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Developing a Comparative Analysis Model by Risk Management Approach on Satellite Media Affecting Individual Health, Families, Social Health, Humans and Human Dignity: Comparing Countries with Iran

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ABSTRACT

Introduction: To ascertain the impact of risks arising from the technology of satellite media, whatsoever, in this era especially those connected to the internet (including Cyborgs, Metaverse and AI), on the health of individuals (mental, attitudes and behaviors that even may cause physical impacts such as violence, etc.), families, the social and as a whole, humans and human dignity, an authentic research done to deal with the related risks to prevent any kind of direct and/or indirect negative impacts of satellite media on the variables. The objective was to display a new way of assessing the related risks and developing a comparative analysis model by risk management approach to reach to a result for Iran.

Methods: Comparing five countries randomly selected from almost each continent along with Iran, focused on Tehran as a metropolitan counting different ethnic groups, their common risks of satellite media were identified by risk management approach. The questionnaires, provided by applying the Likert Scale, were distributed among the related experts, professionals, graduate and post-graduate students as well as the related authorities. The comparative study called for a qualitative research required a descriptive research along with case studies and an analytical study. Subsequently distributing questionnaires, exploratory research, The Mann-Whitney U Test using the SPSS statistics concluded as quantitative research. Finally, this research reached to an applied research too.

Results: Social and cultural risks of the countries understudy were assessed. The comparative and analytical studies and appraisals as well as statistical processes revealed that Iran's current media approach and its performance towards the whole society are quite different from the other five countries with those Iran was compared to.

Conclusion: A new technical method to approach risks of satellite media to control them for preventing any kind of satellite media risks that impacts on variables. As applied research the new result showed that an immediate action is required to regulate satellite media standards to protect the whole society and to modify the current situation of Iran's media approach towards them.

Key words: Individual health; Family health; Social health; Human dignity; Satellite media; Risk management

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INTRODUCTION

"Statistically, almost there is nowhere on the earth where is not under the control and coverage of any type of satellites including media satellites. And of course, almost as soon as the media satellites' owners and controllers decide, they can broadcast and connect everywhere and even perhaps any region on the earth that they have under their own coverage even including, more or less, far away in the universe-exactly just like Voyager 1. In nature, though quite shinning the progress of technology is, its accessibility can be incredibly considered as a horrific danger from some other point of views; it means it can be considered as a destructive risk too. Reviewing numerous studies on the impacts of media either positive or negative, and considering this point that each society has its own cultural and social trends, one encounters with some hints or direct signals of some existing hidden/invisible or visible risks that might have different impacts on each and every society and its individuals, from the top layer to the deep bottom."[1]

Here in this article the Satellite Media means "the media which is technically and originally supported by satellites such as Satellite TVs, Satellite Radios and social Media"[1] as well as its related platforms and also any kind of technology that directly and/or indirectly connected to satellites and the internet and supported by them and have directly or indirectly impacts on the individual health, families, the social health and as a whole humans and human dignity.

Here, for instance, "Forbes states a downside to the Metaverse, and emphasizes that we'll need to consider challenges as we move into a more immersive virtual world. It expresses challenges include things like: Privacy, Protection for children, Health concerns, Access inequality, Legal issues, Desensitization and Identity hacking."[2]

"The protection of human dignity under the media regulations is an issue not completely resolved."[3]

As can be seen, the challenges stated by Forbes and other similar works somehow pointed to the issues related to the individual health, families, the social health and as a whole humans and human dignity. However, in both quantity and quality, what Forbes and the similar valid and reliable works pointed to, are not enough and adequate in the lack of risk management point of views.

Considering media in connection with humans, including human health, as well as human dignity, the application of the risk management process, undoubtedly, is quite necessary and it will be quite useful.

With the rapid advent and sometimes even better to say with the non-stop outburst of new super-modern media and their rapid updates, a quite urgent need for the risk management to possess sufficient and strict privilege of taking control any kind of media is fully felt.

"It can be mentioned that one of the existing risks that its presence can be quite harmful for the base structure of a nation, is neglecting and forgetting own national culture as well as own social and even individual identities. In general, media, particularly satellite media, and in the technologically

modern world, social media is an extremely powerful kind of technology which is able to transmit information, concepts and ideas to a general or specific audience or user or a group of them such as children."

Here in this article, "the risk" is the negative impacts of satellite media on societies including the individual health, families, the social health, and as a whole, humans and human dignity. For an all time and a 24/7 monitoring, controlling over and treating this risk that affects human mental and physical health, families, social health, humans and human dignity, applying risk management process principles is a top priority.

