

# **Media Choice in Times of Uncertainty**

—Media Richness Theory in Context of Media Choice in Times of Political and Economic Crisis

### **Rashad Mammadov**

University of the Fraser Valley, Abbotsford, Canada Email: rashad.mammadov@ufv.ca

How to cite this paper: Mammadov, R. (2022). Media Choice in Times of Uncertainty. Advances in Journalism and Communication, 10, 53-69. https://doi.org/10.4236/ajc.2022.102005

**Received:** December 22, 2021 **Accepted:** April 18, 2022 **Published:** April 21, 2022

Copyright © 2022 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). http://creativecommons.org/licenses/by/4.0/

CC ① Open Access

## Abstract

What drives the audience's choice of media is one of the most studied topics in mass communication research. Both academia and field professionals benefit from the studies that cast light on this fundamental issue. However, there is a lack of attention to interdisciplinary approaches. The purpose of this study is to implement Media Richness Theory (MRT), rarely used in mass communication research to address the issues, which otherwise would remain unexplained since none of the existing mass communication theories combine factors such as a crisis situation, visual richness of media content and media choice of audience simultaneously. Findings of multivariate analysis of variances applied to survey data from the European Social Survey support the researchers' hypotheses that during the political and economic crisis in Greece, the assumptions of MRT explained the changes in audience's behavior towards a decrease in visually "lean" in favor of using visually "rich" media.

#### **Keywords**

Visual Perception, Electronic Media, Media Richness Theory, Media Choice, Crisis, Greece

# **1. Introduction**

Our behavioral habits depend on the circumstances. Stress and constant uncertainty are one of the strongest determinants of behavior (McKenzie & Harris, 2013; Stults-Kolehmainen & Sinha, 2014). They affect our decision-making on different levels, and one of them is our media preferences (Stults-Kolehmainen & Sinha, 2014). Studies looking at the media choices of audiences mostly focus on more general terms, trying to define the factors that have a long-term effect, shaping our preferences not only about the type/format but also about the content of certain medium (Gezduci & D'Haenens, 2007; Moody, 2011; Bowman, Jöckel, & Dogruel, 2012; Näsi & Räsänen, 2013). This study is focused on the short-term effect instead. We are looking to find if trust in the political and economic institutions and overall satisfaction with living conditions and realities can be defining factors in the switch between mediums, forcing the audience to move towards more visual and more interactive types of media. This study uses the survey data collected by a reputable organization for one European country in a difficult period of its recent history. The country faced a period of economic and political difficulties followed and accompanied by public protests and confrontations. This is a suitable ground to test our assumptions that established media consumption habits can be affected in times of uncertainty.

Since this study aims to explain the audience's behavior in times of crisis, Crisis communication theories are the first area to look for a theoretical explanation. However, certain theories that have the potential to operate on the borderline between crisis communication and mass communication often focus on explaining media's choices to emphasize the importance of one crisis over another (Sellnow & Seeger, 2013). Sellnow and Seeger (2013) distinguish three mass communication theories that follow this path: Framing talks about "how" the crisis is handled by media by showing the frames used in a particular coverage. Two other theories aim to explain the choice of those frames. Diffusion of innovation looks at the media's role in advocating change in times of crisis. Uses and gratification theory explains how consumers use the media and what kind of satisfaction they get in the process. Out of these three, uses and gratification is the only one that employs an audience-centered approach that assumes that the audience is an active participant and is self-aware in its media choices. This study in turn is looking to examine the subconscious reaction of the audience to the increased level of uncertainty caused by a crisis situation. Although Katz, Blumler, and Gurevitch (1974) in their observation of Uses and gratification, expanding boundaries of the theory to conflict situations identified five ways in which "social factors may be involved in the generation of media-related needs" (p. 27), none of them explain the phenomena described in this study. Other studies have offered analyses of crisis situations using different media formats (Jin & Liu, 2010; Ali et al., 2011; Spence & Lachlan, 2009; Loveless, 2008), but this study is more unique in its focus on linking the crisis to the visual characteristics of the medium.

Thus, despite the common theoretical approaches listed above, researchers are looking to find an explanation of phenomena out of the field of mass communication theories. The *Media Richness Theory* (MRT), widely known in the world of business studies states that people are trying to avoid ambiguity and equivocality and turning to the most "rich" and "interactive" medium as one of the ways to do it (Taylor, 2004; El-Shinnawy & Makrus, 1997; Wang, Hsieh, & Song, 2012). The researchers assume this theoretical approach can also explain the switch between mediums in times of economic, political, and ideological unrest in societies. Therefore, the purpose of this study is to determine the applicability of Media Richness Theory to explain the effect of a crisis situation with high levels of uncertainty expressed in low levels of general trust and satisfaction in the audience's media choice between visually rich and visually lean media.

#### 2. Implementation of the MRT

*Media Richness Theory*, offered by Daft and Lengel (1986) is mainly used in business and market research, to describe the relationship between the choice of communication media (with the recent focus on email correspondence, and video conferencing) and efficiency of negotiations, management techniques, or in audience studies to predict the efficiency of the message across different mediums (Kock, 2005).

