The TV Needs a Digital Add-on: How Multi-screening Fosters Engagement, Social Interaction and Immersion (an Exploratory Study in Portugal)

La televisión necesita una llamada digital: Cómo el multi-pantalla fomenta la participación, la interacción social y la inmersión. Un estudio exploratorio en Portugal

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RESUMEN

La proliferación de las tecnologías digitales, junto con el aumento de las tasas de adopción de internet y dispositivos móviles, están reconfigurando el panorama mediático contemporáneo y fomentando nuevas prácticas de uso. La televisión está pasando por un proceso de remediación o hibridación, ya que el contenido se está convirtiendo en transmedia y los espectadores en multiplataforma. Este artículo trata del multi-pantalla, es decir, el uso de dispositivos con pantalla mientras se ve la televisión. El objetivo de esta investigación es la identificación de las prácticas multi-pantalla más comunes y las motivaciones, usos y gratificaciones detrás de esas conductas. Nuestro enfoque teórico articula el concepto de multi-pantalla, y la descripción de las prácticas multi-pantalla más comunes, con una visión general de la investigación sobre las comunicaciones móviles y las motivaciones para su adopción y uso. Nuestro trabajo empírico consiste en focus groups con usuarios multi-pantalla, donde fueron explorados sus objetivos, necesidades, preferencias y expectativas asociados a estas prácticas. Nuestros resultados identifican dos tipos principales de motivaciones para el multi-pantalla: utilitaria (asociado con hacer un mejor uso del tiempo y ser más eficaces en el cumplimiento de tareas) y afectiva (relacionado con una necesidad constante e inevitable de estar puesto al día con lo que está pasando en el mundo y estar conectado a la red de estrechas relaciones de uno). Los dispositivos móviles añaden un estrato digital a la televisión, y esto se caracteriza, más a menudo, por no tener relación con el contenido de la televisión.

ABSTRACT

The proliferation of digital technologies, along with increasing rates of adoption of the internet and mobile devices, are reconfiguring the contemporary media landscape and fostering new usage practices. The television is undergoing a remediation or hybridization process, as content becomes transmedia and viewers become multiplatform. This paper focuses on multi-screening, i.e. the use of screened devices during television viewing. The aim of this research is identifying the most common multi-screening practices and the motivations, uses and gratifications behind those behaviors. Our theoretical framework articulates a discussion of the concept of multi-screening itself, along with a description of the most common multi-screening practices, with an overview of previous research in the Mobile Communication subfield on the motivations for mobile phone adoption and use. Our empirical work consists of focus group discussions with multi-screeners, exploring the goals, needs, preferences and expectations associated to these practices. Our results identify two main types of motivations for multi-screening: utilitarian (associated with making a better use of time and being more effective in accomplishing tasks) and affective (related to a constant and pressing need of being up-to-date with what is going on in the world and being connected to one's network of close relationships). Mobile devices add a digital layer to television viewing, and this layer is more often unrelated to television content than related.

1. INTRODUCTION

Several authors within Media Studies, such as Marshall McLuhan, Jean Baudrillard and Gilles Lipovetsky, have highlighted the importance of screens in contemporary society. Plus, screened-media are increasingly proliferating, as computers and mobile phones are already widespread, and the penetration rates of smartphones and tablets are increasing at considerable speed.

The concept of second screening, usually referring to the use of laptops or mobile phones during television viewing, puts the digital media in a supporting role. However, the proliferation and penetration of other screened devices with internet connection, such as smartphones and tablets, has resulted in an increase of multitasking, and also in other activities binomials that do not necessarily include the television, thus putting mobile devices in a preponderant role. Thus, the concept has evolved to 'multi-screening'.

Previous research on the adoption, use and social impact of the mobile phone within the Mobile Communications subfield of Media Studies is a relevant framework for addressing this phenomenon. However, literature shows that the most common multi-screening situation is using the smartphone or tablet while watching television. Thus, this paper aims to identify the motivations and perceived benefits related to these emergent practices.

1.1 FROM SECOND SCREENING TO MULTI-SCREENING

The concept of 'second screen' was used for the first time to refer to the simultaneous use of two or more computer screens connected to the same laptop/desktop. Later, the same expression was used to describe the emerging practice of using more than one screened media, for instance, using a mobile phone while watching television. This term stresses television viewing as the preponderant activity, absorbing most of the users' attention and engagement.

