutually exclusive.

Additionally, new variables were transformed from the data on SPSS in order to answer the hypothesis in relation to users' personality traits. Specifically, 5 new variables were created; Extraversion, Neuroticism, Conscientiousness, Agreeableness and Openness. The new variables in regards to personality traits contained some of individuals' answers reversed. For example, in order to measure users' extraversion respondents had to answer four questions, indicating their answers on a 7-point Likert scale, varying from "Strongly Disagree" to "Strongly Agree": "I am the life of the party", "I do not talk a lot", "I talk to a lot of different people at parties" and "I keep in the background". Extrovert individuals who are "the life of the party" and "talk to a lot of different people at parties" would also talk a lot and would not keep in the background. Some of the questions are posed in the reverse direction so the directionality had to be reversed for the composite variable. The same procedure took place for the Neuroticism, Conscientiousness, Agreeableness and Openness personality

traits. Thus, the composite, aggregate variable was created for each of the personality traits by averaging the sets of four questions, with some having to be reversed.

4.3. Hypotheses Testing

4.3.1. Social Technographics Ladder (2018) - Hypothesis 1

Social media users were asked “In a typical month, across all the social media platforms you use, how often do you engage in the following activities?” (The reader is referred to Appendix A. Questionnaire, p. 68). A 5-point Likert scale with 32 items was used, where respondents had 5 choices, varying from “Never”, to “Less than Rarely” (once every two weeks), “Rarely” (1 or 2 times per month), “Occasionally” (3 or 4 times per month), and “Frequently” (at least 5 times per month). Out of the 241 respondents used in the research, and in order to fall into one of the 2018 Social-Technographics Ladder (STL) category, users had to perform each activity at least once every two weeks, and thus, “Less than Rarely” (www.forrester.com; Li et al., 2007). Data reveal that:

Table 1. Social Technographics Ladder Frequency-Percentage (April 2018)

Social Technographics Ladder (2018)	Frequency	Percentage
Creators	187	77.6%
Conversationalists	228	94.6%
Critics	62	25.7%
Collectors	76	31.5%
Joiners	210	87.1%
Spectators	223	92.5%
Inactives	4	1.5%

Table 1 reveals the 2018 Social Technographics Ladder (STL), where *N*=241. Specifically, data indicate that Creators constitute the 78% of the online population, Conversationalists the 95%, Critics the 26%, Collectors 31%, Joiners 87% and, lastly, Spectators constitute the 92% of the online population. According to previous literature and as data reveal, there is an overlap of users in this typology, since users fall under multiple categories (Van Dijck, 2009). Additionally, data indicate that 4 out of the 241 respondents were falling under the Inactives category, and thus, represent the 1.5% of the online population. The low count of the Inactives is not surprising because the distribution of the survey was online, and thus, it was expected that respondents were indeed using a number of the Web 2.0 features, applications and websites, such as social media platforms, a point that will be further discussed in the Conclusion.

According to Forrester’s (2012) STL, active users (and thus, Creators, Conversationalists, Critics, Collectors, Joiners and Spectators) constituted the 48% of the

online population, while 52% of the population were considered Inactives. Therefore, the 2012 STL when not considering Inactives would be:

Table 2. Forrester's (2012) Social Technographics Ladder. Percentages without considering Inactives (April 2018)

Forrester's Social Technographics Ladder	Percentage	Percentage without considering Inactives
Creators	13%	27%
Conversationalists	33%	69%
Critics	19%	40%
Collectors	15%	31%
Joiners	19%	40%
Spectators	33%	69%

Table 2 indicates the percentages of users' typology without considering the Inactives category, according to Forrester's (2012) STL. Specifically, data reveal that Creators constituted the 27% of the online population, Conversationalists and Spectators the 69%, 40% were Critics and Joiners, while 31% were Collectors.

Similarly, the 2018 STL is formed as of:

Table 3. Social Technographics Ladder. Percentages without considering Inactives (April 2018)

Social Technographics Ladder	Percentage	Percentage without considering Inactives
Creators	78%	78.9%
Conversationalists	95%	96.3%
Critics	26%	26.2%
Collectors	31%	32.1%
Joiners	87%	88.6%
Spectators	92%	94.1%

Table 3 indicates the percentages of the STL categories, without considering the Inactives. Specifically, data reveal that the 2018 STL constitutes of 78.9% Creators, 96.3% Conversationalists, 26.2% Critics, 32.1% Collectors, 88.6% Joiners and 94.1% Spectators.

Consequently, the 2018 STL compared to Forrester's (2012) Social Technographics Ladder is being compared, without taking under consideration the Inactives category:

Table 4. Social Technographics Ladder. Percentages without considering Inactives (April 2018)

Social Technographics Ladder	2012	2018
Creators	27%	78.9%
Conversationalists	69%	96.3%
Critics	40%	26.2%
Collectors	31%	32.1%
Joiners	40%	88.6%
Spectators	69%	94.1%

Table 4 reveals the 2018 category percentages of the Social Technographics Ladder compared to Forrester's (2012), without considering the Inactives. Specifically, data indicate a 51.9% increase in the Creators category, a 27.3% increase in the Conversationalists category, a 1.1% increase in the Collectors category, a 48.6% increase in the Joiners category and a 25.1% increase in the Spectators category. Additionally, data reveal that there has been a decrease in the Critics category by 13.8% ever since the 2012 Forrester's STL.

- **Chi-Square tests:**

Because the categories are not mutually exclusive (meaning a respondent can take on more than one STL category), a series of chi-square goodness-of-fit tests were needed for each of the STL categories. The expected frequencies were computed by multiplying the 2012 STL percentage to the study's sample size. Through the use of the Chi-Square formula (where Chi-square = sum (O-E)^2 / E), the following results emerged:

1. The distribution of Creators differs from that in 2012, where $\chi^2(1)= 313.5$, $p<.001$, such that there are proportionally and significantly more Creators in 2018.

Table 5.a. Chi-Square Test Creators (April 2018)

	Creators	
	Observed N	Expected N
No	54 (22%)	176(73%)
Yes	187(78%)	65 (27%)
Total	241	

2. The distribution of Conversationalists differs from that in 2012, where $\chi^2(1)=74.4$, $p<.001$, such as there are proportionally and significantly more Conversationalists in 2018.

Table 6.a. Chi-Square Test Conversationalists (April 2018)

	Observed N	Expected N
No	13 (5.4%)	75 (31.1%)
Yes	228(94.6%)	166 (68.8%)
Total	241	

3. The distribution of Critics differs from that in 2012, where $\chi^2(1)= 20.01$, $p<.001$, such as there are proportionally and significantly less Critics in 2018. (The reader is referred to Appendix B.Chi-Square Goodness-of-Fit Tests, p. 85).
4. Additionally, data reveal not a statistically significant difference of Collectors from that in 2012, where $\chi^2(1)= .019$, $p=.889$, such as there are no proportionally and

significantly more Collectors in 2018. (The reader is referred to Appendix B.Chi-Square Goodness-of-Fit Tests, p. 85).

5. The distribution of Joiners differs significantly from that in 2012, where $\chi^2(1)= 225.0$, $p<.001$, such as there are proportionally and significantly more Joiners in 2018. (The reader is referred to Appendix B.Chi-Square Goodness-of-Fit Tests, p. 85)
6. The distribution of Spectators differs significantly from that in 2012, where $\chi^2(1)= 62.9$, $p<.001$, such as there are proportionally and significantly more Spectators in 2018. (The reader is referred to Appendix B.Chi-Square Goodness-of-Fit Tests, p. 85).

Consequently, the hypothesis that given the evolving online participatory culture, the distribution of the user typology is no longer that observed in 2012, according to Forrester's Social Technographics Ladder (H1*)* is *confirmed,* as the STL has mutated in the last six years*.*

4.3.2. Social Technographics Ladder (2018) across platform types - Hypothesis 2

A number of chi-square test of independence tests were performed on SPSS in order to explore the relationship between each STL user category and social media types. Each test comprises a platform type use (binary variable) as the independent variable (column of crosstab) and STL category as the dependent variable (row of crosstab). The typical significance test for a 2x2 is equivalent to a proportions test, while the reported Monte Carlo significance – when needed – will be slightly more accurate. The data reveal that:

- **Creators:**

Data reveal that 80% percent of those using social networking sites, such as Facebook, Twitter and LinkedIn, are Creators. Contrarily, only 54.5% percent of those not using social networking sites (but might use other platform types) are Creators. Data indicate that $\chi^2= 7.39$, $p<.05$, Monte Carlo signif.; Monte Carlo significance is reported because at least one cell has expected count less than 5.

Additionally, data reveal that 67% percent of those using discussion forums are Creators, whereas 84.7% of those using other platform types are Creators. Therefore, there are fewer Creators on discussion forums compared to those not using them. Data indicate $\chi^2= 10.45$, $p<.01$.

On the contrary, data reveal that there is no statistical significance for the presence of Creators in media sharing networks (where χ^2= .027, *p*=.869), bookmarking and content curation sites (where χ^2=.237, *p*=.627), consumer review networks (where χ^2= .429, *p*=.512) and blogging and publishing networks (where χ^2= .198, *p*=.656) when comparing each type of platform with other type. Additionally, there appear to be more Creators on anonymous social networks (as 100% of those using the particular type are Creators compared to 76.9% who use other types), but the difference is not statistically significant, as χ^2=2.08 *p*=.149, Monte Carlo signif. Thus, Creators are significantly more present on SNSes and unsurprisingly less present on discussion forums.(The reader is referred to *Table 8*. Appearance of a STL category across platform types (April 2018), p. 47) (The reader is referred to Appendix C., p. 87).

- **Conversationalists:**

Data reveal that 96% percent of those using social networking sites are Conversationalists. Contrarily, 81.8% percent of those not using social networking sites (but might use other platform types) are Conversationalists. Data indicate that χ^2= 7.75, *p*<.05, Monte Carlo signif.; Monte Carlo significance is reported because at least one cell has expected count less than 5.

On the contrary, data reveal that there is no statistical significance of those using media sharing networks (where χ^2= .000, *p*=.989, Monte Carlo signif.), discussion forums (where χ^2= 1.05, *p*=.304), bookmarking and content curation sites (where χ^2=.328, *p*=.567, Monte Carlo signif.), consumer review networks (where χ^2= .004, *p*=.951), blogging and publishing networks (where χ^2= .055, *p*=.815, Monte Carlo signif.), and anonymous social networks (where χ^2=1.17, *p*=.291, Monte Carlo signif.) are Conversationalists. (The reader is referred to *Table 8*).

- **Critics:**

Data reveal that there is no statistical significance of those using social networking sites (where χ^2= .470, *p*=.493), discussion forums (where χ^2= .838, *p*=.360), bookmarking and content curation sites (where χ^2=.204, *p*=.652), consumer review networks (where χ^2= .211, *p*=.646), blogging and publishing networks (where χ^2= .002, *p*=.967), and anonymous social networks (where χ^2=.031, *p*=.861, Monte Carlo signif.) are Critics. Additionally, there appear to be more Critics on media sharing networks (as 28.6% of those using the particular type are Critics compared to 16.1% who use other types), but the difference is not statistically significant, as χ^2=3.55, *p*=.059. (The reader is referred to *Table 8*).

