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Mobile TV Consumption Intentions: A Portuguese Perspective¹ (A Theoretical Perspective)

Luis Miguel Pato ²

Resumo: Atualmente o consumo de conteúdos multimédia através do telemóvel é cada vez mais uma realidade presente. A televisão será um médium com um papel fundamental neste cenário. Partindo da teoria dos "Usos e Gratificações", nesta investigação tenciona-se apreender as motivações do consumo desta modalidade de televisão. Esta abordagem permite compreender as motivações psicológicas em que se pode fundamentar a escolha e adoção de um determinado médium. A abordagem metodológica deste trabalho será executada através da aplicação de dois inquéritos a amostras compostas por estudantes universitários portugueses. Primeiro pretende-se aferir as intenções para consumir TV Móvel. No segundo tenciona-se recolher informações acerca dos níveis de satisfação no que concerne à interação com a modalidade de tv móvel que atualmente caracteriza o mercado nacional. Considera-se que através desta abordagem será possível apreender dados que permitam uma melhor compreensão das várias perspetivas que compõe a adoção desta modalidade de televisão.

Palavras-chave: Usos e Gratificações, Adopção Tecnológica, TV Móvel, Realidade Portuguesa

Abstract: Currently people consume multimedia content on their mobile devices. And television is regarded as a future certainty for this type of media consumption. Based on the Uses and Gratifications (U&G) perspective, we intend to point out the motives for consuming this type of television. This theoretical perspective helps understand the audience's fulfillment of psychological needs in what regards media choices and new media adoption. These aspects (gratifications) are the motivators for media uses. Our methodological approach will be applied through the application of two questionnaires to samples made up of college students. On the first one we will evaluate their intentions to watch television through a mobile phone. On the second we will evaluate their satisfaction level regarding an interaction with the current mTV reality in Portugal. Through this investigation we believe that through the achieved results of this study we will obtain a set of relevant concepts for a better understanding of the different views and beliefs of early addopters regarding mTV in Portugal.

Keywords: Uses and Gratifications, Technological adoption, Mobile TV, Portuguese Reality

Introduction

When we look at current mobile phone and its media services we believe that it is a new invention. However its desire is nothing new. For instance, in McLuhan's essays regarding technological development we can see that he was one of the first

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² Luís Miguel da Cruz Pato. Doutorando em Ciências da Comunicação na Universidade da Beira Interior (Covilhã). Email:luis13pato@gmail.com.

authors to abolish geographical boundaries. Regarding this aspect we can recall the original idea behind the concepts of withdrawing geographical boundaries in "The Global Village" and in the "Typographic Man". Therefore, as Deleuze and Gautarri, we can also define this aspect as the: "deterritorialization of the consumption of media" (*ibid.*, 1980). Or in our particular case of a "medium": television. However, the inclusion of this medium – as an application for the mobile phone – is nothing new (GOGGIN, 2006). This current trend of television development started in mid 1990's – when a once passive mediumendured new dynamic possibilities from the Internet and became a richer, personalized and more available experience (KUMAR, 2007).

When we consider new communication technologies, one can say that they point out to "convergence". This trend is followed by the mobile phone and its applications – where we can include mobile television (mTV) (Carlsson & Walden, 2007; Schuurman, 2009). Currently, this device has the technical possibility of integrating Internet access – thus receiving and sending text, audio and video content and television (WEI, 2006). The idea of television – as mobile application (mTV) – is regarded as the next logical step because it converges two of history's best selling media products – Mobile Phones and Television(SCHATZ, WAGNER, EGGER, & JORDAN, 2007; SCHUURMAN, 2009). Therefore, it is understandable that current research on mobility has shifted to user's interest in these technologies (Steinbock, 2005).

Guided by the idea that audiences are active media consumers, we intend to apprehend their intentions to adopt mTV services. Our theoretical perspective for this paper is the "Uses and Gratifications" (UG) theory because, as we will regard in the following pages, it attempts to clarify the psychological and behavioral pundits involving mediated communications (RUGGIERO, 2000). Based on this view, this paper evaluates the alleged causes for "why" and "how" people might intend to use their mobile phones to watch TV. In this exploratory investigation we offer an insight into what is mTV today and what people want it to be by profiling various theoretical results of UG studies on this matter in a general perspective.

Part 1 – Mobile TV – Worldwide trends and the Portuguese scenario

When we look at current 3G mobile phones (e.g. smart phones) we can regard that mobile phone services enable a set of data transactions. Currently the possibility of downloading music, receiving and sending emails, playing downloadable and online games, checking the: news, weather, sport information, radio, traffic news and watching television. The basic framework for this data delivery (defined as m-commerce) was foreseen in a 1996 European Commission framework called the "Digital Interactive Services" developed for new media publishing in the EU (SCHLUETER & SHAW, 1997). Today we can see that it has been productively adapted to mobile phone services (LOEBBECKE, 2001)³.

Through the perspective that results from TV development we can say that its fragmentation is part of a serious of attempts that have occurred since the mid 1990's. This occurred because the tremendous possibilities from using the "Internet" as "channel for distribution" of media content through devices with some extent of mobility was observed (NOAM, GROEBEL, & GERBARG, 2004). Since then, several attempts have existed. For some time now, concerns regarding this media replacement have implied that an on-line television reality would eventually displace traditional TV reception and consumption (LIN, 1999). The perspectives regarding this issue are that in the near future TV market scenarios will rest on the following realities – 1) TV and online realities are totally suitable and can co-exist and 2) TV use motives are similar to online service motives (*ibid.*, 1999a).

Therefore we can say that the emulation of TV content through internet platforms will be a ground-breaking success – and here we can include mobile phones. If we look at the sheer penetration numbers – 5 billion mobile phone subscriptions disturbed in a global range, it is understandable why we believe in this aspect(ITU, 2010)Still, it is important to point out 1.5 billion of these devices are smart-phones (ITU, 2011).