"The rise of the cyborgs–Welcome to the post-human age."[4] Signals of entering a new era, the era of a new humankind, can be seen in various scientific definitions and articles as well as news. "The new book Cyber-Humans, Our Future with Machines provides a broad perspective on humanity's technological future. It explains why a future merger between humans and machines is inevitable and what the coming cyborg age might look like.

It is predicted that robots will surpass human intelligence within the next fifty years. The ever- increasing speed of advances in technology and neuroscience, coupled with the creation of supercomputers and enhanced body parts and artificial limbs, is paving the way for a merger of both human and machine."[4]

"Cyborgs will replace humans and remake the world, James Lovelock the famed British environmentalist and futurist says. For tens of thousands of years, humans have reigned as our planet's only intelligent, self-aware species. But the rise of intelligent machines means that could change soon, perhaps in our own lifetimes. Not long after that, Homo sapiens could vanish from Earth entirely. 'Our supremacy as the prime understanders of the cosmos is rapidly coming to end,' James Lovelock says in the book, "Novacene." 'The understanders of the future will not be humans but what I choose to call 'cyborgs' that will have designed and built themselves.' "[5]

"The term "Cyborg" arises as a short form of "Cybernetic Organism," which is an entity made up of both biological and technical elements. Initially, it was used to describe any system of this mixed type; however, it has more recently been employed for entities where the biology and technology are integrally attached, thereby removing people riding bicycles or wearing glasses from the definition.

To be called a Cyborg it is normally the case that the entity has abilities above and beyond those exhibited by either their biological or technological parts alone. "[6]

"Humans must become cyborgs if they are to stay relevant in a future dominated by artificial intelligence. That was the warning from Tesla founder Elon Musk, speaking at an event in Dubai this weekend."[7]

Now going a little bit further, "Social Media Cyborgs" as an expression can be seen in some

professional and technical texts such as: “When social media habituates us to “connect” with a vast network of strangers at non-human scale in a Time of Strangers, we become part AI. In other words, social media turns us into cyborgs.

But specifically: SUFFERING CYBORGS.”[8] Also special news relating to the new modern technology of media and the related and supporting systems, are published such as: “Elon Musk's satellites are connecting Ukraine with the internet. Starlink was conceived as a civilian program — but Ukraine's military can also use it to guide drones and strike Russian tanks and positions.”[9]

“U.S. quietly paying millions to send Starlink terminals to Ukraine, contrary to SpaceX claims”[10]

“About 150,000 people in Ukraine are using SpaceX's Starlink internet service daily, government official says.”[11]

On the other hand, it is referred to another specific term that nowadays can be heard all around, i.e. the “Metaverse”.

As for Cyborgs and its related expressions such as social media cyborg, there are lots of definitions of the Metaverse stated by different professionals that all should be considered in the field of risk management. Giving an example, one of these definitions is: “In its current meaning, the Metaverse generally refers to the concept of a highly immersive virtual world where people gather to socialize, play, and work. Awareness of this term surged on October 29, 2021, when Facebook rebranded itself “Meta” and released a video in which CEO Mark Zuckerberg says, “I believe the Metaverse is the next chapter for the internet.”[12]

Today, the rapid pace of technological change, technological development as well as technological progress, and consequently the same processes in the field of media technology is almost unavoidable and unprecedented. Almost every day the world witnesses new technologies in every field of science and updates to current and existing technologies.

“As we move closer to our current digital age of media, we can see that new media formats are invented and then made available to people more quickly than media that came before. For example, while it took 175,000 years for writing to become established, and about 1,000 years for printing to gain a firm foundation as a medium, audiovisual media (radio, television, and movies) penetrated society within a few decades, and digital media gained prominence in even less time.”[13]

The rapid change and evolution in media and the impact of technology progress can be seen in daily changes and even sometimes unimaginably in social media and the related technology, such as continuous updating in different platforms and also creating new platforms such as the Metaverse, as “a block-chain-based virtual reality platform”[14] or creating new roles such as social media cyborgs. “To understand the impact of certain technologies, we need to consider how we, as a society, consume them.

One technology that has had a huge impact, though, is satellite technology."[15]

Digital and satellite TVs by broadcasting programs, through a wide variety of local and satellite networks, as well as high-tech internet and social media that can be connected to any related device that some of these devices like microchips can be even implanted into human bodies and brains, can have their own impacts on individuals, their personality and identities, including on those people who are too young, and have no idea about media literacy.