However, other concepts related to the same phenomena have been suggested such as multi-screening (e.g. Lin, 2013; Microsoft, 2013; Nielsen, 2014), dual screening (e.g. Google, 2012; Lee, 2012), interactive TV (e.g. Chorianopulos and Lekakos, 2008), social television (e.g. Ducheneaut, Moore, Oelhberg, Thorton and Nickell, 2008; Eriksson Consumer Lab, 2012; Proulx and Shepatin, 2012), transmedia television (Evans, 2011), co-viewing (e.g. Haridakis and Hanson, 2009), connected viewing (e.g. Smith and Boyles, 2012) and even the industry concept of smart TV (e.g. Chin, Hwang and Choo, 2013), among others. These more recent concepts do not establish a hierarchy between the media being used simultaneously neither limit themselves to a particular binomial – television and mobile phone, even considering the possibility of using more than two screened-media at the same time (Van Cauwenberg, 2014). Furthermore, a broader understanding of the phenomenon considers not only simultaneous activities but also sequential and intercalary activities.

Lee (2012) presents the concept of dual screening to refer the simultaneous use of two screened-media. The author rejects the preponderance of a medium over the

other, arguing that attention tends to be distributed among them in an interactive and dynamic manner, depending on triggers and engagement.

Haridakis and Hanson (2009) suggest co-viewing to describe the articulation between watching videos on YouTube and related social interactions on social networks such as Facebook. The authors demonstrated that inputs from uses and gratifications theory are relevant for explaining this type of practice and introduced the notion of a 'social layer' being added to the videos.

The concept of social television (Ducheneaut et al., 2008; Avendaño, 2011; Eriksson Consumer Lab, 2012; Proulx and Shepatin, 2012) develops this notion, and it refers specifically to the most common multi-screening binomial: using a smartphone or tablet while watching television, highlighting social networking as the main activity performed in the digital devices. It may occur in social networking sites or instant messaging platforms such as Facebook, Twitter, Instagram, Whatsapp and Viber, or in television-related mobile applications, such as Beambly. This practice is relatively common, as a study from Eriksson Consumer Lab (2012) indicates that 62% of US TV viewers use social media while watching TV. Television-related applications may focus on a television channel (such as FoxFan) or on a particular content (for instance, Idols or Rising Star). These mobile apps tend to have social features, i.e. allow interaction with other users by commenting the contents, in addition to other functions such as providing information and interacting with TV content. Most research on social TV comes from the US context, where Twitter is very relevant. Commenting on Twitter on TV content, particularly about live broadcasting of sports events or talent shows, is a common practice. Proulx and Shepatin (2012) argue that the articulation between TV broadcasting and social media is an opportunity to revitalize TV, particularly from a marketing point of view.

The term transmedia television, suggested by Evans (2011) to describe the articulation of practices such as transmedia gaming and mobile television, is broader as it includes the articulation of other simultaneous practices besides interacting in social networks with TV viewing. Although focusing primarily on television instead of portable media, the author addresses several stakeholders of these new practices, namely the content producing industry, the distribution industry, and the audiences.

Multi-screening (Lin, 2013) is a broader term that refers to the articulation of different screened media, without establishing any preponderance between them, and including both simultaneous and intercalary practices. Being more encompassing, we believe that this is the more suitable terminology to describe the phenomenon that we are addressing.

1.2 MULTI-SCREENING PRACTICES

Research has identified different variations of multi-screening practices: the articulation of different portable devices with television viewing; practices that articulate more than one screened-device; practices that are sequential and other intercalary; and even considering practices that articulate one screened-device, usually the smartphone, with other activities (although this is usually considered multi-tasking). However, most

of the studies agree that the most common multi-screening binomial is using the smartphone or tablet while watching television (e.g. Google, 2012; Smith and Boyles, 2012; Lin, 2013; Nielsen, 2014; Dias and Teixeira-Botelho, 2014). Research from Google (2012a, 2012b) shows that the smartphone is the device most frequently involved in multi-screening activities (57% of the time spent using a smartphone is simultaneous with other activity and the most common activity performed at the same time than using a mobile phone is watching TV, with 52%). A more recent report from Nielsen (2014) argues that 84% of mobile device's owners use them while watching television, claiming there 'digital consumers' need a minimum of two screened-devices to satisfy their needs of simultaneous social interaction, information, entertainment and sense of productivity and accomplishment. This study also shows that multi-screening activities are becoming more frequent and diversified.