The potential of MRT for the mass communication research field has been potentially underestimated. Lack of attention by mass communication scholars is understandable because Daft and Lengel have talked about the role of communication media in regard to resolving ambiguity, negotiating various interpretations, and facilitating understanding only inside the environments of organizational (mainly business) structures. Although in rare cases, scholars try to use the theory to look at the media choice of audience from a different angle (D'Ambra & O'Connor, 1998), most of the "media preference studies" go in another direction and explain media phenomena employing approaches such as Uses and gratification (Park, Chung, & Lee, 2012). However, the choice of theoretical grounding must be dictated by the specific characteristics of the phenomenon and as mentioned above, in this case, common mass communication theories are not able to provide a satisfactory explanation. Some features of the Media Richness Theory, in turn, have the potential to provide a better understanding of the described phenomenon.

The theory states that the more visual cues and hints are provided in addition to non-visual information such as text or voice, the richer the medium becomes. Social cues delivered through gestures and facial expressions are the carriers of important explanatory or amplifying messages. The two main assumptions of the theory declare that: 1) people want to overcome equivocality and uncertainty and that 2) certain types of media serve this goal better than others (El-Shinnawy & Markus, 1997). Daft and Lengel describe the hierarchy of media richness using four criteria, representing four levels of media richness, from high to low: 1) availability of instant feedback; 2) capacity of the medium to transmit multiple cues (body language, voice tone, inflection); 3) use of natural language and 4) personal focus of the medium (Daft & Lengel, 1984; El-Shinnawy & Markus, 1997; Kock, 2005). As one can see this schema is designed to explain the efficiency of relations in a business organization, but at the same time, both assumptions and some of the criteria can be effectively adapted for mass communication studies. Although only a few interdisciplinary research projects that involved mass media (Chang & Yang, 2013; Kwak, 2012; Lai & Chang, 2011; Sheer, 2011; Park et al., 2012; Elliott, 1999; Trevino et al., 1990) examined the possibilities of using Media Richness Theory, those who did often came to intriguing conclusions. Chang and Yang (2013) found that media richness is one of the factors defining the blog acceptance behavior of the audience. Kwak (2012) uses the concepts of MRT to classify online media users by their communication motives. Lai and Chang's empirical study provides evidence that media richness along with other factors, significantly contribute to e-book reader acceptance. Some go as far as using MRT to analyze how well news organizations utilize the potential of online communication channels (Elliott, 1999). These are just some of the possible applications of the theory and its potential for the field of mass communication research is yet to be discovered. This study takes another step in this direction to explain certain media preferences of the audience by using Media Richness Theory as the main theoretical grounding.

The researchers look at a very specific time in the life of a chosen country (Greece), affected by important social and political events such as public protests and unrest caused or accompanied by either economic, political, ideological uncertainty, or equivocality. The MRT describes uncertainty and equivocality as decision-making factors when it comes to the choice of particular kinds of medium. At the same time, the hierarchy model provided in the theory has been used to link those factors with the types of the medium chosen by the audience.

#### **3. Literature Review**

Trust is one of the factors that previous studies describe as one of the determinants of the levels of uncertainty. In fact, the functionalist understanding of trust says that it is "a device pruning down uncertainty and complexity of the outer world" (Lascaux, 2008). Stahlberg (2011) argues that the lack of trust in the effectiveness of own voice can make people look at other sources for guidance to reduce uncertainty. In autocratic regimes, the source is often political establishment (Kernis et al., 2000) but during a crisis situation in a media-rich environment media's roles in reducing uncertainty become inevitable since suspicions in the trustworthiness of alternative sources add to the general uncertainty and unpredictability (Lascaux, 2008).

Satisfaction is another important predictor of the level of uncertainty along with trust. An empirical study of Norwegian teachers showed a fair tendency for those who are more certain about their decisions to be more satisfied with their jobs (Munthe, 2003). Overall life satisfaction was linked to religious belief, certainty in an empirical study by Galen and Kloet (2011). Another study looking at the volunteer networks provides evidence of associations between higher levels of certainty and higher levels of satisfaction (Kramer, Meisenbach, & Hansen, 2013).

Although trust and satisfaction separately have been linked to the feeling of certainty numerous times, very few studies considered them together as an affecting factor, but those that do, show strong effects. Surra (2001) found that higher levels of both trust and satisfaction were linked to lower ambivalence and conflict in most people (Surra, 2001). In other words, raising levels of trust and

satisfaction lead to the elimination of contradictory attitudes or feelings towards people or actions. This is a rational way to look at the realities of a crisis situation with it's ongoing conflicts and a constant feeling of contradictory explanations of events coming from opposing camps.

As usual media preferences of the audience are based on established, self-justified choices, made under different kinds of influences. It has been studied from various angles and the focus is often on the influences like cultural background, political affiliation, and others. However, in studies "preference" often means preferences in nature (news vs. entertainment, etc.) or political position of the media (Rittenberg, Tewksbury, & Casey, 2012; Trevino et al., 1990). Multi-platform comparisons seem to be less covered when it comes to the question of media preferences. There was a rise of interest in this area regarding online media. More specifically, studies focus on the shift from traditional media to new platforms and looked at the problem of trying to explain the shift using the differences across different age groups of the audience for western media (Yang & Huesmann, 2013). Regarding the countries with developing democracies shift towards online media is often explained by the abilities of new information delivery methods to overcome censorship and control (Soengas, 2013).