However, there are some problematic issue that need to be covered, for example, this market is regarded with skepticism and while Europe and the US are attempting to sort out technological standards and spectrum available for mobile TV (CHOI et. al., 2009). The solution found is – the re-usage of content that was previously produced for broadcast television (KNOCHE, McCARTHY & SASSE, 2005). And due to corporate disbelief there have existed little attempts to specify a TV market for this type of television.

³ According to Stuart Barnes the Basic core process has six moments in two main areas 1) "Content" and 2) "Infrastructure Services". In the first case we can see that there are moments for "Creation", "Packaging", and "Market Making". In the second, there are "Transport", "Delivery Support" and "Interface Applications" (Barnes, 2002).

In Portugal we can point out two joint ventures called – "Quinze" (2007) and "Hotspot" (2008) between the Portuguese national channel – RTP and "Produções Fictícias" – a private media content company. Nonetheless, because of the lack of investment, these productions lasted only a year. Therefore, in this moment – that we consider as an era of TV adoption we will attempt to lay out, in the following pages, the basic psychological blueprints behind user acceptance of a technological innovation like our object of study – mobile television.

Part. 2 – Psychological perspective – Emotions, Appraisal and Theory of Planned Behavior

2.1 Emotions

Today, "emotions" are considered fundamental aspects in media acceptance and specifically in new media(WIRTH & SCHRAMM, 2005). This perspective is due to the fact that the question that we basically want to understand is – "what appraises people to adopt a certain type of technology?"When we consider a theoretical perspective like the one that the UG promotes, we believe that understanding emotions is fundamental. Therefore, in the following paragraphs we intend to look at the concepts of "emotions" and "appraisal" as theoretical guidelines before we regard the concept of UG and technological acceptance.

Firstly, in historic terms emotions were regarded as a mere physical response to experiences that the human being feels regarding the world⁴. Today, this perception is regarded as limited and current theoretical perspectives consider that: "emotions are triggered by our lives circumstances; thus, they are not automatic but voluntary" (DAMÁSIO, 1994) Neuroscientist — António Damásio — regards that emotions are based on complex patterns were psychological and neurological actions are predictable (*ibid.*, 1994). In his book: "The Self Comes to Mind" hepoints out that the main differences between "Emotions" and "Feelings" are that in the first case it regards an exterior representation of ourselves while the second issue occurs only in an interior level and thus we can see that it's not public (*ibid.*, 2010). Nonetheless,

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⁴ William James considers that an emotion is: "that bodily changes follow directly the perception of the exiting fact and that our feeling" (*ibid.*, 2007).

fundamentally emotions are described as a complex state of the organism that involves bodily and character changes.

When we regard the basis of emotions we can see that Wirth & Schramm consider that the base of emotions are divided in three different perspectives – 1) "phylogenic" biological approach; 2) "Ontogenetically"based on the impact of personality; 3) "Actual Genesis" describes the development of the concrete feeling in a given situationor interaction (*ibid.*, 2005). All of these aspects emergethrough an internal process because where in case of a reactionall influences converge, are selected, processed and weighted to result as a concret feeling towards something, someone or a given interaction moment (enjoyment, sadness, anxiety) (*ibid.*, 2005).

2.2 Appraisal

This theoretical recalling is due to the fact that when an individual reacts, it depends of an evaluation of the meaning that the given issue represents and implies(LAZARUS, 1991). Here, a fundamental suggestion is that this process of evaluation depends on an emotional response or reaction (*ibid.*, 1991). When a person evaluates any new given reality, he has the need to compare it with other aspects that he already knew previously; thus, this means that appraisal results from a process based on "core relation themes" – one for each new and distinct emotion (*ibid.*, 1991). According to Richard Lazarus, this basics of this issue resides on three perspectives (*ibid.*, *appud.*, WIRTH & SCHRAMM, 2005):

- 1) "Primary" –resides on the persons intuition when he regards if a situation can be considered as relevant or not;
- 2) "Secondary" a person considers if he ore she has appropriate stratagies for coping with a given situation;
- 3) "Reappraisal" situations are reevaluated because since the first moment of a persons evaluation, context might have changed.

Still regarding this topic, we recall that a persons evaluation of a situation that can induce emotion, follows three core theoretical issues: "desirability", "praiseworthiness" and "appealingness" that are applied to event based emotions(ORTONY, CLORE, & COLLINS, 1990). These authors consider that there does not exist a previously organized manner of "appraisal" because it might occur in

various forms and orders or even in combination with each other (*ibid.*, 1990). According to these authors, this process occures in the following manner (*ibid.*, 1990):

- 1) In a first moment, there is a representation of the reality;
- 2) In a second moment, people sum up and evaluate the situation relating them to other realities that they already knew from previous encounters and consider if it is desirable or not:
- 3) The previous evaluation moments now make up what can be regarded as a specific emotion and a feeling becomes a conscious act.

2.3 - Theory of Planned and Reasoned Behavior

This aspect leads us to the "Theory of Planned Behavior" (TPA). Developed by Martin Fishbein and Icek Ajzen, this theoretical framework spawns from "attitude studies" (like its academic ancestor – the Theory of Reasoned Action - TRA) and studies behavior and intention predictions. This theoretical concept extended the TRA because according to its conception, behavioral intentions cannot be the solely determinant for an individual's behavior.

TPA extended this theoretical concept by introducing a new component – "perceived behavior control". TRA was designed to predict behaviors and understand their psychological determinants(AJZEN, 1985). TRA was based exclusively on three fundamental concepts – 1)"Behavioral Intentions" (BI), 2) "Attitude" (A), 3) "Subjective Norm" (SN). BI measures someone's degree of intention to carry out a behavior and "attitude" regards the sum of the beliefs of that particular behavior weighted by the evaluation of these beliefs. Through SN, these authors considered it was a combination of perceived expectations (perceptions) by the person who is carrying out the action or behavior (FISHBEIN & AJZEN, 1975).

TPA – on the other hand – regarded this theoretical concept as limited because in addition to "Attitudes" and "Subjective Norm" (which makes up the theoretical core of TRA), this theoretical concept adds the concept of "Perceived Behavioral Control" – a concept that originated from "Self Efficacy Theory" (SET)(Ajzen, 1985; Bandura, 1977).