- **Collectors:**

In regards to Collectors, data reveal that there is no statistical significance of those using social networking sites (where χ^2= .870, *p*=.351), media sharing networks (where χ^2= 3.45, *p*=.063), blogging and publishing networks (where χ^2= .124, *p*=.725), and anonymous social networks (where χ^2=.029, *p*=.864, Monte Carlo signif.) are Collectors.

Additionally, data reveal that 18.6% percent of those using discussion forums are Collectors, whereas 40.3% of those using other platform types are Collectors, as data indicate χ^2= 12.65, *p*<.001. Similarly, data reveal that 12.9% percent of those using bookmarking and content curation networks are Collectors, whereas 34.3% of those using other platform types are Collectors, as data indicate χ^2= 5.72, *p*<.05. Likewise, data reveal that 22.4% percent of those using consumer review networks are Collectors, whereas 35.8% of those using other platform types are Collectors, as data indicate χ^2= 4.32, *p*<.05. Therefore, there are fewer Collectors on discussion forums, bookmarking and content curation networks and consumer review networks compared to those not using them. (The reader is referred to *Table 8*).

- **Joiners:**

Additionally, SPSS crosstabulations indicate that there is no statistically significant difference in regards to Joiners and social networking sites (where χ^2= 2.10, *p*=.147, Monte Carlo signif.), media sharing networks (where χ^2= .009, *p*=.926), discussion forums (where χ^2= .042, *p*=.837), bookmarking and content curation sites (where χ^2=1.30, *p*=.253, Monte Carlo signif.), consumer review networks (where χ^2= 2.44, *p*=.118), blogging and publishing networks (where χ^2= .001, *p*=.978), and anonymous social networks (where χ^2=.013, *p*=.909, Monte Carlo signif.). Thus, the presence of Joiners (88.6% overall among non-Inactives) is roughly equivalent across all social media types.

- **Spectators:**

Lastly, data reveal indicate that there is no statistically significant difference in regards to Spectators and usage of the social media types: social networking sites (where χ^2= 1.95, *p*=.162, Monte Carlo signif.), media sharing networks (where χ^2=1.11, *p*=.292, Monte Carlo signif.), discussion forums (where χ^2= 2.62, *p*=.105), bookmarking and content curation sites (where χ^2=2.51, *p*=.616, Monte Carlo signif.), consumer review networks (where χ^2= 4.87, *p*=.485), blogging and publishing networks (where χ^2= .358, *p*=.549), and anonymous social networks (where χ^2=.485, *p*=.486, Monte Carlo signif.). Thus, the presence of Spectators (94.1% overall among non-Inactives) is roughly equivalent across all social media types.

Table 8. Appearance of a STL category across platform types (April 2018)

STL Categories	Social Networking Sites	Media Sharing Networks	Discussion Forums	Bookmarking and content curation networks	Consumer review networks	Blogging and publishing networks	Anonymous social networks
Creators	✓	×	-	×	×	×	×
Conversationalists	✓	×	×	×	×	×	×
Critics	×	×	×	×	×	×	×
Collectors	×	×	-	-	-	×	×
Joiners	×	×	×	×	×	×	×
Spectators	×	×	×	×	×	×	×

✓ means that the STL category appears more than on other social media types

× means that the STL category does not show a difference

-means less appearance of a STL category compared to other social media types

Consequently, it is deducted that the current typology also differs across platform types, and thus, the second hypothesis (H2) is mostly *confirmed*, since data reveal that most of the STL categories use different social media types.

- **Binary Logistic Regressions**

A number of binary logistic regressions were conducted on SPSS to determine usage of specific social media platforms that characterizes each STL category use. Each STL category role is associated to the usage of specific platforms, each of which have different affordances that allow for different STL roles. As there is no explicit causal direction, the binary logistic regressions here are used to characterize or classify, rather than predict, each STL role based on platform usage.

Data reveal that Creators are significantly associated to the usage of Facebook (where b=2.23, p=.001) and Twitter (where b=1.08, p<.05), where $\chi^2(11)=40.15$, $p < .001$, pseudo $R^2 = .234$, and negatively associated to Amazon.com (where b=-1.36, p<.05), as well as Instagram (where b=-0.887, p<.10) and Reddit (where b=-0.698, p<.10). Data parallel previous studies that Creators use multiple social media platform types to create and distribute digital content. Thus, Creators are more characteristic of Facebook and Twitter users. Thus, the usage of Facebook is associated with an increase of 2.23 to the log-odds of the probability that the user exhibits Creator activities, and 1.08 for Twitter.

Additionally, Conversationalists are significantly associated to the usage of Facebook (where b=2.37, p<.05) and Twitter (where b=3.01, p<.05), where χ^2 (11)= 23.72, $p < .05$, pseudo $R^2 = .273$, and negatively associated to Instagram (where b=-1.95, p<.10). Again, data parallel previous studies that Conversationalists drive the conversation on social networking sites, but interestingly not on media sharing networks like Instagram (Foreman,2017).

Critics are significantly associated to the usage of Twitter (where b=.727, p<.05), as well as TripAdvisor (where b=1.68, p<.10), where $\chi^2(11)= 21.15$, $p < .05$, pseudo $R^2 = .124$. Data compliment previous studies that Critics post rating and reviews on websites like TripAdvisor (www.forrester.com; Li et al., 2007).

Moreover, Collectors are significantly associated to the usage of Twitter (where b=.681, p<.05), TripAdvisor (where b=2.08, p<.05), as well as Instagram (where b=1.41, p<.05), where $\chi^2(11)=41.08$, $p < .001$, pseudo $R^2 = .221$. As Collectors share with the entire online community digital content, they use multiple social media types (www.forrester.com; Li et al., 2007).

Joiners are significantly associated to the usage of Facebook (where b=3.71, p<.001), as well as Twitter (where b=1.90, p<.05), where $\chi^2(11)=43.30$, $p < .001$, pseudo $R^2 = .307$. Data parallel previous studies regarding the relationship of Joiners to social networking sites (www.forrester.com; Li et al., 2007).

Lastly, Spectators are significantly associated to the usage of Twitter (where b=2.58, p<.05), where $\chi^2(11)=22.98$, $p < .05$, pseudo $R^2 = .221$. Interestingly, Spectators are not associated with any bookmarking and content curation site or any consumer review network which, according to literature are their prominent used platforms, rather a social networking site where they can survey other users' profiles, read news and reviews.

4.3.3. Personality Traits and Categorization of Users - Hypothesis 3

After computing the variables of Extraversion, Neuroticism, Openness, Agreeableness and Conscientiousness (the reader is referred to 4.2. Computed Variables, p.39), a number of Reliability Tests were performed on SPSS. Specifically, data indicate that in regards to Extraversion, α= .682, which is questionable, but even if an item was deleted from the scale, it would still be questionable. Regarding Agreeableness, α=. 770, which is considered acceptable, after deleting one item from the scale. For Conscientiousness α=. 513, which is considered to be poor, but even if an item on the scale was deleted, it would still be poor. Additionally, data reveal a questionable Cronbach's α for Neuroticism, where α=.628, after two items were deleted from the scale. Lastly, Openness indicates an α=. 693, which again is questionable. Thus, the results of this subsection should be regarded to be tentative at best.

A number of Binary Logistic Regressions were performed on SPSS to ascertain the effects of the five personality traits (extraversion, neuroticism, openness, agreeableness and conscientiousness) to the STL categories (Creators, Conversationalists, Critics, Collectors, Joiners, Spectators).

Regarding Creators, data reveal that 187 out of the 241 respondents are considered to be Creators. The model predicting Creator from the five personality traits is significant, $\chi^2(5)=25.19$, $p < .001$, pseudo $R^2 = .152$. The predictors account for 15.2% of the variance indicating that prediction is modest. The model shows that out of the five personality traits, only Extraversion significantly and positively predicts the log-odds of whether one is a Creator or not, where $b = .603$, $p < .001$, one-tailed.

Regarding Conversationalists, data reveal that 228 out of the 241 respondents are considered to be Conversationalists. The model predicting Conversationalist from the five personality traits is significant, $\chi^2(5)=19.13$, $p < .05$, pseudo $R^2 = .223$. The predictors account for 22.3% of the variance indicating that prediction is modest. The model shows that out of the five personality traits, only Extraversion significantly and positively predicts the log-odds of whether one is a Conversationalist or not, where $b = .728$, $p < .05$, one-tailed. Additionally, in regards to Agreeableness and Conversationalists, b=.536 and p >.05.

Regarding Critics, data reveal that only 62 out of the 241 respondents are considered to be Critics. The model predicting Critics from the five personality traits is significant, $\chi^2(5)=22.03$, p= .001, pseudo $R^2 = .128$. The predictors account for 12.8% of the variance indicating that prediction is of low effect size. The model shows that out of the five personality traits, Extraversion (where $b = .356$, $p < .05$, one-tailed and Openness (where $b = .261$, $p < .10$, one-tailed) significantly (weakly for Openness) and positively predict the log-odds of whether one is a Critic or not.

Regarding Collectors, data reveal that only 76 out of the 241 respondents are considered to be Collectors. The model predicting Collectors from the five personality traits is significant, $\chi^2(5)=72.86$, $p < .001$, pseudo $R^2 = .366$. The predictors account for 36.6% of the variance indicating that prediction is of a high effect size. The model shows that out of the five personality traits only Extraversion (where $b = .940$, $p < .001$, one-tailed) significantly and positively predict the log-odds of whether one is a Collector or not.

Regarding Joiners, data reveal that 210 out of the 241 respondents are considered to be Joiners. The model predicting Joiners from the five personality traits is not considered statistically significant, as $\chi^2(5)=5.98$, $p> .05$, pseudo $R^2 = .046$. But, there is a relationship between Extraversion and Joiners, as $b=.348$ and $p< .10$, two-tailed, and thus, Extraversion is weakly, positively associated with the Joiner category.

Lastly, regarding Spectators, data reveal that 223 out of the 241 respondents are considered to be Spectators. The model predicting Spectators from the five personality traits is not considered statistically significant, as $\chi^2(5)=5.91$, $p> .05$, pseudo $R^2 = .059$. But, there is a relationship between Extraversion and Spectators, as $b=.410$ and $p<.10$, and thus, Extraversion is associated with the Spectator category.

Results indicate the relation of the STL categories and personality traits. Specifically, Extraversion has been shown to have a positive association with the STL categories of Creators, Conversationalists, Critics and Collectors, while Openness has a positive association with the Critics category. Lastly, it is found that Extraversion has an association with the Joiners and the Spectators categories, but it is not considered statistically significant.