The approaches listed above are reliable and relevant when it comes to the description of media preferences in general, but this study is more interested in a case-based approach. We are looking at a particular country, in a very specific time period, when society was affected by significant economic and political troubles, which caused massive protests and public unrest. These realities represent the crisis situation, which by itself can be a strong predictor of media behavior. In a modern world, a crisis is often associated with the conflicts caused by economic, ethnic, religious, and cultural problems (Everts, 2000). The media's role in this complex environment is bilateral. First, it has a responsibility to provide the public with information and analysis and fill the gap in the public's knowledge (Entman, 2004) regarding the issues of interest, especially since in the times of ambiguity caused by natural or human-made disasters, people turn to media in search for guidance and the effect of media becomes even more pronounced (Ball-Rokeack & DeFleur, 1976). The public in most cases is a passive receiver of information due to lack of interest and information (Beniger & Gusek, 1995) or reliance on the shortcuts and opinions of the elites (Brody, 1994) also usually coming from the media.

In the environment when uncertainty becomes a constant feeling, we assume that it influences the media choice at a subconscious level and the audience reacts on a subconscious level as well, trying to look for more visual cues for guidance. Using Media Richness Theory, we predict that media preferences particular media platform choice of audience in the times of unrest will be defined by their aspiration to overcome equivocality, leading to the choice of the most visual (rich for visual cues) and interactive, face-to-face (availability of instant feedback) types of media. These two criteria employed from the media richness hierarchical model of the theory are representative descriptions of the two types of media. Interactivity is one of the main qualities and benefits of new, internet-based media, and the availability of visual cues is the highest in television broadcasting. Based on the same assumptions newspaper as a medium mainly operates with text. There is a visual component in newspaper content, but its information load is very limited compared to television and online media. Radio operates with only one format, voice, and has no ability to provide visually rich content. Thus, in the classification of media based on the Media Richness Theory, newspapers and radio can be considered as "lean" mediums. Television and the Internet are in turn examples of the "rich" medium. Since the goal of the study is to compare these different groups of media, their clear definitions are important.

Based on the theoretical assumption researchers are looking to find if there are any overtime differences in media use and shift from leaner newspaper and radio towards more visual and interactive broadcasting and online. Therefore, the first hypothesis assumes, that

- (*H*1*a*) in times of political, economic, and ideological uncertainty, the public will disengage from "lean" media and, as a result, newspaper and radio use will decrease. At the same time,
- (*H*1*b*) in times of political, economic, and ideological uncertainty, the public will lean towards "rich" media, thus television and Internet use will increase.
- (*RQ*1) *if there are differences in media preferences of the public across times of stability and crisis*?

The second hypothesis will examine the relationship between the factors such as overall trust and overall satisfaction, which, according to previous studies (Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000; Lascaux, 2008; Munthe, 2003; Galen & Kloet, 2011; Kramer, Meisenbach, & Hansen, 2013; Surra, 2001) are strong predictors of uncertainty among the general public and media preferences of the audience in different time spans of analysis. By examining the effects of those factors, researchers expect to find that, there is a significant effect of trust and satisfaction on media preferences of the public across times of stability and crisis. More specifically, the second hypothesis states, that

 (H2) as an effect of trust and satisfaction factors, in times of crisis public will change their media behavior towards a decrease in the use of visually "lean" in favor of using more visually "rich" media.

To test the second hypothesis we will examine if (*RQ2*) there are any significant relations between changes in media preferences of the audience and changes in the moods and feelings of the respondents regarding political, economic, and ideological situations.

#### 4. Methodology

**Country:** One European country is a target of this study. Because the goal is to examine the audience's behavior in non-routine conditions, the criterion for the selection of the country of interest was the presence of recently happened

public unrest, caused or accompanied by different kinds of social and economical problems. Researchers focused on Greece, where economic collapse caused public protest in all major cities with a culmination in late 2009-early 2010 (Mail Foreign Service, 2010).

Data source. Centre for Comparative European Survey Data (CCESD) is a London-based organization, created in 1995 by Richard Topf from Metropolitan University. It operates on the edge between social science and informatics. The goal is to combine the data from different survey groups and agencies across Europe and provide easy access to digital navigation tools through an intuitive web interface (CCESD, 2014). The partner agencies and organizations include, but are not limited to Eurobarometer, European Values Studies (EVS), European Quality of Life Survey (EQLS), British Election Survey (BES), European Social Survey (ESS), and International Social Survey Programme (ISSP). There are certain methodological requirements that need to be met in order to be included in the Centre's database, which makes the Centre a credible source for survey data when it comes to the European continent. Because data is collected by different agencies with specific interests, there are varieties of topics that can be accessed through this system. For this study, several factors need to be measured and even though members of CCESD employ similar methodological approaches to data collection, time spans and questionnaires are different. Although comparing particular questions from different sources is an approach previously used by other scholars (Nie et al., 2010) in this study we will examine data from a single source.

Researchers looked at several measures to answer research questions that were stated above. First of all, they needed to have a measure of use of different kinds of media. That information had to be for at least two different years with one of them being the year of crisis and another the year of stability. Finally, they had to be able to measure two important factors—trust and satisfaction.