One of the main points is that any kind of media and specially satellite media have direct and indirect impacts on societies and each and every individuals. Regarding penetrating impacts of media and nowadays penetrating impacts of super-modern technology of media – just like the Metaverse- into societies, it can be imagined that in confrontation with societies, the culture of a country, is not just limited to the political boundaries; and with the presence of the satellite media, each and every nation can be exposed to the other nations' cultures and even destructive technologies. Though it is an opportunity for people in the world to get acquainted with the various cultures of different nations, there is a risk for them to be affected negatively by other nations' cultures too.

It can be mentioned that one of the existing risks that its presence can be quite harmful for the base structure of a nation, is neglecting and forgetting own national culture as well as own social and even individual identities and dignity.

Considering the parameters of this research such as violence, crime, sexual rapes and media influences on sexual intentions, media and kids, pornography and nude, families' norms and values, this article tried to address those individuals for what they are responsible for, either who are responsible in both media and health organizations, firms and centers, or the related ones. Of course whole through media and health organizational charts and the related organizations, specifically at the top of the organizational charts, there are individuals and outstandingly authorities who are quite responsible in all types of media and their impacts on the health of each and every person , society and human dignity, particularly, here in this article, responsible in satellite media to prevent any kind of direct and indirect media risks that are caused by using satellite media that have impacts on individuals mentally and physically, families, societies, humans, human dignity and in particular, on each and every individual as a precious being. Also in this article there are other parameters, like censorships and limitations on content, etc. that have direct or indirect impacts on the health of societies and persons as precious beings. A long with formal individuals and authorities, these are families and specially parents who need to identify the risks which media may specifically generate for their own children and then this is the responsibility of parents who should supervise and control the situation. At last, each and every person in the society should be aware of useful and harmful consequences of media and its super speedy growth and development that might be brought about by using any kind of them.

Highly important to note that there is no certain time for identifying and assessing media risks. This is an all-time job. There should be not only long term and short-term objectives but also it absolutely

needs a 24/7 effort to monitor everything externally and internally.

More specifically, the final result of this research is applicable in Iran, too. Though the research location is Tehran, however the procedure of this research shows that the main technical way can be separately used in each and every city in Iran and anywhere else in the world to obtain a specific result for a spotted area. This point is highly important to be considered that as Tehran is a metropolitan, so those who answered the related questions of this research, can have different backgrounds and can be of different ethnic groups and from every province of Iran. In this direction, there is a safer way to assess and treat and confront with the satellite media threats and risks by applying the risk management process to manage and control the media risks, of any type, which are harmful for societies counting individuals, their health and their dignity.

It should be mentioned that though almost raw, there are always online updated information, news and statistics on media and on media-related subjects in some authentic websites related to famous organizations such as Freedom House, Statista as well as Reporters Without Borders. However it should be noted that it is quite important to consider and refer to the information, news and related statistics as well as raw data of inside the country (Iran) and it should not be mainly focused on the information of foreigners and the outsiders."[19] Based on the risk management process, in this article it has been displayed that how by identifying, analyzing and evaluating the risks of satellite media which have negatively impacts on societies, humans and human dignity, the nobles can treat the risks. Though there are lots of different risks arising from satellite media, for the purpose of this article and for showing how to apply and operate the risk management process along with a comparative study to regulate satellite media impacts, cultural and social risks arising from satellite media have been considered.

The objective of this article is to display how to use risk management as a powerful process to trace any kind of risks of new born super-modern technologies, such as the Metaverse and AI, or any kind of risks of any available and common technology relating to the satellite media such as social and cultural risks of social media platforms or satellite TVs and radios, to fundamentally protect humans including the individual health, families, the social health and human dignity, focusing on social and cultural risks.

METHODS

Though the risk management process has its own fixed steps, the tools that can be used to implement this process can vary in many ways. Considering available media related to the satellite media, this article displays how the risk management process can be used along with a comparative study and analysis, as one of the ways available, to assess the risks of satellite media that negatively impact individual health, families, social health, and humanity as a whole, including human dignity, by identifying, analyzing, evaluating and treating this risk and then reaching to a result for Iran.

"One of the principles of the risk management is to protect and support the values or create values."[16]

In this article, it means that the risk management, in nature, protects and supports the values of individuals, families, societies and humans or create their related values to support and protect them to guarantee the individual mental and physical health as well as the social health and human dignity. One of the main levels in the risk management process is "risk assessment".

"Risk assessment is the overall process of risk identification, risk analysis and risk evaluation."[16] So, for assessing risks of satellite media impacting on the individual health, families and the social health, humans and human dignity, there should be a wide range of subtle studies to identify "sources of risk, areas of impacts, events (including changes in circumstances) and their causes and their potential consequences. The aim of this step is to generate a comprehensive list of "satellite media risks" based on those events that might create, enhance, prevent, degrade, accelerate or delay the achievement of objective"[16] to react against the negative impacts of satellite media on the health of societies and individuals mentally and physically, and as a whole, humans and human dignity. "Comprehensive identification is critical, because a risk that is not identified at this stage will not be included in further analysis.