In answering the hypotheses, Extraversion is positively associated with the categorization of individuals (based on their social media behaviour) as Creators or Critics, and thus, hypothesis H3a is *confirmed*. Additionally, Neuroticism is not positively associated with the Joiner category, and thus, hypothesis H3b is *disconfirmed*. Similarly, data reveal that Openness is not positively associated with the Spectator and the Collector categories, and thus, hypothesis H3c is *disconfirmed*. Moreover, Agreeableness is not positively associated with the Conversationalist category, and thus, hypothesis H3d is *disconfirmed*. Lastly, data reveal that Conscientiousness is also not positively associated with the Collectors category, and thus, hypothesis H3e is *disconfirmed*. As data reveal, only Extraversion is highly significantly and positively associated with 4 out of the 6 STL categories (Creators, Conversationalists, Critics and Collectors), while Openness is weekly statistically significant associated with the Critics category.

4.4. Additional Findings

4.4.1 Reasons for using Social Media

Social media users have the opportunity to use these platforms for personal and/or professional reasons. Specifically, users are able to maintain either a personal profile on these platforms, and/or a professional profile in order to promote their business/ products/ services, to influence and inform their consumers, to communicate with their audiences, and so forth. As *Table 11* indicates, data reveal that 99% of respondents, and thus, 239 out of the 241 participants, use social media for personal reasons, such as to keep in touch with friends and family, be entertained, share personal content, search job opportunities, and so forth. Contrarily, 25% of the respondents use social media for professional reasons, and thus, as a business/ organisation/ individual, in order to maintain professional identity, communicate with audiences, influence and inform consumers, and so forth. Specifically, data reveal that respondents use social media professionally in order to promote and/or review products/ businesses/ services, to increase awareness in regards to a brand, to improve their customer services, and/or to communicate and collect feedback from their audiences. Data also reveal that 25% of the respondents use social media for both personal and professional reasons.

Table 11. Reasons for using Social Media (April 2018)

Reasons For using Social Media	Respondents Answers
For personal reasons	99% (239 of the respondents)
For professional reasons	25% (60 of the respondents)
For both personal and professional reasons	25% (60 of the respondents)

4.4.2. Users' Connections

As literature indicates, the number of followers a user has on social media depends on the reasons he or she uses them (www.statista.com). Data reveal that social media users who use these platforms for personal reasons have of the following breakdown of their connections: 27% 0 to 100 followers/ friends/ connections, 47% have 101 to 500 followers/ friends/ connections, 17% have 501 to 1000 followers/ friends/ connections, 4% have 1001 to 2000 followers/ friends/ connections, while 5% of them have over 2000 connections across all their personal social media profiles.

Contrarily, data indicate different percentages of followers/ friends/ connections in regards to users' professional profiles. Specifically, research reveals that 18% of the respondents have 0 to 100 followers/ friends/ connections, 56% have 101 to 1000 followers/ friends/ connections, 23% have 1001 to 10.000 followers/ friends/ connections, while only

3% of the respondents have 10.0001 to 100.000 followers/ friends/ connections across all their professional social media profiles. As research indicates, users/ businesses/ organisations who own professional social media profiles, tend to have a greater number of connections than those who own personal profiles, as they represent a business that is somehow known to the public, as, for instance, Coca Cola has over 107 million friends on its Facebook page (www.statista.com; www.facebook.com/cocacola)

Additionally, respondents indicated the number of followers/ friends/ connections on their most used social media platform. Data reveal that users have 0 to 100 followers/ friends/ connections by a percentage of 27%, 101 to 500 followers/ friends/ connections by a percentage of 56%, 501 to 1000 followers/ friends/ connections by a percentage of 11%, and lastly, more than 1000 followers/ friends/ connections by a percentage of 6%. As data show, most users have approximately 501 to 1000 followers/friends/connections on their most used social media platform, and thus, they interact with a great number of connections, consuming and producing user-generated content.

4.4.3. Social Media Anonymity

According to researchers, social media users are able not to share any kind of personal information on these platforms, by either hiding their real name through the use of pseudonyms, use “fake” profile pictures, and so forth. Through this option, users are able to share media content such as photos, videos, as well as textual content with others, or ask embarrassing questions that otherwise they would not ask (Foreman, 2017). Data reveal that 69% of respondents (where *N*=241) do not maintain any anonymous profiles on their social media. Conversely, 31% of respondents do maintain an anonymous profile, and thus, do not share personal information with their followers/ friends/ connections on some of their used platforms.

Chapter 5: Discussion and Conclusion

5.1. Discussion of the Findings

This chapter focuses on summarizing and discussing the hypotheses of the research in order to answer the overall research question: "*What is the recent socio-technographics ladder typology distribution of digital interactivity based on users' reported behaviour and personality traits?"*

Additionally, this chapter presents the practical implications and limitations of the research process overall, recommendations for further research, as well as a synthesis of the key points of the research are provided to the reader.

5.1.1. Hypothesis 1

According to Forrester's (2012) Social Technographics Ladder, social media users can be categorized into seven types based on the manner of their engagement with social media, whereas there is an overlap in this typology in that users may fall under multiple categories; Creators, Conversationalists, Critics, Collectors, Joiners, Spectators and Inactives. Each STL category performs specific online activities; for instance, in order for a user to be characterized as a Creator, he or she needs to perform specific activities, such as create and publish media and textual content online on social networking sites, and/or other social media types.

Data reveal that the distribution of the user typology is no longer that observed in 2012, according to Forrester's Social Technographics Ladder. As research indicates, users' typology has mutated in the last six years and different categories are now more prominent among others, compared to the past. Specifically, when looking across actives only, data indicate that Creators now constitute the 78.9% of the online population, compared to the 27% in 2012. Therefore, there is a noticeable increase (51.9%) to the Creators category (when not considering the Inactives), and thus, a lot more social media users publish on and create their own webpages, maintain blogs, write articles or stories, or upload media content such as photos and videos to social networking sites, and/or other social media types (the reader is referred to *Table 4. Social Technographics Ladder. Percentages without considering Inactives (April 2018)*, p. 41).

Similarly, Conversationalists now constitute the 96.3% of the online population, whereas in 2012, the represented the 69%. This 27.3% increase signifies that even more people update their statuses on social networking sites and post updates on Twitter on a regular basis, but also spread the content of Creators in multiple social media by sharing their content (the reader is referred to *Table 4.*). Likewise, data reveal a 1.1% increase in the

Collectors category, and thus, those who engage by tagging webpages by saving URLs on social bookmarking sites, those who use RSS feeds, add “tags” to webpages or photos, or create metadata to share with the entire online community. Consequently, Collectors now represent the 32.1% of the online population as opposed to 31% of the 2012 STL (the reader is referred to *Table 4.*). However, this increase is not statistically significant.

In regards to the Joiners, research suggests a 48.6% increase. Specifically, Joiners now constitute the 88.6% of the online population (as opposed to 40% in the 2012 STL), and thus, a lot more people use and visit social networking sites such as Facebook, Twitter and LinkedIn (the reader is referred to *Table 4.*). Similarly, Spectators now constitute the 94.1% of the online population as opposed to the 69% of the 2012 STL. This 25.1% increase in the category suggests that more people engage by reading blogs and online forums, reading ratings and reviews, watch user-generated videos on social media like YouTube, and listen to podcasts (the reader is referred to *Table 4.*).

Interestingly, research suggests a 13.8% decrease in the Critics category. Specifically, data reveals that only 26.2% of the online population now represent Critics, as opposed to 40% in the 2012 STL. Consequently, less social media users comment on blogs, contribute to online forums, or post ratings and reviews on social media (the reader is referred to *Table 4.*).

As a consequence, research suggests that users’ distribution has mutated since 2012, with noticeable increases in the Creators, Conversationalists, Joiners and Spectators STL categories. Data reveal that more users either use and visit social networking sites, update their statuses, read blogs and online forums, as well as reviews and rating, and/or listen to podcasts, watch user-generated videos, publish on and create their own webpages, and so forth. On the contrary, there has also been a noticeable decrease in the Critics category, indicating that less people comment on blogs, or contribute to online forums, or post ratings and reviews on social media websites.

5.1.2. Hypothesis 2

Social media have evolved and widespread over the years, serving a variety of purposes depending on audiences’ needs and usage, such as exchanging news and information to personal photos and videos. Consequently, a classification scheme has emerged depending on and according to social media’s features and functions, and users’ personal usage. Therefore, social media platforms types include social networking sites, media sharing networks, discussion forums, bookmarking and content curation sites, consumer review networks, blogging and publishing networks and anonymous social networks.

According to research, the distribution of social media users' category also differs across platform types. Specifically, data reveal that Creators and Conversationalists are the two STL categories who mostly use social networking sites such as Facebook and Twitter, as these platforms permit them to connect with other users, while also feature facilities for sharing user-generated content such as photos, videos and audio files. Through these platforms, Creators and Conversationalists are able to create and distribute media content, since they allow them to create personal profiles and interact with other users (Foreman, 2017; Li et al., 2007). As previous literature indicates, Creators publish on and create their own web pages, maintain blogs, write articles or stories, or upload videos to sites, while Conversationalists are those who spread the content of Creators (Li et al., 2007, p.4; www.forrester.com). Thus, Conversationalists are more likely to be present on the same social media that Creators exist, or use different platforms through which they disseminate Creators' media content.

Moreover, data reveal the presence of Collectors on discussion forums, bookmarking and content curation websites and consumer review networks. Results confirm previous literature, since Collectors use these platforms that allow them to engage with the online community by tagging webpages by saving URLs on social bookmarking sites, use RSS feeds, add "tags" to webpages or photos, and/or create metadata to share with others (Foreman, 2017, Li et al., 2007; www.forrester.com). Interestingly, Collectors do not appear prominently on media sharing networks, meaning that the definition of Collectors needs to be updated.

Interestingly, data indicate that the presence of the STL categories on other social media platform types are not statistically significant. For instance, data reveal that while there appear to be more Creators on anonymous social networks than elsewhere, this difference is not a statistically significant. Specifically, even though individuals who use them need to create either media or textual content to share with others, and thus, be considered as Creators, data show a difference not statistically significant. As anonymous social networks are used by a noticeable amount of people who use them to ask the online community embarrassing or humiliating questions that otherwise would not ask, the creation of content is mandatory (www.forrester.com; Foreman, 2017).

Overall, it has been found that the current user typology differs across platform types, as social media users choose different social media platform types depending on their needs.

5.1.3. Hypothesis 3

According to many researchers, the FFM links personality dimensions to online behaviour, as they relate to and influence to a certain extent users' online participation in

regards to their digital activities (Moore & McElroy, 2011; Hughes et al., 2011). Since the levels of social media usage reflect personality attributes (such as individuals' needs, values and preferences), personality traits are related to a broad spectrum of types of behaviour and human activities on social media (Landers et al., 2006, p.284). Data reveal an interesting effect of the "Big Five" personality traits (Extraversion, Neuroticism, Agreeableness, Conscientiousness and Openness) in relation to social media usage.