The combination of these factors was found in the European Social Survey (ESS), an academically driven multi-country survey, administered in over 30 countries to date (European Social Survey (ESS), 2013). One of the thematic surveys of ESS, "Media and social trust", ran in a 2-year-round cycle since 2004 provided all necessary data. The General sample size of the survey varies from 15 to 56 thousand respondents depending on the set of questions, country of analysis, and the round of operation.

*Measures*: Measures used in this study can be clustered into three main categories: *time, media preference*, and *certainty predictors*.

To measure the time factor, researchers selected two different years. The first one is a year of stability, without significant political or economic cataclysms. In Greece it was 2008, the last quiet year, and their economy was named the 27<sup>th</sup> largest economy in the world (Madianos et al., 2013) but starting from the next year economic crisis had a major effect on the country, much stronger than in other European countries. Starting from 2009, the crisis affected most of the population (Madianos et al., 2013). By 2010, the year of our analysis unemployment reached 14.2%, GDP dropped to -3.5% and the country had to sign a Memorandum of Economic and Financial Policies to cut budget spending and to avert default. It led to public protests, supported by one-third of the population (Rüdig & Karyotis, 2013). Therefore, these two years were examined to find the differences in media preferences over time. The years also match with rounds 4 and 5 of the "Media and social trust" survey.

Media preference measurement is crucial for the study and to be able to see the difference in media consumption of European audiences, we need to have objective data about newspaper readership, radio listeners, television viewers, and Internet usage in the country. The same, "Media and social trust" survey by ESS asked respondents four specific questions: *On an average weekday, how much time, in total, do you spend watching television*?; *On an average weekday, how much time, in total, do you spend listening to the radio*?; *On an average weekday, how much time, in total, do you spend reading the newspapers*?, and *How often do you use the internet, the World Wide Web, or email—whether at home or at work—for your personal use*?. The first three of the questions used a seven-point response scale from "no time at all" to "more than three hours." The last question, asking about the use of the Internet also used a seven-point scale, but the responses varied from "no time at all" to "every day."

The third measure—*Certainty predictors*, in this case is a collective term that describes a set of factors, which if looked together can be considered as a representation of the level of political, economic, and social certainty among the general population. To measure certainty for given countries for a specific time period, researchers looked at the choice of available survey data, asking questions that would explain moods and feelings of society at a given period. Since they used trust and satisfaction as two predictors of certainty, direct questions about these factors/feelings would be the most helpful. For each of the two variables, several survey questions were selected. For Trust, they picked five questions asking to rate the following feelings: Trust in the country's parliament; Trust in the legal system; Trust in the police; Trust in politicians and Trust in the European Parliament. These were combined in one, "overall trust" variable. The following questions were combined under one variable to measure "overall satisfaction:" How satisfied with life as a whole; How satisfied with the present state of the economy in the country; How satisfied with the national government and How satisfied with the way democracy works in the country. In both cases, a ten-point measurement scale was used from "no trust at all" to "complete trust" for trust and "extremely dissatisfied" to "extremely satisfied" for satisfaction variables.

*Statistical analysis.* Three-step statistical analysis was done to answer research questions. First, factor analysis was executed for 5 "trust" and 4 "satisfaction" questions in order to define common factors. The second-step multivariate analysis of variance (MANOVA) was conducted to examine the changes in the use of different kinds of media across two years of analysis. To test the effect of trust and satisfaction on these overtime changes researchers conducted a multivariate analysis of covariance as a third step which included the results of factor analysis as covariates.

#### **5. Findings**

*Factor analysis.* The Principal Axis Factor (PAF) of nine questions from the Media and Social trust survey questionnaire was conducted on data gathered from 5396 participants from three countries across 2 years of analysis. An examination of the Kaiser-Meyer-Olkin measure of sampling adequacy suggested that the sample was factorable (KMO = 0.895).

Five items loaded onto Factor 1. It is clear from **Table 1** that these five items all relate to the level of trust in several key government institutions that respondents reported in different time spans of analysis. This factor loads onto the reported level of the trust in the parliament, the legal system, political elites, police, and international support expressed in the form of trust in the European Parliament. This factor was labeled, "Trust". Three items load onto a second factor related to respondents' reported satisfaction about political and economic institutions in their countries. This factor was labeled, "Satisfaction". Cronbach's alphas for the five trust and three satisfaction items were0.851 and0.736, respectively.

**MANOVA.** Referring to the Wilks' Lambda outcome (under "Years") we can report that we have a significant multivariate outcome (prior to covariate adjustment), in respect of different media choices across the two different time spans representing stability and crisis times:  $\lambda = 0.962$ , F(4, 4761) = 47.339, p < 0.001. Table 2 indicates that there is a significant univariate outcome for three

Component	1 ( <i>Trust</i> )	2 (Satisfaction)
Trust in country's parliament	0.860	
Trust in the legal system	0.785	
Trust in the police	0.712	
Trust in politicians	0.816	
Trust in the European Parliament	0.805	
How satisfied with life as a whole		0.519
How satisfied with present state of economy in country		0.828
How satisfied with the national government		0.850
How satisfied with the way democracy works in country		0.790
Eigenvalues	3.177	2.302
Percentage of total variance	63.53	57.54
Number of test measures	5	3

**Table 1.** Factor analysis (N = 5396).

Source: European social survey.