Regarding this issue, Albert Bandura considers that expectations such as motivation, performance and feelings of frustration associated with failures or success

determine behavioral actions (BANDURA, 1990). This author divided "expectations" into two separate forms - "self-efficacy" (a person can execute a given behavior required for the desired outcomes) and "outcome expectancy" (a person's belief that a given behavior will lead to certain outcomes) (ibid., 1977). SET intends to explain the existence of various relationships and actions linked with beliefs, intentions, behavior and attitudes (SHEPPARD, HARTWICK, & WARSHAW, 1988). As we will see in the following pages, this perspective is fundamental in the "Uses and Gratifications" theoretical perspective because basically we are studying the fundaments (motivations) of individual's actions regarding media.

According to Azjen, human behavior follows three types of theoretical conceptions 1) "Behavioral Beliefs" (BB) - a person's belief regarding the consequences of a particular behavior; 2) "Normative Beliefs" (NB) – an individual's perception about a particular behavior and its judgment by others; 3) "Control Beliefs" (CB) – a person's individual belief about the presence of elements that can ease or harden the process of performing a given behavior (AJZEN, 2001).

Through the TPA concept we can see that BB produces favorable or unfavorable "Attitude toward the behavior" (ATB)⁵. This aspect results in "Subjective Norm" (SN)⁶, and "Control Beliefs" detaches "Perceived Behavioral Control" (PBC). The combination of these elements result in: "Behavioral Intention" (AJZEN, 2002). Through an empirical perspective we can say that the golden rule of this theoretical concept is – the growth of "Perceived Behavioral Control" (PBC) depends exclusively of the degree of favorability regarding attitude toward "Behavior" and "Subjective Norm" (*ibid.*, 2002). Empirically speaking this means that TPA, through the addition of PBC, can explain the relationship between the intention of acting (or behaving) in certain form and the actual behavior that occurs (AJZEN, 1991).

When we attempt to apply these theoretical concepts to technology we must talk about technological acceptance models. We will do this in the following paragraph

Part. 3 -Technological Adoption and Acceptance Models of Media **Innovations**

⁵ ATB (Attitude Towards the Behavior) – regards a person's belief regarding a positive or negative evaluation of self-performance in a given behavior.

SN (Subjective Norm) – is related to an individual's perception of society's pressure regarding his behavior.

⁷ PBC (Perceived Behavioral Control) – is related to a person's perceived ease or difficulty of performing a particular behavior.

3.1 The Theory of the "Diffusion of Innovations"

Throughout information technology (IT) history we can say that "technological adoption" it has been an issue targeted by researchers with significant attention. Nonetheless, we believe that the adoption of innovative technologies does not depend solely on the technological experience that technology offers but on the consumers that use them. In order to understand this issue better, we recalled the theory of the "Diffusion of Innovations" by Everett Rogers. This academic approach intends to explain the causes and speed that defines the stretch of technological innovations through cultures (E. ROGERS, 1995; E. M. ROGERS, 1986). According to Rogers, the "diffusion of technological innovation occurs in a five step procedure" that is categorized in the following order – "Knowledge", "Persuasion", "Decision", "Implementation" and "Conformation" and its theoretical concept is based on the following aspects (*ibid.*, 1995)8:

- 1) Innovation an idea, practice, or object that is perceived as new by a person that is adopting this novelty;
- 2) Communication Channels the way by which messages are transmitted from one individual to another;
- 3) Time it recalls the decision making process the length of time that it takes to pass from through innovation to acceptance and posterior usage;
- 4) Social System set of interrelated units that are engaged in joint problem solving to accomplish a common goal.

Besides this issue we can see that Rogers also categorized people's attitudes towards innovative technologies in more seldom perspective. He pointed out that the technological adoption process can be organized in five different categories (*ibid.*, 1985):

- Innovators are the first people to adopt an innovation. They are young in age and are willing to take risks – this tolerance has them adopting innovative technologies without any fear of failure;
- 2) Early Adopters they are regarded as the second fastest group who adopt innovative technologies. These people can be specified by the highest degree

⁸ In his book: Communication Technology, Rogers first placed the following elements: awareness, interest, evaluation, trail and adoption as fundamental issues regarding the technological acceptance process (*ibid.*, 1985).

- if opinion leadership among other adoption categories. Typically they are young people have a high social status;
- 3) Early Majority people in this phase adopt an innovation after some time. These individuals have a tendency to be slower in this process. The social status of these individuals is above average and they contact with early adopters and hold opinion leadership positions in a seldom manner;
- 4) Late Majority technological adoption is latter rather than earlier and they are more skeptic. They are characterized through a low income reality and social status;
- 5) Laggards these individuals are the last to adopt technological novelties. They can be characterized by minute opinion leadership, aversion to change and are advanced in age.

A somewhat similar aspect occurs when we talk about the adoption of mobile phone and mobile applications – the "generation mobile" is characterized in a similar fashion (LSE, 2006):

- 1) "Mobile Generation" (18-24 years of age);
- 2) "Telefanatic" (18-34 years of age);
- 3) "Useful Parents" (parents that are between 18 and 34 years of age);
- 4) "Smart Connected" (25-44 Parents and active workers);
- 5) "Thumb Culture" (Mobile Phones are a mirage);
- 6) "Silver disbeliever" (senior citizens) (LSE, 2006).

Besides this point, we also regarded that Rogers pointed out the importance of "Opinion Leadership". This author relied on Katz and Lazarsfeld's "Two Step Flow Theory" to place a heavy toll on the importance that opinion leaders have on influencing the adoption of innovative technologies (*ibid.*, 1985). Still regarding the adoption of technology and "how" and "when" the users work with technology we have retrieved the "Technology Acceptance Model" (TAM) (DAVIS, 1989). We will see this issue in the following paragraphs.