Smith and Boyles (2012) suggest the term connected viewing to characterize all the different activities that are performed through mobile devices while watching television. A study from Pew Internet Research (2012) showed that the most frequent activity simultaneous to watching television is keeping busy during commercial breaks, followed by non-TV related activities such as checking the email, web browsing and downloading apps. Other TV-related activities that are also frequent included checking whether something they heard on TV is true or not (22%), searching what other people are saying about television content (20%) and commenting online about the content (19%) and, with a less frequent use, voting for a reality show or contest (6%). The study by Smith and Boyles (2012) distinguishes between 'connected viewing' and 'distracted viewing' by arguing that the first concept is more frequent for smartphone users and requires a connection between watching TV and smartphone activities, and the second refers to mobile phone users who use the device to keep busy while the television content is not engaging their attention. Television content is usually the trigger for smartphone activities such as researching or social interactions. To 'distracted viewers', the activities performed are unrelated to the television content and usually end up drawing the attention from the TV completely. Using the same categories, more recent research by Dias and Teixeira-Botelho (2014), conducted in Portugal, shows that 'distracted-viewing' practices are actually more frequent than 'connected viewing'. The authors have explored the different perspectives of industry and users regarding screened-media articulation. However, previous research conducted in the US context (Proulx and Shepatin, 2012) highlights the potential of 'connected viewing" for creating greater brand engagement and recognition, particularly through the association of social media interaction and live broadcasting on TV. In the industry, different stakeholders such as TV content producers, TV channels, mobile apps developers, and advertising agencies look at multi-screening as an opportunity to energize traditional media business models and approaches. Facing decreasing TV audiences and commercial breaks avoidance, using mobile apps to enhance TV content and explore new ways of advertising seems to the industry as a viable solution. However, users are not adhering to these new mobile apps articulated with TV content as expected, and advertising is precisely one of the reasons why not. The 'revolutionizing' of TV had previously been discussed by Lotzt (2007), who pointed to the synergies with new media as one of the main causes for profound changes in the traditional model of TV (concerning business models, audiences and content).

In an initial study on multi-screening, Courtois and D'Heer (2012) found behavior patterns associated with smartphone or tablet use during television viewing: a) focusing only on television; b) confounding television viewing with other screened-media; and c) confounding television viewing with other screened and non-screened media. An important finding was the low awareness, experience and interest in using branded apps to enhance the TV viewing experience or to comment on it.

On the same issue, it is also relevant the distinction from mobile devices as 'companions' or as 'enhancers', suggested by Eriksson Consumer Lab's study (2012). As 'companions', people use mobile phones simultaneously with TV viewing but there is no connection between those activities, i.e. playing a game on mobile phone while listening to news on TV. However, as 'enhancers', people watch TV while they interact with applications that are related to the channel or content they watching. This enhances the TV experience by adding it a social layer, extra information or allowing participation.

Another important conclusion from research on multi-screening is that this type of practice does not tend to be consistent, become a routine or even be consistently correlated to users' features or profiles. Each media is chosen according to goals and context and is preferred for certain types of activities, i.e. computers for work, television for information, smartphones for connectedness and tablets for entertainment (Google, 2012b; Lin 2013). Consistently, Nielsen (2014) describes tablets as 'TV buddies' and eReaders as 'bedfellows'. This suggestion is also coherent with research from Microsoft (2013) that uses metaphors to describe the most common uses and gratifications related to each medium. Exploring correlations between devices, activities performed, motivations and context, this study presents four multi-screener profiles: 'content grazing' are driven by entertainment, 'investigative spider-webbing' need additional information on whatever they are doing, 'social spider-webbing' look for a sense of belonging and 'quantum' are utilitarian and effective.

1.3 FROM MOBILE PHONE USE TO MULTI-SCREENING PRACTICES
Recent research on multi-screening is grounded on previous findings on mobile phone adoption, use practices and social impact, developing notions suggested by the Mobile Communication subfield, and also classic Media Studies theories.

One of the main contributions for understanding multi-screening behavior, and particularly the motivations that drive it and the resulting benefits, is Uses and Gratifications Theory (UGT). Originally developed for television, it has been applied to mobile phones (Leung and Wei, 2000), mobile internet (Stafford and Gillensen, 2014), and multi-screening.

Regarding multi-screening, Choi, Kim and McMillan (2009) found that the uses and gratifications that drive the use of other screened-devices during television viewing are consistent with previous research on other media: entertainment, social interaction, access to information and communication, passing time, and fashion/status. A more focused study on apps found other uses and gratifications: constant availability, novelty, convenience, entertainment, and instrumentality, being availability the best predictor (Wei, Karlis and Haught, 2012). Cheng, Liang and Leung (2014) also found

uses and gratifications related to efficiency, such as technological convenience and information exchange, but also other related to social connectivity, in particular when the activity performed on mobile devices was social networking. More recently, Ainasoja, Linna, Haikilla, Lammi and Oksman (2014) have found four profiles of multi-screeners, depending on the uses and gratifications that drive behavior: 'commentators', 'analyzers', 'home gamers' and 'active followers'.