Specifically, data indicate a positive significant association of Extraversion to the Creators, Conversationalists, Critics and Collectors STL categories, while Openness is weakly significantly positively associated to the Critics category. Lastly, results show that Extraversion has an effect to the Joiners and the Spectators, but it is not considered statistically significant.

The findings echo previous studies in regards to Creators and Extraversion (H3a). Specifically, Creators are those users who create and distribute the media and textual content that other users consume on social media platforms, while extraversion has been positively associated to social media usage, as extrovert individuals use multiple online platforms to enhance their social connections to others, as well as create and distribute media content (Blackwell et al., 2017;Li et al., 2007, www.forrester.com). Similarly, Extraversion has a positive association with Critics; users who engage by commenting on blogs, contributing to online forums, post ratings and/or reviews on multiple social media platforms (Li et al., 2007; www.forrester.com). Consequently, data reveal the positive effect of Extraversion to both Creators and Critics, and thus, Hypothesis H3a is confirmed.

According to previous research, Joiners hold a passive role to social media, but they might engage with an interesting piece of media content (Li et al., 2007; www.forrester.com). Additionally, as research suggests, those high in neuroticism use social media frequently in order to receive feedback and reassurance from other and avoid loneliness (Blackwell et al., 2017). Data reveal that Neuroticism is not associated to the STL Joiners category, possibly due to their passive role on social media platforms (Blackwell et al., 2017). Thus, Hypothesis H3b (Neuroticism will be positively associated with the Joiner category) is not supported.

Spectators engage by reading blogs and forums, rating and reviews, while they watch user-generated videos and photos from other users on multiple social media platforms (Li et al., 2007; www.forrester.com). Interestingly, data reveal that Openness does not relate to Spectators, which contradicts previous literature, as open individuals use social media to seek information and to express themselves, but also have a preference for variety (Blackwell et al., 2017; Donnellan et al., 2006; Langstedt, 2011). Similarly, Openness does not have an effect to the Collectors category, and thus, those who engage by tagging webpages by saving URLs on social bookmarking services, use RSS feeds to aggregate the best content on the internet, add "tags" to web pages or photos, or create metadata to share

with the entire online community, as they use social media as communication tools to express their appreciations towards new ideas (Gosling et al., 2011; Tripathi, 2010; Li et al., 2007; www.forrester.com). Consequently, Hypothesis H3c (Openness will be positively associated with the Spectator and the Collector categories) is not supported.

Moreover, data reveal that Agreeableness is not significantly and positively associated to Conversationalists (Hypothesis H3d); those who spread the content of creators, since they drive the conversation in the online environments (Li et al., 2007; www.forrester.com). Previous studies support that those high in agreeableness engage in online dialogues with other users on social media platforms, and thus, they could be identified as Conversationalists who drive online conversations (Blackwell et al., 2017; Donnellan et al., 2006). Interestingly, results show that Agreeableness does not relate to the Conversationalist category, since users do not engage on online dialogues, rather than creating and distributing their own user-generated content, or do not take any actions online, for instance sharing the content of Creators with other users. Consequently, H3d is not supported.

Lastly, Conscientiousness is not significantly and positively associated to the Collectors category (Hypothesis H3e). As previous research suggests, individuals scoring high in conscientiousness are described as “motivated, careful and purposeful in their actions” and they use social media and its content in a particular manner to “gratify diversional needs or motives” (Langstedt, 2011, p.37). Conscientiousness is not associated to the Collectors category, who use “tags” or create metadata and so forth, as they might not engage in particular actions that would satisfy their needs (Alan and Kabaday, 2016; Li et al., 2007; www.forrester.com). Consequently, H3e is not supported.

As results suggest, only Extraversion has a positive association to most of the STL categories, who engage on social interaction online on various social media. According to Langstedt (2011), extrovert individuals prefer to spend time with people both offline and online, on multiple online platforms to enhance their social connections (p.25). As extraverted users “crave” social interaction online, they engage heavily to multiple social media platforms, and thus, they appear to be Creators, Conversationalists, Critics and Collectors. Similarly, Openness is weakly significantly associated to the Critics category, but none of the other STL categories, which again, it is interesting; individuals high in openness are frequently adding and replacing their photos, and engage in a wide range of activities, while using social media as communication tools to express their appreciations towards new ideas (Gosling et al., 2011; Tripathi, 2010). But results indicate no associating of Openness to Creators for instance.

5.1.4. Research Question

This thesis undertook a comprehensive research study on various social media platforms to explore the linkages between the antecedents of users' digital interactivity on social media and the changes that have occurred in the typology in the last six years, since the reporting of Forrester's (2012) Social Technographics Ladder. Results show that the recent socio-technographics ladder typology distribution of digital interactivity is no longer that observed in 2012. As research suggests, in the first quarter of 2018, the number of internet users worldwide is 4.021 billion, while 3.196 billion are social media users, 13% more than in 2017 (www.smartinsights.com). Results show that social media users select the most appropriate platforms for them, that allow them to create and/or disseminate media content, and thus, the taxonomy of users differs across social media types such as social networking sites, media sharing networks, and so forth. Specifically, data reveal that Creators, Conversationalists, Critics, Collectors, Joiners and Spectators choose different social media types depending on their needs.

Additionally, due to the changes in social media's structures and features over the years, that allow users to participate more actively, users' distribution has altered since the past (VanDijck, 2013). For instance, Facebook introduced in 2016 its "Reaction Emojis"; six interaction emojis that each contain a different meaning attached to it and represents a different emotion (Stinson, 2016). Users are now able to express their emotions quickly and effortlessly, as opposed to the past, where they were able to only use the "like" button (www.facebook.com). Changes like these contributed to the alteration of users distribution, as their needs are being satisfied through social media's structures and features that facilitate and further enhance their online participation and digital interactivity.

Moreover, data reveal that only Extraversion out of the "Big Five" personality traits (Neuroticism, Agreeableness, Conscientiousness, Openness) affect users' online participation on social media. Currently, as results show, social media users are considered to be primarily extroverts, who spend a noticeable amount of time online on various social media platforms to enhance their social connections, by creating and disseminating user-generated content, and therefore, they appear to be Creators, Conversationalists, Critics and Collectors. Consequently, depending on users' reported behaviour and personality traits, the recent socio-technographics ladder typology distribution of digital interactivity has mutated since 2012, as there are significantly more Creators, Conversationalists, Joiners and Spectators since the past, while there are less Critics and, approximately, the same percentage of Collectors as of 2012.

5.2. Limitations and Future Research

It is acknowledge that the work has a small number of limitations which are reported below. First of all, the particular thesis has a linguistic limitation in regards to the design of the survey. Specifically, the survey was conducted in English, and thus it is likely to have an element of negative attitude when it comes to users' responses, since it aimed at collecting data from multiple nationalities across Europe. While one possible way to overcome this limitation would be the translation of the survey into various European languages, such adaptation could be proved challenging, since it may not describe the experience of individuals in another culture, since culture is not being considered (McGorry, 2000, p. 73). McGorry (2000) argues that surveys' translation can be politically challenging because some countries "use the same language with different convections" (McGorry, 2000, p. 74). As a consequence, the use of the English language may be considered a limitation of the study.

One may argue that generalizability is another possible limitation of this work. To be more specific, the particular research used a quantitative approach (online surveys) to collect valuable data in order to answer the hypotheses, sub-questions, and finally, the research question. The number of respondents that were used in the analysis was 241, and thus, it may be considered as a constrain for its generalizability because the number of respondents is modest for a study to draw claims about the population of Europe. As a recommendation for future research, a greater number of responses should be collected and analysed.

Additionally, respondents aged between 35 to 65 years old were less present, compared to the ones aged between 18 to 34 years old, and thus, a greater number of these age groups should be found and included in the research through offline approaches of survey collection; these individuals may more account for the Inactives category. Similarly, a greater number of respondents from Slovakia, Romania, Hungary, Luxembourg, Croatia and Spain should be found and used in the research, as data indicate that only a small percentage of those nationalities participated on the survey, and thus does not mirror the overall population proportions.

Moreover, a further concern regarding the use of online surveys is in regards to the selection bias. Specifically, online survey takers had more likelihood to be part of the social media participatory culture than the non-online survey takers, meaning that the research did not allow for the collection of specific quantitative data in regards to the "Inactives" category of Forrester's Social Technographics Ladder (2012. Future research should be addressing the particular category through the distribution of offline surveys to European respondents, who could indicate their positive or negative involvement with social media platforms.

5.3. Practical Implications

This thesis offers a sizeable contribution to both the scientific and social communities. Specifically, this research fills a previously identified gap in the existing scientific knowledge related to social media, as it offers undisputed results on the levels of European users' participation on social media. Previous literature indicated a high percentage of Inactive users who do not participate at all on social media (Li et.al, 2007; www.forrester.com). The findings of the research provide a better understanding of the current European online participatory culture, as well as active users' digital contribution in platforms such as Facebook, Instagram, LinkedIn and so forth.

Additionally, this research provides evidence to the linkages of personality traits and social media usage. Specifically, it produces new knowledge that should contribute further to the ever expanding social media culture. It achieves that through a purposeful and systematic process, as well as the use of previously established theories, such as the Five Factor Model and its relation to the digital culture. As results suggest that Extraversion is significantly positively associated to most of the STL categories, the particular research suggests that most social media users today are considered to be extroverts.

As the current user typology differs from Forrester's 2012 STL, this thesis presents a better understanding of the current social climate, where more people create and distribute media and textual content. Consequently, it (this thesis) serves as a knowledge base for future investigations into understanding personality antecedents for why users choose, or not, to participate actively on social media. Additionally, and since this research is restricted to Europe, it can be used as a cornerstone for a wider, more global understanding of the evolution of the digital culture.

5.4. Conclusion

Over the years, there have been many theories as well as researchers, who through their studies, have investigated the relationship between users and social media. Through Web 2.0 pages' structures and features, users have the opportunity to participate actively in this online environment, produce content collaboratively, and distribute it massively (Blank & Reisdorf, 2012; Van Dijck, 2009; Ritzer & Jurgenson, 2010). Specifically, due to the expansion of the online participatory culture through the Web, users are able to generate and disseminate content, to connect with people who share similar goals, ideals and interests worldwide, and to express themselves overall. Through the use of various social media platforms, Web 2.0 users share, co-create, discuss and modify online content, since these platforms enable and enhance their online participation.

According to Taprial and Kanwar (2012), social media "encompasses all the services that facilitate creation, sharing and exchange of user-generated content, and empower people to express their thoughts and opinions and share them with others" (p. 6). Since social media is a new kind of interaction both in volume and variety, tracking the digital culture and user interactivity leads to a particular user typology which is characterized by the usage patterns that reflect certain types of user participation in social media. Specifically, Forrester's Social Technographics Ladder (2012) indicated that users can be categorized in seven types, varying from Creators, Conversationalists and so forth, according to their online activities in these environments.