3.2 – From Technology Acceptance Model to the Quality of Service and Entertainment theoretical models

This theoretical concept, adapted from the "Theory of Reasoned Action" (TRA) to technological communication systems, is applied basically to explain intentions to use technologies (NYSVEEN, PEDERSEN, & THORBJØRNSEN, 2005). It suggests thatwhen individuals are presented with innovative technology, factors like: "Perceived Usefulness" (PU) and "Perceived Ease-of-use" (PEOU) – influence their decision making process regarding its usefulness(Venkatesh, 2000)⁹. Besides these factors we can also point out that there also exist others like: "Attitudes towards Use", "Intention towards Use" and "Actual Use" that intend to demonstrate the degree to which a person believes that using a particular system will enhance his performance (*ibid.*, 1989).

Since our theme is based on telephony and computer mediated communication, we also recalled the concepts of "Quality of Service" (QoS) and "Quality of Experience" (QoE). The first issue is related to aspects regarding technological mediation of communication. According to ITU (International Telecommunications Union), QoS is based on contract established between the user and the service provider where in order to understand the networks performance measurements (trafficability, dependability, transmission and charging) are applied(IVERSEN, 2005). On the other hand, when we regard the QoE it has its theoretical premises founded on the measurement of the user's experience (web-browsing, TV consumption, voice and text) with a given new media service(ITU, 2007). This leads us to the apprehension of the objectives of the "Uses and Gratifications" (U&G) framework that we will see in the following paragraphs.

Part. 4–Uses and Gratifications Theory – from the general perspective to harbinger of change

When we look at the issue that we are currently working on, we feel tempted do ask: "why in the world would anybody use a mobile phone to watch television?" While searching for a theoretical framework to answer this question, through the revision of the literature, we observed that this concern, based on finding out "why" would someone use a specific medium for communication purposes, is an historic concern in

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⁹ By regarding the concept of PU we recall the extent to which a person believes that by using a given technology he can increase his job or leisure performance. On the other hand, PEOU – recollects the belief that a person has that the given technological innovation will be free of effort and therefore ease the process of usage and obtaining the desired result (Jung, Perez-Mira, & Wiley-Patton, 2009).

media and social sciences represented by the U&G theoretical perspective (E KATZ, BLUMLER, & GUREVITCH, 1973; MCQUAIL, 1993).

Based on the functionalist perspective, the fundamental issues that loom from this theory are to understand the basic motivations that can justify the selection of a specific medium (A. RUBIN, 1983). Its fundamental questions are (*ibid.*, 1983):

- 1) What causes a person to use a specific communication media to satisfy their consumption needs;
- 2) How people behave when they use their media;
- 3) If external elements affect their media consumption;
- 4) What consequences might derive from their media use.

However, to fully understand media consumption gratifications, we must place them in two separate moments—1) defining the initial desire for the media use and 2) what is actually obtained or accomplished through media consumption (*ibid.*, 1983; RUGGIERO, 2000; Mcquail, 1983).

This perspective leads us to consider that the gratification obtained can be regarded as a foreseen outcome from his/or hers involvement with a specific media consumption action (PALMGREEN, WENNER, & ROSENGREN, 1985). This dual perspective can also be observed in McQuail's work. This author considers that for a complete understanding of this theoretical framework, we must apprehend the "reasons" behind the choice of a specific media and the behavior that people have towards it (*ibid.*, 1983). However, before we proceed and attempt to look at the UG perspective regarding the media that we are studying (television and mobile telephony), we must not overlook the fact that the initial theoretical framework was defined by Elihu Katz through the following three elements (*ibid.*, 1973):

- 1) The gratifications that some individuals might use (e.g. family, friends);
- 2) Individual Needs emotional or cognitive (learning);
- 3) Social Environment personality traits and demographic specifications ¹⁰.

Throughout time, UG research has pointed out that gratifications derive from three elements – 1) "media content", 2) "media exposure" and 3) "social contexts" (E. KATZ, HAAS, & GUREVITCH, 1973). As already regarded in beginning of our paper, this perspective defines the audience as an active element where an individual can characterized through his specific media needs and desires (RUGGIERO, 2000).

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 $^{^{10}}$ Through over theoretical review we observed that gratifications can be placed in the groups of interest -1) Personal Identity; 2) Entertainment; 3) Information seeking; 4) Learning.

Besides this point, previous media experience has a relevant part in this theoretical perspective because users base their gratifications on media that they already are familiar with and that are somewhat related with the new media that they are adopting (e.g. landline telephone – mobile phone)(LEUNG & WEI, 2000). According to Rubin this perspective is essential for the adoption of new technologies because the user relies on familiar media assets that will be enhanced by the new media in order to create his level of expectancy(*ibid.*, 1973). The fundamental motives to consume media can be placed into three fundamental issues – 1) Personal – the empowerment of personal values; 2) Entertainment – forms to escape from the daily routine; 3) Cognitive – attempt to satisfy a learning desire or curiosity (BLUMMER, 1979; *IBID.*, 2000).

This framework was fundamental to understanding TV and other media (e.g. the mobile phone) through the UG theoretical framework. We will regard this issue in following pages.

4.1 –Uses and Gratifications Theory applied to TV, on demand services and Internet – revision of the literature

When Alan Rubin applied this theoretical concept to television, he intended to demonstrate the basic motives that can drive people to consume television (A. RUBIN, 1983). Basically throughout his investigations we can see that the drive force is: "information seeking", "companionship", "entertainment", "power to select TV programs" (some degree of personalization), "escapism" and the "ability to interact socially"(A. RUBIN, 1983; A. RUBIN & E. PERSE, 1987; A. RUBIN & RUBIN, 1982).Regarding this aspect, we observed that theoretician James Lull considered that the use of television in a social sense follows these issues(LULL, 1990):

1) Structural –

- a. Environmental companionship, entertainment when an individual is lonely;¹¹
- b. Regulative punctuates time and activity.

2) Relational

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a. Communication Facilitation – creates common-ground;

¹¹ This perspective is very important in studies that apply UG investigations to senior citizens.