	Dependent Variable	<i>Type III Sum of Squares</i>	F	Sig.
Age	TV watching, news/politics/current affairs on average weekday	1004.235	246.340	0.00
	Radio listening, news/politics/current affairs on average weekday	2706.992	438.156	0.00
	Newspaper reading, politics/current affairs on average weekday	6.761	5.134	0.02
	Personal use of internet/e-mail/www	12,849.475	2134.767	0.00
Gender	TV watching, news/politics/current affairs on average weekday	111.834	27.433	0.00
	Radio listening, news/politics/current affairs on average weekday	66.868	10.823	0.00
	Newspaper reading, politics/current affairs on average weekday	257.295	195.369	0.00
	Personal use of internet/e-mail/www	294.539	48.934	0.00
Years	TV watching, news/politics/current affairs on average weekday	2.252	14.063	0.45
	Radio listening, news/politics/current affairs on average weekday	183.444	29.692	0.00
	Newspaper reading, politics/current affairs on average weekday	18.521	14.063	0.00
	Personal use of internet/e-mail/www	723.552	120.208	0.00

Table 2. Univariate outcome (Prior to trust and satisfaction covariates inclusion).

Source: European social survey.

out of the four dependent variables: Radio listening (F(1, 4761) = 29.692, p < 0.001), Newspaper reading (F(1, 4761) = 14.063, p < 0.001) and Personal use of internet/email/www (F(1, 4761) = 120.208, p < 0.001) across years. No significant results were found for the TV watching variable without applying key covariates. Research question one asking for the overtime changes in media consumption habits of the public was answered.

**MANCOVA.** The multivariate outcome is still strong subsequent to applying the covariates. There is a highly significant multivariate effect across the years for the combined dependent variables of different media uses:  $\lambda = 0.964$ , *F* (4, 4440) = 41.227, *p* < 0.001. We refer to the "year" line of data; the lines for "trust" and "satisfaction" show the covariate effect.

**Table 3** shows that after applying the covariates univariate outcome for TV watching have become much stronger (F(1, 4440) = 15.803, p < 0.000). News-paper reading became slightly less significant (F(1, 4440) = 6.209, p < 0.05), moving from p < 0.001 to p < 0.05 alpha level. Radio listening (F(1, 4440) = 6.209) and F(1, 4440) = 6.209.

Source	Dependent Variable	<i>Type III</i> Sum of Squares	F	Sig
Age	TV watching, news/politics/current affairs on average weekday	839.179	210.412	0.00
	Radio listening, news/politics/current affairs on average weekday	2474.218	401.938	0.00
	Newspaper reading, politics/current affairs on average weekday	3.007	2.248	0.13
	Personal use of internet/e-mail/www	11,896.594	1967.563	0.00
Gender	TV watching, news/politics/current affairs on average weekday	87.690	21.987	0.00
	Radio listening, news/politics/current affairs on average weekday	65.848	10.697	0.00
	Newspaper reading, politics/current affairs on average weekday	236.240	176.629	0.00
	Personal use of internet/e-mail/www	276.188	45.678	0.00
Trust	TV watching, news/politics/current affairs on average weekday	132.086	33.119	0.00
	Radio listening, news/politics/current affairs on average weekday	1.272	0.207	0.64
	Newspaper reading, politics/current affairs on average weekday	5.640	4.217	0.04
	Personal use of internet/e-mail/www	3.067	0.507	0.47
Satisfaction	TV watching, news/politics/current affairs on average weekday	16.989	4.260	0.03
	Radio listening, news/politics/current affairs on average weekday	35.885	5.829	0.01
	Newspaper reading, politics/current affairs on average weekday	.247	0.184	0.66
	Personal use of internet/e-mail/www	54.671	9.042	0.00
Years	TV watching, news/politics/current affairs on average weekday	63.025	15.803	0.00
	Radio listening, news/politics/current affairs on average weekday	209.521	34.037	0.00
	Newspaper reading, politics/current affairs on average weekday	8.305	6.209	0.01
	Personal use of internet/e-mail/www	497.794	82.329	0.00

Table 3. Univariate outcome (After trust and satisfaction covariates inclusion).

34.037, p < 0.001) and Internet use both remained significant as well (F(1, 4440) = 82.329, p < 0.001). With the inclusion of Trust and Satisfaction as covariates, we can observe significant changes in media preferences over the years of analysis, all four Media choice variables differ significantly across the years of stability and crisis.

Multivariate (MANOVA) analyses showed statistically significant changes in all dependent variables, except one. Only in the case of the TV watching statistically significant difference in usage was not found. Hypothesis 1a was fully supported, both newspaper readership and radio listening significantly decreased between years of stability and crisis. Hypothesis 1b was partly supported since television viewership did not show a significant increase over the years. Internet usage, in turn, increased significantly.

When trust and satisfaction were added as covariates in MANCOVA, the effect of the TV watching variable became stronger (p = 0.000). Significance of Newspaper reading variable slightly decreased (p = 0.013). The two remaining variables did not show any changes. *Post hoc* (Bonferroni) analyses of the univariate outcomes (adjusted for trust and satisfaction factors) showed that in the times of crisis television viewership increased strongly compared to times of stability (**Table 4**). Both radio listening (p = 0.000) and Personal Internet use (p = 0.000) showed a significant increase over the years of analysis.