The particular thesis endeavoured to deepen our understanding of "what ways", "how" and to "what extent" the usage of social media in European societies has altered since 2012 through a comprehensive research study on various social media platforms. Online surveys were distributed in April 2018, aiming at collecting valuable data regarding the relationship between users and social media. Results show that users' interpersonal characteristics and personality traits can influence and affect their social media *prosumption*, and thus, the reasons why they fall into one or more categories of the Social Technographics Ladder (www.forrester.com; Van Dijck, 2009). Additionally, the changes and enhancements in the features, structures, services and policies of various widely used social media in the recent years, as well as in the online participatory/digital culture have indeed affected users' digital interactivity.

Specifically, research suggests that even more people participate actively on social media since 2012, for personal and/or professional reasons in order to maintain relationships with their friends and family, and/or their customers. Social media users now create and distribute their own media and textual content across multiple social media types, such as social networking sites, media sharing networks, discussion forums and so forth. Consequently, the distribution of users' digital interactivity has mutated since 2012 with higher numbers to the more participatory categories, for instance Creators and Conversationalists. Therefore, users have now turned from "passive recipients" of online/digital content, to active contributors of the online participatory culture, who disseminate digital and/or user-generated content across various and multiple social media platforms. Results indicate the future direction of online societies; a continuous growth in the amount of people using various social media platforms to communicate with others, be entertained, and/or obtain information.

Lastly, this research links personality dimensions to online behaviour, as they (personality traits) relate to and influence to a certain extent users' online participation on social media platforms (Moore & McElroy, 2011). Specifically, personality traits are reflecting social media usage and relate to a broad spectrum of online behaviours and users' activities

(Moore & McElroy, 2011). Data reveal the positive association of Extraversion in relation to social media usage and users' digital activities overall, as it influences and indeed affects users' online behaviour and digital interactivity.

In conclusion, this thesis links personality traits and the recent socio-technographics ladder typology distribution of digital interactivity which has mutated in the recent years, based on users' reported online behaviour. Consequently, this research deepens our understanding of "what ways", "how" and "to what extent" personality traits affect the online participatory culture and users' digital activities and interactivities.

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Chapter 7: Appendices

A. Questionnaire

The Digital Culture: Recent Users' Online Behaviour and Interactivity in Social Media

REQUEST FOR PARTICIPATING IN RESEARCH

FOR QUESTIONS ABOUT THE STUDY, CONTACT:

Karadeli Anna at 485940ak@eur.nl

DESCRIPTION:

You are invited to participate in a research about users' online behaviour and interactivity in social media. More specifically, the purpose of the study is to understand users' online behaviour and personality traits.

Your acceptance to participate in this study means that you accept to participate in a survey.

You are always free to stop participating at any point.

RISKS AND BENEFITS:

There are no risks associated with participating in this research. Additionally, this researcher will ensure that you cannot be identified, by specific measures, for instance through general identification by only mentioning age and gender, and so forth.

The material from the surveys will be used only for academic work.

TIME INVOLVEMENT

Your participation in this study will take approximately 10 minutes.

PARTICIPANTS' RIGHTS

If you have decided to accept to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty.

Do you agree to take part in this survey?

- ○ Yes
- ○ No

What is your age?

- ○ Under 18
- ○ 18 - 24
- ○ 25 - 34
- ○ 35 - 44
- ○ 45 - 54
- ○ 55 - 65
- ○ 66 or older

Are you a European citizen?

- ○ Yes
- ○ No

What is your nationality?

- ○ Belgium (BE)
- ○ Bulgaria (BG)
- ○ Czech Republic (CZ)
- ○ Denmark (DK)
- ○ Germany (DE)
- ○ Estonia (EE)
- ○ Ireland (EI)
- ○ Greece (GR)
- ○ Spain (ES)
- ○ France (FR)
- ○ Croatia (HR)
- ○ Italy (IT)
- ○ Cyprus (CY)

- ○ Latvia (LV)
- ○ Lithuania (LT)
- ○ Luxembourg (LU)
- ○ Hungary (HU)
- ○ Malta (MT)
- ○ Netherlands (NL)
- ○ Austria (AT)
- ○ Poland (PL)
- ○ Portugal (PT)
- ○ Romania (RO)
- ○ Slovenia (SI)
- ○ Slovakia (SK)
- ○ Finland (FI)
- ○ Sweden (SE)
- ○ United Kingdom (UK)

What is your gender?

- ○ Male
- ○ Female
- ○ Other (please specify): _____
- ○ Prefer not to say

Do you use social media?

(Social media are defined as the websites that enable you to read, create and share information, ideas, personal messages and media content, such as photos and videos, with other users, for example Facebook, Reddit, WordPress, Amazon.com, Twitter, YouTube, Instagram, and so forth.)

- ○ Yes
- ○ No

In which of the following types of social media are you an active user?

(Active users are defined as those who log in to the site and/or complete some action, for instance reading, liking, sharing, posting, and so forth, within the previous 30 days)

- [ ] **Social networking sites**, that allows you to connect with other users and share content (for instance Facebook, Twitter, LinkedIn)
- [ ] **Media sharing networks,** that allows you to share primarily photos and videos (for instance Instagram and YouTube)
- [ ] **Discussion forums**, that allows you to find, discuss and share opinions, information and news with others (for instance Reddit)
- [ ] **Bookmarking and content curation networks**, that allows you to discover, share and save photos and videos (for instance Pinterest)
- [ ] **Consumer review networks**, that allows you to review products, services, businesses and so forth (for instance TripAdvisor and Amazon.com)
- [ ] **Blogging and publishing networks**, that allows you to discover, create, publish and comment on various topics (for instance WordPress)
- [ ] **Anonymous social networks**, that allows you to share content anonymously (for instance Ask.fm)
- [ ] **None of the above**
- [ ] Other (please specify) _____

Why do you use social media? *(Select all that apply)*

- [ ] **For personal reasons** (keep in touch with friends and family, be entertained, share personal content, search job opportunities, and so forth)
- [ ] **For professional reasons** (as a business/organisation/individual to maintain professional identity, communicate with audiences, influence and inform consumers, and so forth)
- [ ] Other (please specify): _____

Approximately, how many followers/friends/connections etc. do you have across all your professional social media profiles overall?

- ○ 0-100
- ○ 101-1000
- ○ 1001-10.000
- ○ 10.001-100.000
- ○ 100.001-1 million
- ○ more than 1 million

Approximately, how many followers/friends/connections etc. do you have across all your personal social media profiles overall?

- ○ 0-100
- ○ 101-500
- ○ 501-1000
- ○ 1001-2000
- ○ more than 2000

For what professional reason(s) do you use your social media profiles? (*select all that apply)*

- ☐ To promote products/services/businesses
- ☐ To review products/services/businesses
- ☐ To increase awareness of a brand
- ☐ To improve customer service
- ☐ To communicate with your audience
- ☐ To collect feedback from your audiences
- ☐ Other (please specify): _____

Which of the following types of social media do you use on a typical week?*(Select all that apply)*

- ☐ **Social networking sites** (for instance Facebook, Twitter, LinkedIn)
- ☐ **Media sharing networks** (for instance Instagram, YouTube)
- ☐ **Discussion forums** (for instance Reddit)

- [ ] **Bookmarking and content curation networks** (for instance Pinterest)
- [ ] **Consumer review networks** (for instance TripAdvisor and Amazon.com)
- [ ] **Blogging and publishing networks** (for instance WordPress)
- [ ] **Anonymous social networks** (for instance Ask.fm)
- [ ] Other

Please indicate which other social media you use on a typical <u>week.</u>

_____

In a typical <u>month,</u> across ALL THE SOCIAL MEDIA PLATFORMS you use, how often do you engage in the following activities?	**Never**	**Less than Rarely** (once every now and then)	**Rarely** (1 or 2 times per month)	**Occasionally** (3 or 4 times per month)	**Frequently** (at least 5 times per month)
Publish a blog	○	○	○	○	○
Publish your own webpages	○	○	○	○	○
Upload a video you created	○	○	○	○	○
Upload audio/music you created	○	○	○	○	○
Write articles/stories and post them	○	○	○	○	○
Update your status on social networking sites (for example Facebook)	○	○	○	○	○
Post updates on Twitter	○	○	○	○	○
Post ratings/reviews on products or services	○	○	○	○	○
Comment on someone else's blog	○	○	○	○	○
Contribute to online forums	○	○	○	○	○
Contribute/edit articles in a wiki	○	○	○	○	○
Use RSS feeds	○	○	○	○	○
Vote on websites	○	○	○	○	○
Add "tags" to webpages or photos	○	○	○	○	○
Maintain profile on social networking sites (for example Facebook)	○	○	○	○	○

Visit social networking sites (for example Facebook)	○	○	○	○	○
Read blogs	○	○	○	○	○
Listen to podcasts	○	○	○	○	○
Watch video from other users	○	○	○	○	○
Read online forums (including comments on news articles)	○	○	○	○	○
Read customer ratings/reviews	○	○	○	○	○
Read tweets	○	○	○	○	○
Post personal photos and/or "selfies"	○	○	○	○	○
Read news articles	○	○	○	○	○
Create and publish news articles	○	○	○	○	○
Create and promote events	○	○	○	○	○
Promote products/services	○	○	○	○	○
"Like" or "react" to other users' posts	○	○	○	○	○
Share other users' posts	○	○	○	○	○
Share real time live streams (for example live videos)	○	○	○	○	○
Subscribe/Follow/Add other users	○	○	○	○	○
Look at other users' profiles/photos/videos without taking any action	○	○	○	○	○

Do you maintain any anonymous profiles on your social media?

(Anonymous profiles are defined as those where users do not share personal information, for example their real name, profile picture, and so forth.)

- ○ Yes
- ○ No

Please indicate on which social media platform you maintain an anonymous profile.*(Select all that apply)*

- ☐ Facebook
- ☐ Twitter
- ☐ LinkedIn
- ☐ Instagram
- ☐ YouTube
- ☐ Reddit
- ☐ Pinterest
- ☐ TripAdvisor
- ☐ Amazon.com
- ☐ WordPress
- ☐ Ask.fm
- ☐ Other (please specify):_____

On average, how often do you use the following social media on a typical week?

	Daily	Most days	A few times a week	About once a week	Less often than weekly	Never
Facebook	○	○	○	○	○	○
Twitter	○	○	○	○	○	○
LinkedIn	○	○	○	○	○	○
Instagram	○	○	○	○	○	○
YouTube	○	○	○	○	○	○
Reddit	○	○	○	○	○	○
Pinterest	○	○	○	○	○	○
TripAdvisor	○	○	○	○	○	○
Amazon.com	○	○	○	○	○	○
WordPress	○	○	○	○	○	○
Ask.fm	○	○	○	○	○	○

Approximately, how many followers/friends/connections etc. do you have on your <u>most</u> used social media platform?