- b. Affiliation/ Avoidance Physical, verbal contact/neglect; conflict reduction;
- c. Social Learning Behavior Modeling, problem solving, value transmission:
- d. Competence/Dominance Role enhancement; reinforcement, exercising authority.

However, when the VCR was introduced in the last century, this perspective changed, due to the possibility of "personalization", and included issues like: "storage", "learning", "social interaction" and "time shifting" were also be recollected (A. M. RUBIN & RUBIN, 1989). Thus, here we can see a correlation of relaxation and pastime motives mixed up information and learning drives.

Furthermore, Rubin found out that, for example when it comes to specific genre (e.g. talk show) viewers have the tendency of being involved with dispositional issues (such as aggression, joy) and viewing factors (as motives relating to entertainment and excitement)(CORTESE & RUBIN, 2010). Regarding this aspect, the U&G theory has been applied to TV program genre and services. From these we will point out the following essays: "news" (PALMGREEN, WENNER, & RAYBURN, 1981; A. RUBIN & E. PERSE, 1987; A. M. RUBIN & E. M. PERSE, 1987b; A. M. RUBIN, PERSE, & POWELL, 1985), "soap operas(CARVETH & ALEXANDER, 1985; A. M. RUBIN, 1985; A. M. RUBIN & E. M. PERSE, 1987a), "music videos" (ROE & LOFGREN, 1988; SUN & LULL, 1986), "reality shows" (PAPACHARISSI & MENDELSON, 2007; POTTER, 1988), "talk shows" (A. RUBIN, 1983; A. M. RUBIN, HARIDAKIS, & EYAL, 2003) "TV shopping" (CORTESE & RUBIN, 2010; GRANT, GUTHRIE, & BALL-ROKEACH, 1991)"Cable TV"(FERGUSON, 1992; L. W. JEFFRES, 1978; KANG & ATKIN, 1999), "IPTV" (KAMPMANN, 2009; SHIN, AHN, & KIM, 2009), "video on demand" (HANSON & HARIDAKIS, 2008B; L. JEFFRES & ATKIN, WEI, 1996)"interactive television"(L. LEUNG & 1998; LIVADITI, VASSILOPOULOU, LOUGOS. & CHORIANOPOULOS, 2003) and "Youtube" (HANSON & HARIDAKIS, 2008A).

In basically all of these studies, viewer motives vary depending on the content type, service and audience dispositions (CORTESE & RUBIN, 2010). For example, in Rubin's studies we can see that he described positive correlations between "relaxation" and "pass-time" motives in comedy consumption moments, sports, information and talk shows (*ibid.*, 2010). However, besides this issue, this author also found negative

correlations in "social interaction" and "pass-time" motives when someone is watching news, talk shows or interviews (*ibid.*, 2010).

Currently, the role of U&G is focused on the Internet and the "implementation of new media ecology" (RUGGIERO, 2000). Today there exists a consensus that the U&G perspective is well-suited for studying computer mediated communication such as the Internet (C. A. LIN, 1999B). According to our revision of the literature, we regarded that various motives such as: "pass-time", "information seeking", "convenience" and entertainment are also relevant motives (C. LIN, SALWEN, & ABDULLA, 2005; C. A. LIN, 1999B; PAPACHARISSI & RUBIN, 2000). The use of the Internet's services follows an array of reasons. For example, the use of the webs services follows the intention of being informed and entertained, to maintain communication and to experience aspects that are unique to this type of service (e.g. movie and video-clips watching and game-play (LIN, 1999b).

Besides this issue, we also regarded that researchers have also observed that there exists a general idea that the Internet can serve as positive driving force for other forms of mediated and interpersonal communication. For example, some authors discovered that Internet uses and especially desires do not differ from motives that are behind the use of other media(LIN, 1999a). Especially in what concerns in "entertainment", "relaxation", "pass-time" and "information desires" (CHARNEY & GREENBERG, 2002; PAPACHARISSI & RUBIN, 2000).

Other studies pointed out that user's motivations were based on: "social escapism", "security", "privacy", "information", "interactive control" and "socialization" (P. KORGAONKAR & WOLIN, 2002; P. K. KORGAONKAR & WOLIN, 1999). Lin's studies point out that "surveillance" is the strongest motivation for using the Internet (*ibid.*, 1999). On the other hand, Papacharissi points out that the motives for using the Internet are: "interpersonal utility", "pass time", "information seeking", "convenience" and "entertainment" (*ibid.*, 2000). Another study compared web using motivations to web page respondents and the results were demonstrated that in this particular case, "information seeking" is strongest motivation for using web pages (FERGUSON & PERSE, 2000).

And what results have studies using the UG's perspective regarding mobile telephony achieved?

4.2 –Uses and Gratifications applied to media consumption through mobile phones

Throughout history the mass media scenery has implied diversification. Today with the advent of "hybrid" media reception platforms, as what occurs with the previously referred Internet, neither mass nor medium could be precisely defined for all situations (WEI, 2008). In this scenario, the mobile phone has developed from an initial symbol of status to become a modern day commodity, a necessity that responds the current multitasking needs (*ibid.*, 2008).

4.2.1 Motivation Typology – Process, Content and Social Categories

Historically, motivations for using communication technologies have been grouped in two separate perspectives – "instrumental" and "social" (PEDERSEN, 2005). Stafford divides these "needs" into "process" and "content motivations" (*ibid.*, 1996) – a perspective that we will follow.

In the first case we can see that the motivations are based on measuring the actual enjoyment that people feel when they use a mobile phone, the second is related to the consumption of the content that the mobile phone carries (STAFFORD & GILLENSON, 2004a). In the case of mobile phones other issues such as: "personal safety", "financial incentives", "status symbol or enhancer", "usefulness", "fashionable", "entertainment", "escapism", "information access", "immediacy", "mobility", "reassurance" and "dependency" are regarded as main "process gratifications"(AOKI & DOWNES, 2003; L LEUNG & WEI, 2000; NYSVEEN, ET AL., 2005)¹². As we saw earlier, many of these issues can also be regarded in previous studies regarding other types of media.