These recent findings on the uses and gratifications associated with multi-screening behavior are also consistent with previous research in the subfield of Mobile Communication that does not use this particular theory as framework. One predominant idea within this subfield of Media Studies is that, although the mobile phone is recognized as a useful, convenient and multi-faceted tool, what users value the most is the connectivity that it affords them (Ling, 2004). Regarding the mobile phone as a very efficient tool is portrayed by different metaphors present in the literature, such as the notions of the mobile phone being a sort of 'companion' or 'extension' of its user is present from early research on its use and impact. Ling and Yttri (2002) identified a distinction between 'coordination', i.e. activities aimed at synchronizing schedules, meetings and tasks, and 'hyper-coordination', which corresponds to a permanent negotiation of identity, belonging and status within a social group. Ling (2004) found that the majority of activities performed via mobile phone are related with connectivity, aimed at managing relationships instead of accomplishing specific tasks. In addition, the mobile phone is predominantly used for increasing the frequency of contact with one's network of close relationships, instead of keeping in touch with more peripheral connections or even expanding the network. Katz and Aakhus (2002) describe as 'perpetual contact' the sense of constant connectivity afforded by the mobile phone, as having the device connected and within reach represents the possibility of contacting someone or being contacted, and that alone is enough to 'keep the user company', as if one's network of close relationships was literally in 'one's pocket'. This duality is present in the comparison suggested by Ling (2004), between the mobile phone and a 'teddy bear', while Vincent (2005) considers it an 'affective technology', i.e. the mediator of emotions and thus the object of an affective relation for its user. In the research that explores the possibility of 'addiction', the most common causes of physical anxiety are related to connectivity (i.e. not knowing what is going on in one's network of close relationships, being aware that one's disconnection is going to upset the others, etc.) (Ling, 2008; Ling and Campbell, 2011). Dias (2008) presents the mobile phone as an extension of both the self and others as, on the one hand, it enhances human abilities of communicating and organizing – as the 'Swiss Army knife' that it is (Fortunati, 2002) – and also of expressing identity and group belonging, and on the other hand, it is an extension of perpetual contact with others (Katz and Aakhus, 2002; Ling, 2008), who seem to be 'inside' the mobile phone.

Smartphones and multi-screening practices take these roles of the mobile phone – companion and enhancer– one step further, as recent research on multi-screening also identifies these two main types of activities: 'coordination' and 'connectivity'. The way users articulate different media, platforms and content according to specific goals and tasks to accomplish is explored by Phalen (2012) and later by Giglietto (2014). Concerning 'connectivity', there is an extensive body of literature highlighting social

capital and sense of belonging as key drivers for multi-screening (i.e. Xu and Yan, 2011; Riedler, Köbler, Goswami and Krcmar, 2013). Saxbe, Graesch and Alvik (2011) accompanied the activities of 30 families over 4 days. Multitasking during television viewing was frequent, but while the most common simultaneous activity for parents was face-to-face interaction, only the children engaged in multi-screening, usually in their bedrooms. The correlation between multi-screening behavior and demographic factors such as age, gender, income and education has been explored is previous research (i.e. Medrano, Aierbe and Orejudo, 2009; Saxbe et al., 2011; Mascheroni, and Ólafsson, 2014), and age stands out as the most influent variable. Voorveld and Viswanathan (2013) suggest that other variables need to be considered, such as media content and contextual elements such as place and time. Székely (2015) proposes a typology for multi-screening behavior organized around 'resource-enhancing activities' and 'recreational activities'.

Summing up, the motivations behind multi-screening behavior are consistent with the previous use of other available media, mainly mobile phones, suggesting that users are taking advantage of this new technological tools to satisfy the same needs – coordination and connectivity – and to obtain the same uses and gratifications – information, social integration and entertainment/escapism.

2. EMPIRICAL RESEARCH

2.1 METHODS
The goal of our empirical work is answering the following question: 1) What are the main motivations for emergent multi-screening practices?

This paper presents partial results from research grounded on an interpretivist approach and that followed a research design with mixed methods. The first phase of this research was an exploratory online survey applied to the students of the Faculty of Human Sciences (including the scientific fields of Communication Sciences, Psychology, Culture Studies, Psychology and Philosophy) of the Catholic University of Portugal, in Lisbon (about 500 students), with 254 valid answers. The goal of this survey was identifying correlations between multi-screening practices (such as content viewed on television and activities simultaneously performed on smartphones and tablets) and socio-demographic features, in order to define profiles of multi-screeners to study with more detail in the next phase. The results from this first phase pointed to age and education as the main factors that were correlated to frequent multi-screening behavior, which is consistent with previous research and industry reports (ANACOM, 2014; Marktest, 2014). However, the tasks performed in the mobile device were different for youngsters and young adults, as youngsters performed tasks related to social interaction and young adults performed tasks related to work.