The second hypothesis was fully supported. MANCOVA results show that trust and satisfaction have a significant effect on the overtime changes in media consumption towards more visually rich and interactive media. More specifically, adding those factors as covariates had an especially significant effect on television usage of the public.

Although previous studies confirm that education, income, socioeconomic status, as well as age and gender (Self, 1988) are important predictors of media choice behavior, in this case, age and gender did not appear to have a statistically significant influence on the effect of age and gender in a crisis situation.

Dependent Variable	(I) Years	(J) Years	Mean Difference (I – J)	Std. Error	Sig.
TV watching, news/politics/current affairs on average weekday	Stability	Crisis	-0.256*	0.064	0.000
Radio listening, news/politics/current affairs on average weekday	Stability	Crisis	0.466*	0.080	0.000
Newspaper reading, politics/current affairs on average weekday	Stability	Crisis	0.093*	0.037	0.013
Personal use of internet/e-mail/www	Stability	Crisis	-0.719*	0.079	0.000

Table 4. Post hoc (Bonferroni) outcomes after applying trust and satisfaction covariates.

Source: European social survey. \*indicates statistically significant numbers.

#### 6. Discussion and Conclusion

The purpose of this study was to implement Media Richness Theory, rarely used in mass communication research to address the issues, which otherwise would remain unexplained since none of the existing mass communication theories combine factors such as crisis situations, visual richness of different types of medium and media choice of audience simultaneously. The attempt was successful, and the findings of the study can be considered as an example of efficient use of the Theory in the field of mass communication studies. Furthermore, the potential of MRT for communication studies is yet to be explored. Its hierarchy model provides the description of the key features of modern, visually rich media, such as the capacity of the medium to transmit multiple cues. Body language, voice tone, and inflection are only a few of them. At the same time, the focus of the theory on the instant feedback opportunities of the digital medium provides a whole new ground to examine social media and online communications channels.

In this particular case of crisis communications in Greece, one can see the potential of this approach to explain the media choice of public and background processes that let us talk about the reasons for particular choices. Evidence suggested that in times of crisis public leaned towards more visually rich media, such as television broadcasting and internet use. The use of "lean" newspaper and radio decreased. In the case of television broadcasting, we were able to identify the role that predictors of uncertainty-trust and satisfaction, affected the increase of television use. In the case of the Internet, the effect was not that clear, and one can say that increase in Internet use can be an effect of the general trend of increase in internet coverage in the country. In point of fact, general Internet usage in Greece increased from 38.2% to 44.4% between 2008 and 2010. Thus, when it comes to the Internet, we can only speculate about the connection between the general increase of internet usage as routine technological development and the effect described in Media Richness Theory, but television broadcasting is different since the effect of trust and satisfaction was clearly observed in this study.

Finally, the results should be interpreted due to this study's limitations. The first limitation lies in the measurement of the uncertainty factor. Since the study is using secondary data, researchers did not have control on the content of survey questionnaires. Even though the methods used in this study basically followed the methods used in numerous previous research which described trust and satisfaction as important predictors of uncertainty (Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000; Lascaux, 2008; Munthe, 2003; Galen & Kloet, 2011; Kramer, Meisenbach, & Hansen, 2013; Surra, 2001), asking direct question would add to the credibility of measurement. Currently, it limits researchers in their attempts to have a combined "uncertainty" factor since combining trust and satisfaction under one factor is questionable. Another limitation is about the general "internet use" question as part of the analysis. Although the

survey describes it as the one answering online media use question, it is, in fact, too broad and covers all kinds of online activity. Different design of the question or a separate question asking specifically about use of online media would provide more credible data for analysis. Future research with first-hand data can develop better methods to address this issue. Third limitation is about absence of certain demographic information such as income level of respondents or their socioeconomic status, since those and other factors has been proven to be important predictors of media choice as well (Self, 1988). This, again must be considered in the designs of future studies.

Perspectives of this direction of the study look promising. Even in this study working with secondary data, in addition to answering stated questions in the process of investigating the opportunities of MRT, another outcome was discovered. During the adaptation of the theory to the needs of the study, researchers were able to classify different types of media within the MRT model. Thus, newspapers and radio were identified as "lean" media as operating with limited opportunities to provide visual cues and interactivity while television and internet fit the requirements of "rich" media. This is only a small example of a potential of Media Richness Theory for mass communication studies and with current common focus on the visual communication and social media, the field can greatly benefit from its deeper implementation.

#### **Conflicts of Interest**

The author declares no conflicts of interest regarding the publication of this paper.

#### References

- Ali, S. R., Stover, C., Vultee, D. M., & Vultee, F. (2011). *Trust but Clarify: Reactions to Social Media Messages in Emergencies.* Paper Presented at the National Communication Association Conference.
- Ball-Rokeack, S. J., & DeFleur, M. L. (1976). A Dependency Model of Mass Media Effects. Communication Research, 3, 3-21. <u>https://doi.org/10.1177/009365027600300101</u>
- Beniger, J. R., & Gusek, J. A. (1995). The Cognitive Revolution in Public Opinion and Communication Research. In T. L. Glasser, & C. T. Salmon (Eds.), *Public Opinion and the Communication of Consent* (pp. 217-248). Guilford.
- Bowman, N. D., Jöckel, S., & Dogruel, L. (2012). A Question of Morality? The Influence of Moral Salience and Nationality on Media Preferences. *Communications*, *37*, 345-369. <u>https://doi.org/10.1515/commun-2012-0020</u>
- Brody, R. A. (1994). Crisis, War, and Public Opinion: The Media and Public Support for the President. *Taken by Storm: the Media, Public Opinion, and U.S. Foreign Policy in the Gulf War.* University of Chicago Press.
- CCESD (Centre for Comparative European Survey Data) (2014). *About the Centre for Comparative European Survey Data*. <u>http://www.ccesd.ac.uk/About</u>
- Chang, Y., & Yang, C. (2013). Why Do We Blog? From the Perspectives of Technology Acceptance and Media Choice Factors. *Behavior & Information Technology, 32*, 371-386. https://doi.org/10.1080/0144929X.2012.656326

- Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*, *32*, 554-571. https://doi.org/10.1287/mnsc.32.5.554
- D'Ambra, J., Rice, R. E., & O'Connor, M. (1998). Computer-Mediated Communication and Media Preference: An Investigation of the Dimensionality of Perceived Task Equivocality and Media Richness. *Behavior & Information Technology*, 17, 164-174. <u>https://doi.org/10.1080/014492998119535</u>
- Elliott, C. (1999). The Asian Online Newspaper: A Media Richness Evaluation. In *Proceedings of 8th AMIC Annual Conference on Asia: Information Poor to Information Rich—Strategies for the 21st Century*. AMIC.
- El-Shinnawy, M., & Markus, M. L. (1997). The Poverty of Media Richness Theory: Explaining People's Choice of Electronic Mail vs. Voice Mail. *International Journal of Human-Computer Studies*, 46, 443-467. <u>https://doi.org/10.1006/ijhc.1996.0099</u>
- Entman, R. M. (2004). *Projections of Power*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226210735.001.0001
- European Social Survey (ESS) (2013). http://www.europeansocialsurvey.org/about/index.html
- Everts, P. (2000). When the Going Gets Rough: Does the Public Support the Use of Military Force? *World Affairs, 162,* 91-107.
- Galen, L. W., & Kloet, J. D. (2011). Mental Well-Being in the Religious and the Non-Religious: Evidence for a Curvilinear Relationship. *Mental Health, Religion & Culture, 14,* 673-689. <u>https://doi.org/10.1080/13674676.2010.510829</u>
- Gezduci, H., & D'Haenens, L. (2007). Culture-Specific Features as Determinants of News Media Use. *Communications*, 32, 193-222. https://doi.org/10.1515/COMMUN.2007.012
- Jin, Y., & Liu, B. F. (2010) The Blog-Mediated Crisis Communication Model: Recommendations for Responding to Influential External Blogs. *Journal of Public Relations Research, 22*, 429-455. <u>https://doi.org/10.1080/10627261003801420</u>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974) Uses of Mass Communication by the Individual. In W. D. Davidsons, & F. T. C. Yu (Eds.), *Mass Communication Research: Major Issues and Future Directions* (pp. 19-32). Praeger.
- Kernis, M. H., Paradise, A. W., Whitaker, D. J., Wheatman, S. R., & Goldman, B. N. (2000). Master of One's Psychological Domain? Not Likely If One's Self-Esteem Is Unstable. *Personality and Social Psychology Bulletin, 26*, 1297-1305. <u>https://doi.org/10.1177/0146167200262010</u>
- Kock, N. (2005). Media Richness or Media Naturalness? The Evolution of our Biological Communication Apparatus and Its Influence on Our Behavior toward E-Communication Tools. *IEEE Transactions on Professional Communication*, 48, 117-130. <u>https://doi.org/10.1109/TPC.2005.849649</u>
- Kramer, M. W., Meisenbach, R. J., & Hansen, G. J. (2013) Communication, Uncertainty, and Volunteer Membership. *Journal of Applied Communication Research*, 41, 18-39. <u>https://doi.org/10.1109/TPC.2005.849649</u>
- Kwak, H. (2012). Self-Disclosure in Online Media: An Active Audience Perspective. International Journal of Advertising, 31, 485-510. https://doi.org/10.2501/IJA-31-3-485-510
- Lai, J., & Chang, C. (2011). User Attitudes toward Dedicated E-Book Readers for Reading: The Effects of Convenience, Compatibility and Media Richness. *Online Information Review*, *35*, 558-580. <u>https://doi.org/10.1108/14684521111161936</u>