Through "content motivations", we regarded that in the case of mobile phones, "information access" is regarded as an important motivation (*ibid.*, 2003; *ibid.*, 2000). Besides this issue, we also observed that "entertainment access" is significant(CHOI, ET AL., 2009; NYSVEEN, ET AL., 2005). When regarding basic mobile phone use we regarded that there exist two perspectives – "hedonic" (good for people) and

¹² Besides these motivations, the only UG study on "mobile internet" found out that "speed", "ease of use" and "convenience"(Stafford & Gillenson, 2004b). We also observed that the "Dependency" is regarded as a motivation because if people lose their mobile phones, they might feel lost (Aoki & Downes, 2003).

"utilitarian" (MCCLATCHEY, 2006). Throughout our research we have discovered that the social perspective hasn't been a fundamental issue. Nonetheless, regarding this issue we have seen that the current use of Internet technologies has implied motivations such as — chatting and friendship interactions and content exchange (HANSON & HARIDAKIS, 2008A; PARK, KEE, & VALENZUELA, 2009).

On the other hand, "social motivations" are basically related to audience experience and desires(L LEUNG & WEI, 2000). Through this, we are talking about issues such as "interaction", "escapism", "friendship" and "posting"(HANSON & HARIDAKIS, 2008A; C. A. LIN, 1999, B; RAACKE & BONDS-RAACKE, 2008).

In order to better understand our theoretical perspective we summarized them in the following overview (table 01). Here you can see the previous and current U&G studies regarding mobile phones and mobile television.

Table 01 – U&G mobile phone study overview

Scholars	Research areas	Motivations found		
O'Keefe & Sulamowski	Telephone	Entretainment, social, acquisition, time		
1998		management.		
Leung & Wei 1998	Pager	Fashion, status, sociability,		
		entertainment, information seeking,		
		utility.		
Leung & Wei 2000	Mobile Phone	Fashion, status, affection, sociability,		
		relaxation, mobility, immediacy.		
Aoki & Downes 2003	Mobile Phone	Search engine, financial incentive,		
		information access, social interaction,		
		time management, dependency, image,		
		privacy.		
Stafford et. al., 2004	Mobile	Convenience, efficiency, immediacy,		
	Internet	ease of use, speed productivity		
Wei 2006	Mobile Phone	Information access, entertainment, web		
		surfing, instrumentality, communication		
		facilitation		
Choi et. al., 2009	Mobile TV	Fashion, entertainment, Permanent		
		access, social interaction		

Lee et. al., 2010	Mobile TV	Information,	entertainment, status,	
		mobility, portability		
Lee et, al., 2010	Mobile TV	Fashion, e	entertainment,	Permanent
		access, social interaction		

5. Methodology

Our study intends to address the U&G regarding the possibility of adoption of mobile television from an audience's perspective. Besides profiling the Portuguese university consumer, we intend to apply a questionnaire that will be based on the precedingtable and the previously quoted studies (TV, Internet, Computer Mediated Technologies and On Demand Services).

As regarded earlier, it will be based on the "Uses and Gratifications" theoretical perspective and on the application of two "Likert questionnaires with two samples of college students. The first one will evaluate their intentions to watch television through a mobile phone. On the other hand, through the second moment we intend to evaluate their satisfaction level regarding an interaction with the current mTV reality in Portugal.

For this evaluation, we selected eight fundamental variables ("Information seeking", "Entertainment", "Fashionable", "Mobility", "Immediacy", "Relaxation", "Interactivity" and "Social Interaction") from previous U&G studies that underline what the mTV reality converges (mobile-phones, television, computer mediated technology, On demand services and Internet).

Through this perspective, we believe that we can point out the expectations of Portugal's potential early adopters of this type of technology.

5. Discussion

With the tremendous degree of mobile penetration, without any doubt, the drive is now on the usage and understanding the user's eventual interest in these technologies. Today with the fast growth of mobile technologies, media content is being distributed through mobile media platforms – such as mobile phones.

This investigation intends to regard this issue from an audience perspective. Through the proposed investigations we observed earlier that mobile phone increasefunctions. We also regarded the use of this device as a source of information and entertainment appears to be a growing reality – this device's inclusion in common life is an implied reality. Nonetheless, demographically speaking, younger generations are considered as the majority of the early adopters of new media technology.

As what occurred with previous studies, in this investigation we also imply the existence of an active audience. It is within this perspective that we based the selection of our theoretical approach – Uses and Gratifications (U&G) and regarded that, besides the residual reality that mobile TV still represents, people imply different motivations for the use of mobile phones (Process, Content and Social Reasons). These findings represent the correct applicability of the U&G theory for investigating new media and especially its adoption. Besides this issue, these variables will help understand this broad use of the mobile phone and the possibility of consuming mobile TV.

Given that currently more and more people own technology capable of receiving this type of content (e.g. smartphones), in the specific case of Portugal, we consider that it is important to understand what potential motivations might be fundamental for the adoption of this type of television. However, one aspect is sure – based on current findings in other countries, besides the technical and instrumental aspects of the device (mobile-phone) the possibility of accessing or receiving diverse genres of TV content (information and entertainment) is already regarded as an important motivation for the adoption of this type of technology.

6. References

AJZEN, I., "The theory of planned behavior. In: Organizational behavior and human decision processes", 1991, pp.179-211.

AJZEN, I., "Nature and operation of attitudes". In: Annual review of psychology, 2001, pp. 27-58.

AJZEN, I., "Perceived Behavioral Control, Self Efficacy, Locus of Control, and the Theory of Planned Behavior". In: Journal of Applied Social Psychology, 2002, pp. 665-683.

AJZEN, I., Action control: From cognition to behavior From Intentions to Actions: A Theory of Planned Behavior, Springer – Verlag, NY – USA, 1985.

AOKI, K., & DOWNES, E. J. "An analysis of young people's use of and attitudes toward cell phones". In: Telematics and Informatics, 2003, pp. 349-364.