Following these preliminary results, the second stage of this research conducted 4 focus groups with multi-screeners (consistent with previous research, industry reports and our previous findings, multi-screeners are young, educated and urban), divided into sets of 2 focus groups with participants with different age and education: one group ranged from 18 to 25 years old and were undergraduate students, and the other

group ranged from 26 to 35 years old and were postgraduate students. Our sample was firstly selected by asking students from the Communication Sciences B.A. and M.A. at the Faculty of Human Sciences of the Catholic University of Portugal via email, and the volunteers were later asked to bring friends, so we could have participants with different backgrounds concerning education and job. Amongst the volunteers, we preferred those who claimed multi-screening frequently. The average number of participants was 8 (from a total of 34) and the genders were balanced. The focus groups were performed face-to-face, recorded, transcribed and analyzed using the technique of analysis grids (Guerra, 2006).

3. RESULTS

3.1 FINDINGS
Concerning multi-screening practices, our results are consistent with previous research, as the most common binomial is using the smartphone while watching TV. However, on the contrary to other findings (Smith and Boyles, 2012), our participants claim that 'distracted viewing' is more common than 'connected-viewing'. In fact, the use of mobile apps in articulation with TV content is only reported by two participants, and such apps are poorly evaluated as they do not find their content enriching or perceive them as a way of interacting, rather they seem these apps as an attempt of forcing them to engage with advertising they wish to avoid. In most cases, smartphones and tablets are used for alternative activities, motivated by the need of accomplishing unrelated tasks or by the TV content not being engaging enough. Regarding related activities on both media, it happens mostly when participants want to know what others are saying about something online, to confirm whether information is true or not or to find additional information about some content. Searching for something that was triggered by TV content is also relatively common, and also engaging in social interaction in social networks or Instant Messaging platforms, and these interactions are sometimes related to TV content being watched, by users prefer interacting in other platforms instead of in branded-mobile apps.

When specifically asked whether if they used some branded-apps to interact with TV content, only two of the participants reported having tried some of those apps. Those experiences where, in both cases, exploratory, and the apps were quickly abandoned. Table 1 summarizes the participants' comments on their multi-screening practices.

Considering our first research question – What are the main motivations for multi-screening? – we have organized the participants' answers according to two categories: utilitarian and affective. This categorization is consistent with previous research about the use and impact of mobile phones, as the most common functions and activities are usually related to coordination – thus, utilitarian – and connectivity – thus, managing affective relationships. When asked about the reasons behind their multi-screening behavior, users immediately refer the need of better managing time, arguing that mobile devices such as smartphones and tablets afford the possibility of making a better use of time by allowing simultaneous activities. Participants report often feeling overwhelmed with so much to do, and regard mobile devices as 'helpers' and 'useful tools' for their daily life.

Table 1: Testimonies on multi-screening practices

FG1 (18-25)	"I'm always on my smartphone when I'm watching TV. Even if its my favorite TV series, if I see the smartphone's light on, I can't resist." (Participant 1C)
	"Its impossible to watch TV without doing something else at the same time. TV just isn't interesting enough." (Participant 1B)
	"I've tried RTP 5i and Rising Star apps but they really didn't fulfill my expectations. I was expecting to find a lot more interaction with the TV shows." (Participant 1E)
FG2 (18-25)	"I like to talk to my friends on Whatsapp about what's going on in the TV series we follow. Sometimes we even synchronize to watch it at the same time, and comment." (Participant 2D)
	"Yes, if I watch something in the news or a documentary that I'm not sure about, I Google it on t my smartphone." (Participant 2E)
	"I'm kind of addicted to some games, and I like to play and watch TV at the same time. I can do it all without a problem." (Participant 2F)
FG3 (26-35)	"Sometimes, I'm watching a soap opera on TV and nothing big is going on, and my mind drifts to things that I need to get done for work, or to an email that I should have sent, so I do it right then." (Participant 3A)
	"I haven't tried any of those mobile apps [related to TV content]. They don't seem that interesting." (Participant 3C)
	"As soon as the TV commercial break starts, I'm on my smartphone checking my emails." (Participant 3D)
FG4 (26-35)	"When I get home at night, there's so much to do... I don't have time to just relax and watch TV. But I can have the TV on while I work on my laptop or tablet." (Participant 4G)
	"Yes, the smartphone is always within reach. And I stop whatever I am doing to check a message or a notification." (Participant 4F)
	"If I'm watching the news and I am interested in a particular subject, I use the smartphone or the tablet to search for more information." (Participant 4C).