- ○ 0-100
- ○ 101-500
- ○ 501-1000
- ○ more than 1000

In a typical month, across ALL THE SOCIAL MEDIA PLATFORMS you use, how often do you engage in the following activities?	**Never**	**Less than Rarely** (once every two weeks)	**Rarely** (1 or 2 times per month)	**Occasionally** (3 or 4 times per month)	**Frequently** (at least 5 times per month)
Publish a blog	○	○	○	○	○
Publish your own webpages	○	○	○	○	○
Upload a video you created	○	○	○	○	○
Upload audio/music you created	○	○	○	○	○
Write articles/stories and post them	○	○	○	○	○
Update your status on social networking sites (for example Facebook)	○	○	○	○	○
Post updates on Twitter	○	○	○	○	○
Post ratings/reviews on products or services	○	○	○	○	○
Comment on someone else's blog	○	○	○	○	○
Contribute to online forums	○	○	○	○	○
Contribute/edit articles in a wiki	○	○	○	○	○
Use RSS feeds	○	○	○	○	○
Vote on websites	○	○	○	○	○
Add "tags" to webpages or photos	○	○	○	○	○
Maintain profile on social networking sites (for example Facebook)	○	○	○	○	○

Visit social networking sites (for example Facebook)	○	○	○	○	○
Read blogs	○	○	○	○	○
Listen to podcasts	○	○	○	○	○
Watch video from other users	○	○	○	○	○
Read online forums (including comments on news articles)	○	○	○	○	○
Read customer ratings/reviews	○	○	○	○	○
Read tweets	○	○	○	○	○
Post personal photos and/or "selfies"	○	○	○	○	○
Read news articles	○	○	○	○	○
Create and publish news articles	○	○	○	○	○
Create and promote events	○	○	○	○	○
Promote products/services	○	○	○	○	○
"Like" or "react" to other users' posts	○	○	○	○	○
Share other users' posts	○	○	○	○	○
Share real time live streams (for example live videos)	○	○	○	○	○
Subscribe/follow/add other users	○	○	○	○	○
Look at other users' profiles/photos/videos without taking any action	○	○	○	○	○

Using the following scale, please rate the following statements:	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly Agree
I am the life of the party	○	○	○	○	○	○	○
I sympathize with others' feelings	○	○	○	○	○	○	○
I get chores done right away	○	○	○	○	○	○	○
I have frequent mood swings	○	○	○	○	○	○	○
I have a vivid imagination	○	○	○	○	○	○	○
I don't talk a lot	○	○	○	○	○	○	○
I am not interested in other people's problems	○	○	○	○	○	○	○
I often forget to put things back in their proper place	○	○	○	○	○	○	○
I am relaxed most of the time	○	○	○	○	○	○	○
I am not interested in abstract ideas	○	○	○	○	○	○	○
I talk to a lot of different people at parties	○	○	○	○	○	○	○
I feel others' emotions	○	○	○	○	○	○	○
I like order	○	○	○	○	○	○	○

I get upset easily	○	○	○	○	○	○	○
I have difficulty understanding abstract ideas	○	○	○	○	○	○	○
I keep in the background	○	○	○	○	○	○	○
I am not really interested in others	○	○	○	○	○	○	○
I make a mess of things	○	○	○	○	○	○	○
I seldom feel blue	○	○	○	○	○	○	○
I do not have a good imagination	○	○	○	○	○	○	○

B. Chi-Square Goodness-of-Fit Tests:

Table 9. Chi-Square Test Critics (April 2018)

Critics			
	Observed N	Expected N	Residual
.00	179	145	34.0
1.00	62	96	-34.0
Total	241		

Table 10. Chi-Square Test Critics (April 2018)

			Critics
Chi-Square			20.014[a]
df			1
Asymp. Sig.			.000
Monte Carlo Sig.	Sig.		.000[b]
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 96.0.

b. Based on 10000 sampled tables with starting seed 1502173562.

Table 11. Chi-Square Test Collectors (April 2018)

Collectors			
	Observed N	Expected N	Residual
.00	165	166	-1.0
1.00	76	75	1.0
Total	241		

Table 12. Chi-Square Test Collectors (April 2018)

			Collectors
Chi-Square			.019[a]
df			1
Asymp. Sig.			.889
Monte Carlo Sig.	Sig.		.943[b]
	95% Confidence Interval	Lower Bound	.938
		Upper Bound	.948

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 75.0. b. Based on 10000 sampled tables with starting seed 743671174.

Table 13. Chi-Square Test Joiners (April 2018)

Joiners			
	Observed N	Expected N	Residual
.00	31	145	-114.0
1.00	210	96	114.0
Total	241		

Table 14. Chi-Square Test Joiners (April 2018)

			Joiners
Chi-Square			225.003[a]
df			1
Asymp. Sig.			.000
Monte Carlo Sig.	Sig.		.000[b]
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 96.0.

b. Based on 10000 sampled tables with starting seed 957002199.

Table 15. Chi-Square Test Spectators (April 2018)

Spectators			
	Observed N	Expected N	Residual
.00	18	75	-57.0
1.00	223	166	57.0

Total	241

Table 16. Chi-Square Test Spectators (April 2018)

			Spectator
Chi-Square			62.892[a]
df			1
Asymp. Sig.			.000
Monte Carlo Sig.	Sig.		.000[b]
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 75.0.

b. Based on 10000 sampled tables with starting seed 112562564.

C. H2- Crosstabs

*Creator * social networking sites Crosstabulation*

			social networking sites		Total
			yes	no	
Creator	.00	Count	44	10	54
		% within social networking sites	20.1%	45.5%	22.4%
	1.00	Count	175	12	187
		% within social networking sites	79.9%	54.5%	77.6%
Total		Count	219	22	241
		% within social networking sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	7.397[a]	1	.007	.010	.010	
Continuity Correction[b]	6.010	1	.014			

Likelihood Ratio	6.381	1	.012	.013	.010	
Fisher's Exact Test				.013	.010	
Linear-by-Linear Association	7.366[d]	1	.007	.010	.010	.008
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.93.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -2.714.

*Creator * media sharing networks Crosstabulation*

			media sharing networks		Total
			yes	no	
Creator	.00	Count	41	13	54
		% within media sharing networks	22.2%	23.2%	22.4%
	1.00	Count	144	43	187
		% within media sharing networks	77.8%	76.8%	77.6%
Total		Count	185	56	241
		% within media sharing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.027[a]	1	.869	1.000	.500	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.027	1	.869	1.000	.500	
Fisher's Exact Test				.856	.500	

Linear-by-Linear Association	.027[d]	1	.869	1.000	.500	.142
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.55.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.165.

*Creator * discussion forums Crosstabulation*

			discussion forums		Total
			yes	no	
Creator	.00	Count	32	22	54
		% within discussion forums	33.0%	15.3%	22.4%
	1.00	Count	65	122	187
		% within discussion forums	67.0%	84.7%	77.6%
Total		Count	97	144	241
		% within discussion forums	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	10.458[a]	1	.001	.002	.001	
Continuity Correction[b]	9.464	1	.002			
Likelihood Ratio	10.292	1	.001	.002	.001	
Fisher's Exact Test				.002	.001	
Linear-by-Linear Association	10.415[d]	1	.001	.002	.001	.001
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.73.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is 3.227.

*Creator * bookmarkig sites Crosstabulation*

			bookmarkig sites		Total
			yes	no	
Creator	.00	Count	8	46	54
		% within bookmarkig sites	25.8%	21.9%	22.4%
	1.00	Count	23	164	187
		% within bookmarkig sites	74.2%	78.1%	77.6%
Total		Count	31	210	241
		% within bookmarkig sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.237[a]	1	.627	.646	.388	
Continuity Correction[b]	.065	1	.798			
Likelihood Ratio	.230	1	.632	.646	.388	
Fisher's Exact Test				.646	.388	
Linear-by-Linear Association	.236[d]	1	.627	.646	.388	.156
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.95.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .485.

*Creator * consumer review network Crosstabulation*

			consumer review network		Total
			yes	no	
Creator	.00	Count	19	35	54
		% within consumer review network	25.0%	21.2%	22.4%
	1.00	Count	57	130	187
		% within consumer review network	75.0%	78.8%	77.6%
Total		Count	76	165	241
		% within consumer review network	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.429[a]	1	.512	.618	.309	
Continuity Correction[b]	.239	1	.625			
Likelihood Ratio	.424	1	.515	.618	.309	
Fisher's Exact Test				.511	.309	
Linear-by-Linear Association	.428[d]	1	.513	.618	.309	.105
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.03.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .654.

*Creator * bloging and publishing networks Crosstabulation*

			bloging and publishing networks		Total
			yes	no	
Creator	.00	Count	6	48	54
		% within bloging and publishing networks	26.1%	22.0%	22.4%
	1.00	Count	17	170	187
		% within bloging and publishing networks	73.9%	78.0%	77.6%
Total		Count	23	218	241
		% within bloging and publishing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.198[a]	1	.656	.793	.413	
Continuity Correction[b]	.033	1	.855			
Likelihood Ratio	.192	1	.661	.793	.413	
Fisher's Exact Test				.608	.413	
Linear-by-Linear Association	.197[d]	1	.657	.793	.413	.179
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.15.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .444.

*Creator * amonymous social networks Crosstabulation*

			amonymous social networks		Total
			yes	no	
Creator	.00	Count	0	54	54
		% within amonymous social networks	0.0%	23.1%	22.4%
	1.00	Count	7	180	187
		% within amonymous social networks	100.0%	76.9%	77.6%
Total		Count	7	234	241
		% within amonymous social networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2.082[a]	1	.149	.212	.165	
Continuity Correction[b]	.966	1	.326			
Likelihood Ratio	3.612	1	.057	.212	.165	
Fisher's Exact Test				.354	.165	
Linear-by-Linear Association	2.073[d]	1	.150	.212	.165	.165
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.57.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.440.

*Conversationalist * social networking sites Crosstabulation*

			social networking sites		Total
			yes	no	
Conversationalist	.00	Count	9	4	13
		% within social networking sites	4.1%	18.2%	5.4%
	1.00	Count	210	18	228
		% within social networking sites	95.9%	81.8%	94.6%
Total		Count	219	22	241
		% within social networking sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	7.758[a]	1	.005	.022	.022	
Continuity Correction[b]	5.245	1	.022			
Likelihood Ratio	5.261	1	.022	.022	.022	
Fisher's Exact Test				.022	.022	
Linear-by-Linear Association	7.725[d]	1	.005	.022	.022	.019
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.19.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -2.779.

*Conversationalist * media sharing networks Crosstabulation*

			media sharing networks		Total
			yes	no	
Conversationalist	.00	Count	10	3	13
		% within media sharing networks	5.4%	5.4%	5.4%
	1.00	Count	175	53	228
		% within media sharing networks	94.6%	94.6%	94.6%
Total		Count	185	56	241
		% within media sharing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.000[a]	1	.989	1.000	.645	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.000	1	.989	1.000	.645	
Fisher's Exact Test				1.000	.645	
Linear-by-Linear Association	.000[d]	1	.989	1.000	.645	.262
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.02.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .014.