BANDURA, A. "Self-efficacy: toward a unifying theory of behavioral change". In: Psychological review, 1977, pp. 191.

BANDURA, A., "Perceived self-efficacy in the exercise of control over AIDS infection". In: Evaluation and program planning, 1990, pp. 9-17.

BARNES, S. J., "The mobile commerce value chain: analysis and future developments". In: International Journal of Information Management, 2002, pp. 91-108.

CARLSSON, C., & WALDEN, P., "Mobile TV-to live or die by content", 2007.

CARVETH, R., & ALEXANDER, A., "Soap opera viewing motivations and the cultivation process". In: Journal of Broad. & Elec. Media, 1985, pp. 259.

CHARNEY, T., & GREENBERG, B. S. "Uses and gratifications of the Internet". In: Communication technology and society: Audience adoption and uses, 2002, pp. 379-407.

CHOI, Y., KIM, J., & MCMILLAN, S., "Motivators for the intention to use mobile TV, A comparison of South Korean males and females". International Journal of Advertising, 2009, pp. 147-167.

CORTESE, J., & RUBIN, A. M., "Uses and Gratifications of Television Home Shopping". In: Atlantic Journal of Communication, 2010, pp. 89-109.

DAMÁSIO, A. R., O erro de Descartes: emação, razão eo cérebro humano, Círculo de Leitores, Lisboa, SIG. 1994.

DAVIS, F. D., "Perceived usefulness, perceived ease of use, and user acceptance of information technology". In: MIS quarterly, 1989, pp. 319-340.

FERGUSON, D. A., "Channel repertoire in the presence of remote control devices, VCRs and cable television". In: J. Broad. & Elec. Media, 1992, pp. 36, 83.

FERGUSON, D. A., & PERSE, E. M., "World Wide Web as a Functional Alternative to Television". In: The. J. Broad. & Elec. Media, 2000, pp. 44, 155.

FISHBEIN, M., & AJZEN, I., "Belief, attitude, intention, and behavior: An introduction to theory and research". In: MA: Addison-Wesley Pub. Co., 1975.

GRANT, A. E., GUTHRIE, K. K., & BALL-ROKEACH, S. J., "Television shopping". In: Communication Research, 1991, pp. 773.

HANSON, G., & HARIDAKIS, P., "YouTube users watching and sharing the news: A uses and gratifications approach". In: Journal of Electronic Publishing, 2008, pp. 11.

ITU., "Definition of quality of experience (QoE)". In: International Telecommunication Union, 2007.

ITU. ITU sees 5 billion mobile subscriptions globally in 2010 - Strong global mobile cellular growth predicted across all regions and all major markets. Retreived on: 13 - 06 - 2011. http://www.itu.int/newsroom/press_releases/2010/06.html.

ITU. Network congestion set to worsenITU calls for international broadband commitment. Retreived on: 13 – 06 – 2011. http://www.itu.int/net/pressoffice/press_releases/2011/01.aspx.

IVERSEN, V. B., "Teletraffic engineering and network planning". In: Lyngby: Technical University of Denmark, 2005.

JEFFRES, L., & ATKIN, D., "Predicting use of technologies for communication and consumer needs". In: J. Broad & Elec. Media, 1996, pp. 318.

JEFFRES, L. W., "Cable TV and viewer selectivity". In: J. Broad., 1978, pp. 167.

JUNG, Y., PEREZ-MIRA, B., & WILEY-PATTON, S., "Consumer adoption of mobile TV: Examining psychological flow and media content". In: Computers in Human Behavior, 2009, pp. 123-129.

KAMPMANN, M. W., "Predicting IPTV usage: an SEM approach", 2009.

KANG, M. E., & ATKIN, D. J., "Exploring the role of media uses and gratifications in multimedia cable adoption". In: Telematics and Informatics, 1999, pp. 59-74.

KATZ, E., BLUMLER, J., & GUREVITCH, M., "Uses and gratifications research". In:Public Opinion Quarterly, 1973, pp. 509-523.

KATZ, E., HAAS, H., & GUREVITCH, M., "On the use of the mass media for important things". In: American Sociological Review, 1973, pp. 164-181.

KNOCHE, H., MCCARTHY, J., & SASSE, M., "Can small be beautiful?: assessing image resolution requirements for mobile TV". 2005.

KORGAONKAR, P., & WOLIN, L. D., "Web usage, advertising, and shopping: relationship patterns". In: Internet Research, 2002, pp. 191-204.

KORGAONKAR, P. K., & WOLIN, L. D., "A multivariate analysis of web usage". In: Journal of Advertising Research, 1999, pp. 53-68.

KUMAR, A., Mobile TV: DVB-H, DMB, 3G systems and rich media applications: Focal Press, Oxford, 2007.

LAZARUS, R. S., Emotion and adaptation. Oxford University Press. Oxford USA, 1991.

LEUNG, L., & WEI, R., "Factors influencing the adoption of interactive TV in Hong Kong: Implications for advertising". In: Asian Journal of Communication, 1998, pp. 124-147.

LEUNG, L., & WEI, R., "More than just talk on the move: Uses and gratifications of the cellular phone". In: Journalism and Mass Communication Quarterly, 2000, pp. 308-320.

LIN, C., SALWEN, M., & ABDULLA, R., "Uses and gratifications of online and offline news: New wine in an old bottle". In: Online news and the public, 2005, pp. 221-236.

LIN, C. A., Online service adoption likelihood. Journal of Advertising Research, 1999a, 79-89.

LIN, C. A., "Predicting online service adoption likelihood among potential subscribers: A motivational approach". In: Journal of Advertising Research, 1999b, pp. 79–89.

LIVADITI, J., VASSILOPOULOU, K., LOUGOS, C., & CHORIANOPOULOS, K., "Needs and gratifications for interactive TV applications: Implications for designers", 2003.

LOEBBECKE, C., Online delivered content: concept and potential. E-commerce and V-business, Oxford: Butterworth-Heinemann, 2001.