On the other hand, some of the participants also refer an 'intrusive side' of smartphones, as communications from work or even friends often interrupt other activities, such as watching television. When asked why they do not turn these 'intrusive' devices off while engaging in other activities, they refer another type of motivations. Without the smartphone, participants feel 'isolated from the world', 'worried' about the ones they love the most, 'anxious' about knowing the latest news. We have designated such type of needs as affective, as they are related to social capital and sense of belonging to a community (Wellman, 2014). Table 2 summarizes the participants' reporting of motivations for multi-screening.

Our research identified two factors which impact diversified behavior. On the one hand, although both smartphones and tablets are used in multi-screening behavior in articulation with television, different activities tend to be performed on each of the devices. We didn't find different users profiles exactly, but a choice of device according to needs, goals and activities, i.e. the same user might choose the smartphone for checking social networks, for instance, while would prefer the tablet for browsing news and blogs. This finding is consistent with previous research from Damásio, Henriques, Teixeira-Botelho and Dias (2013), that report a correlation between the variables time, place and social interaction and the choice of mobile devices – smartphones, tablets and laptops. Tablets and laptops are usually chosen to perform activities that take some time, they are mostly used in fixed locations, mainly at home and at work, and for activities that do not involve much social interaction. On the contrary, smartphones are favorites for quick and on-the-go social interactions. Consistently, our focus group participants reported choosing the tablet for activities that last more time and that require bigger screens, such as browsing the web, playing games, watching videos,

answering emails and editing documents, while the smartphone is more often used to quick searches, checking emails, checking social networks and updating status.

Table 2: Testimonies on motivations for multi-screening

FG1 (18-25)	"Without the smartphone, I feel isolated from the world. It is the smartphone that keeps me connected, up-to-date with what is going on in the world, and with my friends." (Participant 1C)
	"Multi-screening happens naturally for me. Most of the times, I'm not even aware that I start doing different things at the same time. Its just the way I think." (Participant 1B)
	"Why should studying be boring? When I'm studying on my laptop, I can listen to music and talk to friends at the same time, about the studying or something else." (Participant 1E)
FG2 (18-25)	"If I'm watching TV and the smartphone rings, I get restless. That ring is just irresistible. It can be a sweet message from my boyfriend, or news about my favorite band, or a new selfie from my best friend. Whatever it is, I need to see it right away." (Participant 2D)
	"I have to keep checking my smartphone because I know that my mother gets worried if I take too much time to answer, or my girlfriend starts wondering what I'm doing and I'll have problems later, you know?" (Participant 2A)
	"I can't focus on anything without being connected. Sometimes, when I have to study for an exam, I try to turn off the smartphone, and I even wear my headphones without music on, just to block out the noise. But I feel anxious, I feel like I'm missing something..." (Participant 2C)
FG3 (26-35)	"My smartphone is my 'magic little helper', some sort of 'fairy godmother' that helps me go through the day!! (Participant 3C)
	"Smartphones and tablets are such useful tools. I sometimes wonder how I could live without them. Being able to search for instructions while I'm cooking, or order something online while I'm at the bus stop, or answering emails while I'm relaxing in front of the TV, that's just wonderful!" (Participant 3A)
	"Sometimes, I don't even want to multi-screen, but I know that if I don't do it now I'll do it later. If I don't answer a call from work because I'm watching a movie, I know I'll have to return the call, and I'll just worry about what might be anyway..." (Participant 3B)
	"I use my smartphone to keep in touch with my family during the day. I exchange texts with my husband and I chat with my kids on Whatsapp. Its like they're in my pocket." (Participant 3F)
FG4 (26-35)	"If I don't know something, or I need some kind of information, I can just ask Google, anytime, anywhere!" (Participant 4G)
	"My relax moment of the day is usually watching an recorded episode of my favorite series on TV while browsing the web on my tablet." (Participant 4A)
	"There's just something about a phone ringing or blinking... You need to know what it is!" (Participant 4E)

On the other hand, we also found differences between the two age groups formed. First of all, although the most common multi-screening binomial is using the smartphone while watching TV, this behavior is more frequent in the older groups, as some of the youngest claim not watching TV at all. They tend to consume audiovisual contents on their laptops and tablets. Participants aged 18 to 25 explained that they prefer the tablet to the TV because it allows them to consume the content they choose when they wish, whether it is downloaded, recorded, in streaming or live. Also, they prefer tablets because they are not forced to watch traditional TV commercials and they do not feel a lack of concentration as strongly as they do when watching TV, which for them isn't engaging enough. Tablets promote a better focus stimulus, as they can use it on an immersive way, with headphones, in isolation from their environment.