*Conversationalist * discussion forums Crosstabulation*

			discussion forums		Total
			yes	no	

Conversationalist	.00	Count	7	6	13
		% within discussion forums	7.2%	4.2%	5.4%
	1.00	Count	90	138	228
		% within discussion forums	92.8%	95.8%	94.6%
Total		Count	97	144	241
		% within discussion forums	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1.056[a]	1	.304	.386	.229	
Continuity Correction[b]	.543	1	.461			
Likelihood Ratio	1.033	1	.309	.386	.229	
Fisher's Exact Test				.386	.229	
Linear-by-Linear Association	1.052[d]	1	.305	.386	.229	.134
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.23.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is 1.026.

*Conversationalist * bookmarkig sites Crosstabulation*

			bookmarkig sites		Total
			yes	no	
Conversationalist	.00	Count	1	12	13
		% within bookmarkig sites	3.2%	5.7%	5.4%
		Count	30	198	228

	1.00	% within bookmarkig sites	96.8%	94.3%	94.6%
Total		Count	31	210	241
		% within bookmarkig sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.328[a]	1	.567	.707	.482	
Continuity Correction[b]	.022	1	.883			
Likelihood Ratio	.373	1	.541	.707	.482	
Fisher's Exact Test				1.000	.482	
Linear-by-Linear Association	.326[d]	1	.568	.707	.482	.323
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.67.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.571.

*Conversationalist * consumer review network Crosstabulation*

			consumer review network		Total
			yes	no	
Conversationalist	.00	Count	4	9	13
		% within consumer review network	5.3%	5.5%	5.4%
	1.00	Count	72	156	228
		% within consumer review network	94.7%	94.5%	94.6%

Total	Count	76	165	241
	% within consumer review network	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.004[a]	1	.951	1.000	.609	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.004	1	.951	1.000	.609	
Fisher's Exact Test				1.000	.609	
Linear-by-Linear Association	.004[d]	1	.951	1.000	.609	.240
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.10.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.061.

*Conversationalist * bloging and publishing networks Crosstabulation*

			bloging and publishing networks		Total
			yes	no	
Conversationalist	.00	Count	1	12	13
		% within bloging and publishing networks	4.3%	5.5%	5.4%
	1.00	Count	22	206	228
		% within bloging and publishing networks	95.7%	94.5%	94.6%
Total		Count	23	218	241

	% within bloging and publishing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.055[a]	1	.815	1.000	.642	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.058	1	.810	1.000	.642	
Fisher's Exact Test				1.000	.642	
Linear-by-Linear Association	.054[d]	1	.816	1.000	.642	.380
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.24.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.233.

*Conversationalist * amonymous social networks Crosstabulation*

			amonymous social networks		Total
			yes	no	
Conversationalist	.00	Count	1	12	13
		% within amonymous social networks	14.3%	5.1%	5.4%
	1.00	Count	6	222	228
		% within amonymous social networks	85.7%	94.9%	94.6%
Total		Count	7	234	241

	% within amonymous social networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1.117[a]	1	.291	.325	.325	
Continuity Correction[b]	.043	1	.835			
Likelihood Ratio	.796	1	.372	.325	.325	
Fisher's Exact Test				.325	.325	
Linear-by-Linear Association	1.112[d]	1	.292	.325	.325	.277
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is .38.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is 1.055.

*Critic * social networking sites Crosstabulation*

			social networking sites		Total
			yes	no	
Critic	.00	Count	164	15	179
		% within social networking sites	74.9%	68.2%	74.3%
	1.00	Count	55	7	62
		% within social networking sites	25.1%	31.8%	25.7%
Total		Count	219	22	241
		% within social networking sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.470[a]	1	.493	.609	.324	
Continuity Correction[b]	.185	1	.667			
Likelihood Ratio	.451	1	.502	.609	.324	
Fisher's Exact Test				.456	.324	
Linear-by-Linear Association	.468[d]	1	.494	.609	.324	.152
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.66.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .684.

*Critic * media sharing networks Crosstabulation*

			media sharing networks		Total
			yes	no	
Critic	.00	Count	132	47	179
		% within media sharing networks	71.4%	83.9%	74.3%
	1.00	Count	53	9	62
		% within media sharing networks	28.6%	16.1%	25.7%
Total		Count	185	56	241
		% within media sharing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

		Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square		3.559[a]	1	.059	.080	.040	
Continuity Correction[b]		2.931	1	.087			
Likelihood Ratio		3.827	1	.050	.059	.040	
Fisher's Exact Test					.080	.040	
Linear-by-Linear Association		3.544[d]	1	.060	.080	.040	.023
N of Valid Cases		241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.41.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.883.

*Critic * discussion forums Crosstabulation*

			discussion forums		Total
			yes	no	
Critic	.00	Count	69	110	179
		% within discussion forums	71.1%	76.4%	74.3%
	1.00	Count	28	34	62
		% within discussion forums	28.9%	23.6%	25.7%
Total		Count	97	144	241
		% within discussion forums	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability

Pearson Chi-Square	.838[a]	1	.360	.371	.222	
Continuity Correction[b]	.585	1	.444			
Likelihood Ratio	.832	1	.362	.371	.222	
Fisher's Exact Test				.371	.222	
Linear-by-Linear Association	.834[d]	1	.361	.371	.222	.078
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 24.95.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.913.

*Critic * bookmarkig sites Crosstabulation*

			bookmarkig sites		Total
			yes	no	
Critic .00	0	Count	22	157	179
		% within bookmarkig sites	71.0%	74.8%	74.3%
	1	Count	9	53	62
	.00	% within bookmarkig sites	29.0%	25.2%	25.7%
Total		Count	31	210	241
		% within bookmarkig sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.204[a]	1	.652	.663	.399	
Continuity Correction[b]	.053	1	.817			

Likelihood Ratio	.199	1	.656	.663	.399	
Fisher's Exact Test				.663	.399	
Linear-by-Linear Association	.203[d]	1	.653	.663	.399	.152
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.98.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.450.

*Critic * consumer review network Crosstabulation*

			consumer review network		Total
			yes	no	
Critic	.00	Count	55	124	179
		% within consumer review network	72.4%	75.2%	74.3%
	1.00	Count	21	41	62
		% within consumer review network	27.6%	24.8%	25.7%
Total		Count	76	165	241
		% within consumer review network	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.211[a]	1	.646	.751	.379	
Continuity Correction[b]	.090	1	.764			

Likelihood Ratio	.209	1	.647	.751	.379	
Fisher's Exact Test				.638	.379	
Linear-by-Linear Association	.210[d]	1	.647	.751	.379	.112
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.55.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.458.

*Critic * bloging and publishing networks Crosstabulation*

			bloging and publishing networks		Total
			yes	no	
Critic	.00	Count	17	162	179
		% within bloging and publishing networks	73.9%	74.3%	74.3%
	1.00	Count	6	56	62
		% within bloging and publishing networks	26.1%	25.7%	25.7%
Total		Count	23	218	241
		% within bloging and publishing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.002[a]	1	.967	1.000	.570	
Continuity Correction[b]	.000	1	1.000			

Likelihood Ratio	.002	1	.967	1.000	.570	
Fisher's Exact Test				1.000	.570	
Linear-by-Linear Association	.002[d]	1	.967	1.000	.570	.196
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.92.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.042.

*Critic * amonymous social networks Crosstabulation*

			amonymous social networks		Total
			yes	no	
Critic	.00	Count	5	174	179
		% within amonymous social networks	71.4%	74.4%	74.3%
	1.00	Count	2	60	62
		% within amonymous social networks	28.6%	25.6%	25.7%
Total		Count	7	234	241
		% within amonymous social networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.031[a]	1	.861	1.000	.576	
Continuity Correction[b]	.000	1	1.000			

	Likelihood Ratio	.030	1	.863	1.000	.576	
	Fisher's Exact Test				1.000	.576	
	Linear-by-Linear Association	.030[d]	1	.862	1.000	.576	.319
	N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.80.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.174.

*Collector * social networking sites Crosstabulation*

			social networking sites		Total
			yes	no	
Collector	.00	Count	148	17	165
		% within social networking sites	67.6%	77.3%	68.5%
	1.00	Count	71	5	76
		% within social networking sites	32.4%	22.7%	31.5%
Total		Count	219	22	241
		% within social networking sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.870[a]	1	.351	.472	.249	
Continuity Correction[b]	.479	1	.489			
Likelihood Ratio	.918	1	.338	.472	.249	

Fisher's Exact Test				.472	.249	
Linear-by-Linear Association	.866[d]	1	.352	.472	.249	.131
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.94.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.931.

*Collector * media sharing networks Crosstabulation*

			media sharing networks		Total
			yes	no	
Collector	.00	Count	121	44	165
		% within media sharing networks	65.4%	78.6%	68.5%
	1.00	Count	64	12	76
		% within media sharing networks	34.6%	21.4%	31.5%
Total		Count	185	56	241
		% within media sharing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3.451[a]	1	.063	.072	.043	
Continuity Correction[b]	2.868	1	.090			
Likelihood Ratio	3.632	1	.057	.072	.043	
Fisher's Exact Test				.072	.043	
Linear-by-Linear Association	3.437[d]	1	.064	.072	.043	.023

N of Valid Cases	2	41

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.66.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.854.

*Collector * bloging and publishing networks Crosstabulation*

			bloging and publishing networks		Total
			yes	no	
Collector	.00	Count	15	150	165
		% within bloging and publishing networks	65.2%	68.8%	68.5%
	1.00	Count	8	68	76
		% within bloging and publishing networks	34.8%	31.2%	31.5%
Total		Count	23	218	241
		% within bloging and publishing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.124[a]	1	.725	.814	.444	
Continuity Correction[b]	.014	1	.907			
Likelihood Ratio	.122	1	.727	.814	.444	
Fisher's Exact Test				.814	.444	
Linear-by-Linear Association	.124[d]	1	.725	.814	.444	.171

N of Valid Cases	2	41

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.25.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.352.

*Collector * amonymous social networks Crosstabulation*

			amonymous social networks		Total
			yes	no	
Collector	.00	Count	5	160	165
		% within amonymous social networks	71.4%	68.4%	68.5%
	1.00	Count	2	74	76
		% within amonymous social networks	28.6%	31.6%	31.5%
Total		Count	7	234	241
		% within amonymous social networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.029[a]	1	.864	1.000	.613	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.030	1	.863	1.000	.613	
Fisher's Exact Test				1.000	.613	
Linear-by-Linear Association	.029[d]	1	.864	1.000	.613	.318

	N of Valid Cases	2 41

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.21.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .171.

*Collector * discussion forums Crosstabulation*

			discussion forums		Total
			yes	no	
Collector	.00	Count	79	86	165
		% within discussion forums	81.4%	59.7%	68.5%
	1.00	Count	18	58	76
		% within discussion forums	18.6%	40.3%	31.5%
Total		Count	97	144	241
		% within discussion forums	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	12.665[a]	1	.000	.000	.000	
Continuity Correction[b]	11.679	1	.001			
Likelihood Ratio	13.224	1	.000	.000	.000	
Fisher's Exact Test				.000	.000	
Linear-by-Linear Association	12.613[d]	1	.000	.000	.000	.000
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 30.59.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is 3.551.