LSE, T. C. W., "The Mobile Life Report 2006 - How mobile phones change the way we live". In: London School of Economics, 2009.

LULL, J., Inside family viewing: ethnographic research on television's audience. New York: Routledge, NY USA, 1990.

MCCLATCHEY, S., "The consumption of mobile services by Australian university students". International Journal of Mobile Marketing, 2006, pp. 1–9.

MCQUAIL, D., WINDAHL, STEVE., Modelos de Comunicação - para o estudo das comunicação de massas, Editorial Noticias, Lisboa, 1993.

NOAM, E. M., GROEBEL, J., & GERBARG, D., Internet television: Lawrence Erlbaum Assoc Inc., 2004.

NYSVEEN, H., PEDERSEN, P. E., & THORBJØRNSEN, H., "Intentions to use mobile services: antecedents and cross-service comparisons". In: Journal of the Academy of Marketing Science, 2005, pp. 330-346.

ORTONY, A., CLORE, G. L., & COLLINS, A.,The cognitive structure of emotions. Cambridge Univ Pr., Cambridge, 1990.

PALMGREEN, P., WENNER, L. A., & RAYBURN, J., "Gratification discrepancies and news program choice". Communication Research, 1981, pp. 451.

PALMGREEN, P., WENNER, L. A., & ROSENGREN, K. E. (Eds.). (1985). Uses and Gratifications Research: The Past Ten Years. Beverly Hills: Sage.

PAPACHARISSI, Z., & MENDELSON, A. L., "An exploratory study of reality appeal: Uses and gratifications of reality TV shows". In: Journal of Broadcasting & Electronic Media, 2007, pp. 355-370.

PAPACHARISSI, Z., & RUBIN, A. M., "Predictors of Internet use". In: J. Broad. & Elec. Media, 2000, pp. 175.

PARK, N., KEE, K. F., & VALENZUELA, S., "Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes". In: CyberPsychology & Behavior, 2009, pp. 729-733.

PEDERSEN, P. E., "Instrumentality challenged: the adoption of a mobile parking service". In: Mobile Communications, 2005, pp. 373-388.

POTTER, W. J., "Perceived reality in television effects research". In: J. Broad. & Elec. Media, 1988, pp. 32, 23.

RAACKE, J., & BONDS-RAACKE, J., "MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites". In: CyberPsychology & Behavior, 2008, pp. 169-174.

ROE, K., & LOFGREN, M., "Music video use and educational achievement: a Swedish study". In: Popular Music, 1988, pp. 303-314.

ROGERS, E. (1995). Diffusion of innovations. New York: Free Pr, 1995.

ROGERS, E. M. (1986). Communication technology: The new media in society (Vol. 1). New York: Free Press.

RUBIN, A., Television uses and gratifications: The interactions of viewing patterns and motivations. Journal of Broadcasting & Electronic Media, 1983, 37-51.

RUBIN, A.,& Perse, E. (1987). Audience activity and television news gratifications. Communication Research, 14(1), 58.

RUBIN, A., & RUBIN, R. (1982). Older Persons TV Viewing Patterns and Motivations. Communication Research, 9(2), 287.

RUBIN, A. M. (1985). Uses of daytime television soap operas by college students. J. Broad. & Elec. Media, 29, 241.

RUBIN, A. M., HARIDAKIS, P. M., & EYAL, K., "Viewer Aggression and Attraction to Television Talk Shows". In: Media Psychology, 2003.

RUBIN, A. M., & PERSE, E. M., "Audience Activity and Soap Opera Involvement A Uses and Effects Investigation". In: Human Communication Research, 1987a, pp. 246-268.

RUBIN, A. M., & PERSE, E. M., "Audience activity and television news gratifications". In: Communication Research, 1987b, pp. 58.

RUBIN, A. M., PERSE, E. M., & POWELL, R. A., "Loneliness, parasocial interaction, and local television news viewing". In: Human Communication Research, 1985, pp. 155-180.

RUBIN, A. M., & RUBIN, R. B. "Social and psychological antecedents of VCR use. The VCR age". In: Home video and mass communication, 1989, pp. 92-111.

RUGGIERO, T. E., "Uses and gratifications theory in the 21st century". In: Mass Communication and Society, 2000, pp. 3-37.

SCHATZ, R., WAGNER, S., EGGER, S., & JORDAN, N., "Mobile TV Becomes Social-Integrating Content with Communications". In: Information Technology Interfaces, 2007.

SCHLUETER, C., & SHAW, M. J., "A strategic framework for developing electronic commerce". In: Internet Computing, IEEE, 1997, pp. 20-28.

SCHUURMAN, D., DE MAREZ, L., VEEVAETE P., EVANS T., Content and context for mobile television: Integrating trail, expert and user findings. In: Elsevier - Telematics and Informatics, 2009, pp. 293-305.

SHEPPARD, B. H., HARTWICK, J., & WARSHAW, P. R., "The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future" research. In: Journal of Consumer Research, 1988, pp. 325-343.

SHIN, G., AHN, J., & KIM, T., IPTV in Korea: The effect of perceived interactivity on trust, emotion, and continuous use intention, 2009.

STAFFORD, T. F., & GILLENSON, M. L. Motivations for Mobile Devices: Uses and Gratifications for M-Commerce. Acessed in 23 – 05 – 11 at: http://sigs.aisnet.org/sighci/Research/ICIS2004/SIGHCI_2004_Proceedings_paper_11.pdf.

STEINBOCK, **D.** The Mobile Revolution - The Making of Mobile Services Worldwide. Kogan Page, London, VA UK, 2005.

SUN, S. W., & LULL, J. "The adolescent audience for music videos and why they watch". Journal of Communication, 1986, pp. 115-125.

VENKATESH, V. "Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model". In: Information systems research, 2000, pp. 342-365.

WEI, R. "Motivations for using the mobile phone for mass communications and entertainment". Em: Telematics and Informatics, 2008, pp. 36-46.

WIRTH, W., & SCHRAMM, H. "Media and emotions". In: Communication Research Trends, 2005. 24(3).