In addition, younger participants tend to mention more affective motivations for multi-screening, while the older groups highlight utilitarian reasons. Young adults argue that smartphones and tablets are extremely useful for accomplishing simple tasks, and effective in replacing PCs when on-the-go. They multi-screen because that helps them using their time better and being more effective in accomplishing their daily tasks. On the other hand, the main motivations for multi-screening reported by the youngsters are keeping 'perpetual contact' (Katz and Aakhus, 2002) in sociability activities and also better use of time. This 'perpetual contact' has a double sense as it includes being up-to-date to what is going on in their close network of relationships, and also in the world. Smartphones fulfill such important needs that they find it difficult to fully turn off the attention from it, and they feel anxious if they don't check it frequently. Thus, checking their smartphone periodically to consult feeds from social networks or contacts in their communication applications has become a common ritual. Most of them refer that they keep informed by reading news on social media or mobile applications. Social networks feeds are their source of information both about world events, brands' news or events within their networks of friends and family. Young participants mention the 'immediacy addiction' phenomenon, describing it as a need they feel to get and know everything in real time. They compare it to a nervous tic, to always be dealing with stimuli and information and never be quiet or disconnected. This immediacy need also applies to being in touch with close circles and the world. They admit that this behavior reduces their ability of focusing on tasks and devices for a prolonged amount of time. Also, it prevents them from leaving something to do later: they must answer their doubts and questions and also comment and share immediately.

Although we selected the sample balanced in gender and organized each focus group also with balanced gender, we checked for diversified behavior according to this variable and did not find relevant differences. This finding is also coherent with previous research on mobile phone use and impact, which also does not vary according to gender (Ling, 2004). Table 3 summarizes the variations of multi-screening behavior according to age.

Regarding our second research question –How is attention distributed between the different media involved in multi-screening behavior?– we concluded that the smartphone tends to be preponderant over the other screened-medium. Considering in particular the binomial TV/smartphone, watching television tends to be a constant activity when compared to the sporadic quick checking of the smartphone. However, all of our participants agree that it is usually the smartphone the main focus of their attention because they tend to stop whatever they are doing to pay attention to the smartphone whenever it calls for it, and some of them report feeling nervous or anxious if they don't check their smartphones frequently. Most participants admit giving immediate attention to stimuli from the smartphone –calls, messages or notifications– even if they are completely focused on a TV content that they enjoy. In addition, the television is characterized by some of the participants as a 'background medium', while others admit turning it on more out of routine or to 'keep them company' than to actually focus on watching something. Others, mostly the younger participants, state that it is either impossible or a waste of time devoting their time solely to television, as it becomes increasingly boring and obsolete. This is consistent with previous work

from Ling (2004) and Levinson (2009), who have emphasized the intrusiveness of the mobile phone, and its 'push' way of interacting with users.

Table 3: Testimonies on variation of multi-screening behavior according to age

FG1 (18-25)	"I use the smartphone while I'm ding other things because I want to keep in touch, I want to know everything that is going on." (Participant 1A)
	"I'm hooked on Instagram. I always know what my friends are doing, and even my favorite celebrities." (Participant 1C)
	"My parents have asked me if I have a nervous tic. Maybe I do. The truth I'm always checking my smartphone for news and updates." (Participant 1D)
FG2 (18-25)	"I guess I can say I am a bit addicted... Because I can't wait. If I see a message, I need to read it now, and I need to answer it right away." (Participant 2A)
	"Smartphones are useful and help us do a lot of things, but the most important for me is communicating with my friends and family." (Participant 2C)
	"Sometimes I need to study and I leave the smartphone in another room. But after a while I feel alone. And I feel off, disconnected. And then I feel nervous and I can't study anyway..." (Participant 2E)
FG3 (26-35)	"My smartphone makes me more efficient. I'm always getting small tasks done while I'm commuting, during lunch, when I'm waiting for a meeting..." (Participant 3A)
	"When I'm at work, I call my husband to arrange who's going to pick up the kids and who's taking care of dinner. When I'm at home, I talk to my work colleagues to see if the presentation for tomorrow is ready, or if a client has made a payment. I guess its my way of being in two places at the same time." (Participant 3D)
FG4 (26-35)	"I guess sometimes its quite ridiculous. I use the smartphone while watching TV to get small things done and then, sometimes, if I don't have anything to do except watching TV, I use it anyway to find something else to do..." (Participant 4A)
	"The smartphone helps me, but sometimes I feel like I'm its slave... Because I always do what it tells me, you know, answering texts, commenting on status updates and photos..." (Participant 4C)

However, some of the participants, younger and older, perceive attention distribution in a more balanced way, and report the feeling that they are able to pay attention both to the smartphone and to the TV at the same time.