*Collector * bookmarkig sites Crosstabulation*

			bookmarkig sites		Total
			yes	no	
Collector	.00	Count	27	138	165
		% within bookmarkig sites	87.1%	65.7%	68.5%
	1.00	Count	4	72	76
		% within bookmarkig sites	12.9%	34.3%	31.5%
Total		Count	31	210	241
		% within bookmarkig sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5.720[a]	1	.017	.021	.011	
Continuity Correction[b]	4.773	1	.029			
Likelihood Ratio	6.574	1	.010	.014	.011	
Fisher's Exact Test				.021	.011	
Linear-by-Linear Association	5.697[d]	1	.017	.021	.011	.008
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.78.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is 2.387.

*Collector * consumer review network Crosstabulation*

			consumer review network		Total
			yes	no	
Collector	.00	Count	59	106	165
		% within consumer review network	77.6%	64.2%	68.5%
	1.00	Count	17	59	76
		% within consumer review network	22.4%	35.8%	31.5%
Total		Count	76	165	241
		% within consumer review network	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4.320[a]	1	.038	.052	.025	
Continuity Correction[b]	3.723	1	.054			
Likelihood Ratio	4.482	1	.034	.038	.025	
Fisher's Exact Test				.052	.025	
Linear-by-Linear Association	4.302[d]	1	.038	.052	.025	.014
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.97.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is 2.074.

*Joiner * social networking sites Crosstabulation*

			social networking sites		Total
			yes	no	
Joiner	.00	Count	26	5	31
		% within social networking sites	11.9%	22.7%	12.9%
	1.00	Count	193	17	210
		% within social networking sites	88.1%	77.3%	87.1%
Total		Count	219	22	241
		% within social networking sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2.102[a]	1	.147	.175	.134	
Continuity Correction[b]	1.245	1	.265			
Likelihood Ratio	1.804	1	.179	.325	.134	
Fisher's Exact Test				.175	.134	
Linear-by-Linear Association	2.093[d]	1	.148	.175	.134	.088
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.83.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.447.

*Joiner * media sharing networks Crosstabulation*

		media sharing networks		Total
		yes	no	
	Count	24	7	31

Joiner	.00	% within media sharing networks	13.0%	12.5%	12.9%
	1.00	Count	161	49	210
		% within media sharing networks	87.0%	87.5%	87.1%
Total		Count	185	56	241
		% within media sharing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.009[a]	1	.926	1.000	.566	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.009	1	.926	1.000	.566	
Fisher's Exact Test				1.000	.566	
Linear-by-Linear Association	.009[d]	1	.926	1.000	.566	.180
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.20.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .092.

*Joiner * discussion forums Crosstabulation*

			discussion forums		Total
			yes	no	
Joiner	.00	Count	13	18	31
		% within discussion forums	13.4%	12.5%	12.9%
	1.00	Count	84	126	210

	1.00	% within discussion forums	86.6%	87.5%	87.1%
Total		Count	97	144	241
		% within discussion forums	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.042[a]	1	.837	.847	.493	
Continuity Correction[b]	.000	1	.993			
Likelihood Ratio	.042	1	.838	.847	.493	
Fisher's Exact Test				.847	.493	
Linear-by-Linear Association	.042[d]	1	.838	.847	.493	.151
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.48.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .205.

*Joiner * bookmarkig sites Crosstabulation*

			bookmarkig sites		Total
			yes	no	
Joiner	.00	Count	2	29	31
		% within bookmarkig sites	6.5%	13.8%	12.9%
	1.00	Count	29	181	210
		% within bookmarkig sites	93.5%	86.2%	87.1%
Total		Count	31	210	241

	% within bookmarkig sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1.305[a]	1	.253	.389	.201	
Continuity Correction[b]	.731	1	.393			
Likelihood Ratio	1.522	1	.217	.281	.201	
Fisher's Exact Test				.389	.201	
Linear-by-Linear Association	1.299[d]	1	.254	.389	.201	.136
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.99.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.140.

*Joiner * consumer review network Crosstabulation*

			consumer review network		Total
			yes	no	
Joiner	.00	Count	6	25	31
		% within consumer review network	7.9%	15.2%	12.9%
	1.00	Count	70	140	210
		% within consumer review network	92.1%	84.8%	87.1%
Total		Count	76	165	241

	% within consumer review network	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2.445[a]	1	.118	.148	.084	
Continuity Correction[b]	1.840	1	.175			
Likelihood Ratio	2.640	1	.104	.148	.084	
Fisher's Exact Test				.148	.084	
Linear-by-Linear Association	2.435[d]	1	.119	.148	.084	.050
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.78.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.560.

*Joiner * bloging and publishing networks Crosstabulation*

			bloging and publishing networks		Total
			yes	no	
Joiner	.00	Count	3	28	31
		% within bloging and publishing networks	13.0%	12.8%	12.9%
	1.00	Count	20	190	210
		% within bloging and publishing networks	87.0%	87.2%	87.1%
Total		Count	23	218	241

	% within bloging and publishing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.001[a]	1	.978	1.000	.593	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.001	1	.978	1.000	.593	
Fisher's Exact Test				1.000	.593	
Linear-by-Linear Association	.001[d]	1	.978	1.000	.593	.252
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.96.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .027.

*Joiner * amonymous social networks Crosstabulation*

			amonymous social networks		Total
			yes	no	
Joiner	.00	Count	1	30	31
		% within amonymous social networks	14.3%	12.8%	12.9%
	1.00	Count	6	204	210
		% within amonymous social networks	85.7%	87.2%	87.1%
Total		Count	7	234	241

	% within amonymous social networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.013[a]	1	.909	1.000	.624	
Continuity Correction[b]	.000	1	1.000			
Likelihood Ratio	.013	1	.910	1.000	.624	
Fisher's Exact Test				1.000	.624	
Linear-by-Linear Association	.013[d]	1	.909	1.000	.624	.400
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is .90.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .114.

*Spectator * social networking sites Crosstabulation*

			social networking sites		Total
			yes	no	
Spectator	.00	Count	18	0	18
		% within social networking sites	8.2%	0.0%	7.5%
	1.00	Count	201	22	223
		% within social networking sites	91.8%	100.0%	92.5%
Total		Count	219	22	241
		% within social networking sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1.954[a]	1	.162	.235	.167	
Continuity Correction[b]	.946	1	.331			
Likelihood Ratio	3.589	1	.058	.182	.167	
Fisher's Exact Test				.385	.167	
Linear-by-Linear Association	1.946[d]	1	.163	.235	.167	.167
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.64.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is 1.395.

*Spectator * media sharing networks Crosstabulation*

			media sharing networks		Total
			yes	no	
Spectator	.00	Count	12	6	18
		% within media sharing networks	6.5%	10.7%	7.5%
	1.00	Count	173	50	223
		% within media sharing networks	93.5%	89.3%	92.5%
Total		Count	185	56	241
		% within media sharing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

		Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square		1.112[a]	1	.292	.382	.217	
Continuity Correction[b]		.584	1	.445			
Likelihood Ratio		1.029	1	.310	.382	.217	
Fisher's Exact Test					.382	.217	
Linear-by-Linear Association		1.107[d]	1	.293	.382	.217	.123
N of Valid Cases		241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.18.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.052.

*Spectator * discussion forums Crosstabulation*

			discussion forums		Total
			yes	no	
Spectator	.00	Count	4	14	18
		% within discussion forums	4.1%	9.7%	7.5%
	1.00	Count	93	130	223
		% within discussion forums	95.9%	90.3%	92.5%
Total		Count	97	144	241
		% within discussion forums	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability

Pearson Chi-Square	2.629[a]	1	.105	.135	.082	
Continuity Correction[b]	1.881	1	.170			
Likelihood Ratio	2.826	1	.093	.135	.082	
Fisher's Exact Test				.135	.082	
Linear-by-Linear Association	2.618[d]	1	.106	.135	.082	.056
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.24.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -1.618.

*Spectator * bookmarkig sites Crosstabulation*

			bookmarkig sites		Total
			yes	no	
Spectator	.00	Count	3	15	18
		% within bookmarkig sites	9.7%	7.1%	7.5%
	1.00	Count	28	195	223
		% within bookmarkig sites	90.3%	92.9%	92.5%
Total		Count	31	210	241
		% within bookmarkig sites	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.251[a]	1	.616	.711	.416	
Continuity Correction[b]	.018	1	.892			

Likelihood Ratio	.234	1	.628	.711	.416	
Fisher's Exact Test				.711	.416	
Linear-by-Linear Association	.250[d]	1	.617	.711	.416	.229
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.32.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .500.

*Spectator * consumer review network Crosstabulation*

			consumer review network		Total
			yes	no	
Spectator	.00	Count	7	11	18
		% within consumer review network	9.2%	6.7%	7.5%
	1.00	Count	69	154	223
		% within consumer review network	90.8%	93.3%	92.5%
Total		Count	76	165	241
		% within consumer review network	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.487[a]	1	.485	.598	.324	
Continuity Correction[b]	.189	1	.664			

Likelihood Ratio	.471	1	.492	.598	.324	
Fisher's Exact Test				.598	.324	
Linear-by-Linear Association	.485[d]	1	.486	.598	.324	.157
N of Valid Cases	241					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.68.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .697.

*Spectator * bloging and publishing networks Crosstabulation*

			bloging and publishing networks		Total
			yes	no	
Spectator	.00	Count	1	17	18
		% within bloging and publishing networks	4.3%	7.8%	7.5%
	1.00	Count	22	201	223
		% within bloging and publishing networks	95.7%	92.2%	92.5%
Total		Count	23	218	241
		% within bloging and publishing networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.358[a]	1	.549	.708	.469	
Continuity Correction[b]	.033	1	.856			

Likelihood Ratio	.411	1	.521	.708	.469	
Fisher's Exact Test				1.000	.469	
Linear-by-Linear Association	.357[d]	1	.550	.708	.469	.316
N of Valid Cases	241					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.72.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is -.597.

*Spectator * amonymous social networks Crosstabulation*

			amonymous social networks		Total
			yes	no	
Spectator	.00	Count	1	17	18
		% within amonymous social networks	14.3%	7.3%	7.5%
	1.00	Count	6	217	223
		% within amonymous social networks	85.7%	92.7%	92.5%
Total		Count	7	234	241
		% within amonymous social networks	100.0%	100.0%	100.0%

Chi-Square Tests[c]

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	.485[a]	1	.486	1.000	.423	
Continuity Correction[b]	.000	1	1.000			

Likelihood Ratio	.393	1	.531	1.000	.423	
Fisher's Exact Test				.423	.423	
Linear-by-Linear Association	.483[d]	1	.487	1.000	.423	.335
N of Valid Cases	41					

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is .52.

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .695.