- Lascaux, A. (2008). Trust and Uncertainty: A Critical Re-Assessment. International Review of Sociology, 18, 1-18. <u>https://doi.org/10.1080/03906700701823613</u>
- Loveless, M. (2008). Media Dependency: Mass Media as Sources of Information in the Democratizing Countries of Central and Eastern Europe. *Democratization*, 15, 162-183. <u>https://doi.org/10.1080/13510340701770030</u>
- Madianos, M., Economou, M., Alexiou, T., & Stefanis, C. (2013). Depression and Economic Hardship across Greece in 2008 and 2009: Two Cross-Sectional Surveys Nationwide. *Social Psychiatry and Psychiatric Epidemiology*, 46, 943-953. <u>https://doi.org/10.1007/s00127-010-0265-4</u>
- Mail Foreign Service (2010, March 11). *Greece Rocked by Riots as Up to 60,000 people take to Streets to Protest against Government.* <u>http://www.dailymail.co.uk/news/article-1257243/greek-riots-up-60-000-people-streets</u> <u>-protest-government.html</u>
- McKenzie, S. H., & Harris, M. F. (2013). Understanding the Relationship between Stress, Distress and Healthy Lifestyle Behavior: A Qualitative Study of Patients and General Practitioners. *BMC Family Practice*, 14, Article No. 166. <u>https://doi.org/10.1186/1471-2296-14-166</u>
- Moody, K. E. (2011). Credibility or Convenience? Political Information Choices in a Media-Saturated Environment. *Media International Australia, 140,* 35-46. https://doi.org/10.1177/1329878X1114000107
- Munthe, E. (2003). Teachers' Workplace and Professional Certainty. *Teaching and Teacher Education*, 19, 801-813. <u>https://doi.org/10.1016/j.tate.2003.02.002</u>
- Näsi, M., & Räsänen, P. (2013). Changing Media Preferences? Comparing the Perceived Importance of Television, Newspapers and the Internet in Finland, 1999-2009. Nordicom Review, 34, 77-92. <u>https://doi.org/10.2478/nor-2013-0055</u>
- Nie, N. H., Miller, D. W., III, Golde, S., Butler, D. M., & Winneg, K. (2010). The World Wide Web and the U.S. Political News Market. *American Journal of Political Science*, 54, 428-439. <u>https://doi.org/10.1111/j.1540-5907.2010.00439.x</u>
- Park, N., Chung, J. E., & Lee, S. (2012). Explaining the Use of Text-Based Communication Media: An Examination of Three Theories of Media Use. *Cyberpsychology, Beha*vior, and Social Networking, 15, 357-363. <u>https://doi.org/10.1089/cyber.2012.0121</u>
- Rittenberg, J., Tewksbury, D., & Casey, S. (2012) Media Preferences and Democracy: Refining the "Relative Entertainment Preference" Hypothesis. *Mass Communication and Society, 15*, 921-942. <u>https://doi.org/10.1080/15205436.2011.622065</u>
- Rüdig, W., & Karyotis, G. (2013). Who Protests in Greece? Mass Opposition to Austerity. *British Journal of Political Science, 44,* 487-513. https://doi.org/10.1017/S0007123413000112
- Self, C. C. (1988). Perceived Task of News Report as a Predictor of Media Choice. *Journalism & Mass Communication Quarterly*, 65, 119-125. <u>https://doi.org/10.1177/107769908806500116</u>
- Sellnow, T. L., & Seeger, M. W. (2013). Theorizing Crisis Communication. Wiley-Blackwell.
- Sheer, V. C. (2011). Teenagers' Use of MSN Features, Discussion Topics, and Online Friendship Development: The Impact of Media Richness and Communication Control. *Communication Quarterly*, 59, 82-103. <u>https://doi.org/10.1080/01463373.2010.525702</u>
- Soengas, X. (2013). The Role of the Internet and Social Networks in the Arab Uprisings— An Alternative to Official Press Censorship. *Comunicar*, *41*, 147-155. <u>https://doi.org/10.3916/C41-2013-14</u>
- Spence, P. R., & Lachlan, K. A. (2009) Presence, Sex, and Bad News: Exploring the Res-

ponses of Men and Women to Tragic News Stories in Varying Media. *Journal of Applied Communication Research 37*, 239-256. https://doi.org/10.1080/00909880903025929

- Stahlberg, D. (2011). When Autocratic Leaders Become an Option—Uncertainty and Self-Esteem Predict Implicit Leadership Preferences. *Journal of Personality and Social Psychology*, *101*, 521-540. <u>https://doi.org/10.1037/a0023393</u>
- Stults-Kolehmainen, M., & Sinha, R. (2014). The Effects of Stress on Physical Activity and Exercise. Sports Medicine, 44, 81-121. <u>https://doi.org/10.1007/s40279-013-0090-5</u>
- Surra, C. A. (2001). Parental Divorce and Premarital Couples: Commitment and Other Relationship Characteristics. *Journal of Marriage and Family, 63*, 627-638. https://doi.org/10.1111/j.1741-3737.2001.00627.x
- Taylor, M. (2004). Exploring Public Relations in Croatia through Relational Communication and Media Richness Theories. *Public Relations Review*, *30*, 145-160. <u>https://doi.org/10.1016/j.pubrev.2003.09.003</u>
- Trevino, L. K., Lengel, R. H., Bodensteiner, W., Gerloff, E. A., & Muir, N. K. (1990). The Richness Imperative and Cognitive Style: The Role of Individual Differences in Media Choice Behavior. *Management Communication Quarterly*, *4*, 176-197. <u>https://doi.org/10.1177/0893318990004002003</u>
- Wang, W., Hsieh, J. J. P., & Song, B. (2012). Understanding User Satisfaction with Instant Messaging: An Empirical Survey Study. *International Journal of Human-Computer Interaction, 28*, 153-162. <u>https://doi.org/10.1080/10447318.2011.568893</u>
- Yang, G. S., & Huesmann, L. R. (2013). Correlations of Media Habits across Time, Generations, and Media Modalities. *Journal of Broadcasting & Electronic Media*, *57*, 356-373. https://doi.org/10.1080/08838151.2013.816711