Furthermore, participants refer that the smartphone accompanies them 24/7 (most of them don't ever turn it off and sleep with the device on their bedside table) and is usually involved in most of their multi-screening practices. The binomials that do not include the smartphone are occasionally enhanced with this device as a 'third screen'. In addition, if forced to choose between both media, all of the participants agree that they would prefer to keep their smartphones.

We finished the focus group discussions including a few questions on future trends and possibilities. Most of the participants seem open to the articulation of TV content and mobile apps, as long as they are directed at their needs and preferences. When we suggested apps that articulate TV content and advertising, as Shazam and Shop with eBay, they all expressed being curious and receptive.

On advertising specifically, most of the participants have a negative attitude, but youngsters are more opinionated. They emphasize their dislike for TV commercials as one of the main reasons for giving up on this medium. Not only have these participants developed several strategies to skip ads on YouTube and other platforms, they also

use ad blockers on their computers. Plus, they express dislike for the brands that they consider intrusive. Older participants keep watching television but have their own strategies for avoiding advertising, namely zapping during commercial breaks or moving recorded contents forward. Thus, they would only be willing to consider using branded-apps or other possible new formats if they were less intrusive and tailored to their needs and preferences. Thus, the future of advertising seems to be related with the same basic principles of content marketing, and youngsters tend to be receptive to branded-communications that follow them, as Ruiz and Belmonte (2014) also report.

4. CONCLUSIONS

With this research, we expect to contribute to a deeper understanding of multi-screening activities and motivations, and also of inherent cognitive changes.

Our results support our claim for reconsidering the term 'second screening' (and others) and replacing it with 'multi-screening', an expression that recognizes the possibility of varied screened-media binomials and that does not establish a priority of attention among them. Also, there are different ways of multi-screening, i.e. the activities performed can be connected or disconnected, simultaneous or sequential. However, the smartphone stands out as the most common medium involved in multi-screening behavior, being often the focus of attention, but also the focus of distraction. A differentiation in the use practices of smartphones and tablets is also identified in our research – smartphones being preferred for short and frequent activities, while tablets tend to being used for longer and engaging activities.

About motivations, the activities performed simultaneously in the different media tend to be disconnected, and the activities related to sociability tend to complement other tasks. The discussions with the focus groups identified two very practical reasons for multi-screening: making a better use of time and avoiding advertising. However, the most important reasons were affective: a constant need – described by some of the participants as urge or even addiction – of feeling connected, mainly to loved ones but also to the world in general, keeping up-to-date. This 'connectedness need' was one of the main significant differences between the two age groups studies, being the other the profound dislike for traditional advertising and the use of multiple strategies to avoid it. If for younger participants the main motivation for multi-screening behavior is sociability and the need to constantly keep up-to-date with what is happening in the world and within their networks, for older participants it is the use of time and efficiency, as they consider that multi-screening results in better management of daily tasks.

Findings about attention distribution were less clear. While most of the participants reported on the preponderance of smartphones when they distribute their attention and mentioned a 'background' role for the television, others claimed being able to effectively distribute their attention in a way that enables them to be engaged in simultaneous activities. To get further insight into this matter, other type of research is needed, such as experimental designs using eyetracking, for instance.

Concerning expectations and future trends, we are in a very initial stage in the adoption process and in the correspondent learning curve, at least in the Portuguese context. As Proulx and Shepatin (2012) discuss in their work, media users are open to transmedia behavior, to experimenting new offers and possibilities, and to engage more deeply both with the TV and with other media in an articulated way. Also, the industry needs new formats and business models, particularly concerning the TV, as audiences of live broadcasting are decreasing, and advertising time is skipped. However, the synergic potential of TV, digital content and mobile media is far from being fully exploited, as our results show. Most multi-screening practices remain disconnected from TV content, and there is a lack of interaction between media. This gap identified in our research can be regarded as an opportunity, as industry first movers and pioneer users will be determinant trendsetters. A dialogue between the industry and the users is essential to minimize adoption and learning costs and to achieve a better match between industry offers and user needs. Advertising, TV content and mobile apps must redefine their formats and models in a more convergent and interactive way.

In conclusion, this study shows the relevance of conducting further research that provides a deeper understanding of the multi-screening phenomenon in order to provide insights, both for the industry and for users, that allow a better match between offer and demand in terms of platforms, applications, content and articulation.

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