Identification should include risks whether or not their source is under the control, even though the risk source or cause may not be evident. It should also consider a wide range of consequences even if the risk source or cause may not be evident. As well as identifying what might happen, it is necessary to consider possible causes and scenarios that show what consequences can occur. All significant causes and consequences should be considered.

Risk identification tools and techniques that are suited to its objectives and capabilities, and to the risks faced should be applied. Relevant and up-to-date information is important in identifying risks. This should include appropriate background information where possible. People with appropriate knowledge should be involved in identifying risks."[16]

After risk identification, the second main step in risk assessment of the negative impacts of satellite media on the individual health, families, the social health, and as a whole humans and human dignity is risk analysis. "Risk analysis involves developing an understanding of the risk. Risk analysis provides an input to risk evaluation and to decisions on whether risks need to be treated, and on the most appropriate risk treatment strategies and methods. Risk analysis can also provide an input into making decisions where choices must be made and the options involve different types and levels of risk.

Risk analysis involves consideration of the causes and sources of risk, their positive and negative consequences, and the likelihood that those consequences can occur. Factors that affect consequences and likelihood should be identified. Risk is analyzed by determining consequences and their likelihood, and other attributes of the risk. An event can have multiple consequences and can affect multiple objectives. Existing controls and their effectiveness and efficiency should also be taken into account.

The way in which consequences and likelihood are expressed and the way in which they are combined to determine a level of risk should reflect the type of risk, the information available and the purpose for which the risk assessment output is to be used. These should all be consistent with the risk criteria. It is also important to consider the interdependence of different risks and their sources.

The confidence in determination of the level of risk and its sensitivity to preconditions and assumptions should be considered in the analysis, and communicated effectively to decision-makers. Factors such as divergence of opinion among experts, uncertainty, availability, quality, quantity and ongoing relevance of information, or limitations on modelling should be stated and can be highlighted.

Risk analysis can be undertaken with varying degrees of detail, depending on the risk, the purpose of the analysis, and the information, data and resources available. Analysis can be qualitative, semi-quantitative or quantitative, or a combination of these, depending on the circumstances.

Consequences and their likelihood can be determined by modelling the outcomes of an event or set of events, or by extrapolation from experimental studies or from available data. Consequences can be expressed in terms of tangible and intangible impacts. In some cases, more than one numerical value or descriptor is required to specify consequences and their likelihood for different times, places, groups or situations."[16]

The third main step in risk assessment of the negative impacts of satellite media on the health of individuals and societies, humans and human dignity, is "risk evaluation". "The purpose of risk evaluation is to assist in making decisions, based on the outcomes of risk analysis, about which risks need treatment and the priority for treatment implementation.

Risk evaluation involves comparing the level of risk found during the analysis process with risk criteria established when the context was considered. Based on this comparison, the need for treatment can be considered. Decisions should take account of the wider context of the risk and they should be made in accordance with legal, regulatory and other requirements.

In some circumstances, the risk evaluation can lead to a decision to undertake further analysis. The risk evaluation can also lead to a decision not to treat the risk in any way other than maintaining existing controls.

This decision will be influenced by the "environment's" risk attitude and the risk criteria that have been established."[16]

After risk assessment and implementing its steps, the other main level in the risk management process is risk treatment, it means the process to modify the risks of satellite media negatively impact on the health of individuals and societies, humans and human dignity,.

"Risk treatment can involve:

- Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk;
- Taking or increasing risk in order to pursue an opportunity;

- Removing the risk source;
- Changing the likelihood;
- Changing the consequences;
- Sharing the risk with another party or parties including contracts and risk financing;
- Retaining the risk by informed decision.

Risk treatments that deal with negative consequences are sometimes referred to as "risk mitigation", "risk elimination", "risk prevention" and "risk reduction". Risk treatment can create new risks or modify existing risks."[16]

In the scope of risk treatment, there are lots of expressions and issues that should be considered. For instance, "Control". "Controls include any process, policy, device, practice, or other actions which modify risk. Controls may not always exert the intended or assumed modifying effect; or "Risk avoidance" that is an informed decision not to be involved in, or to withdraw from, an activity in order not to be exposed to a particular risk. "Risk avoidance" can be based on the result of risk evaluation and/or legal and regulatory obligations; or "risk sharing", a form of risk treatment that involves the agreed distribution of risk with other parties; or "risk financing", another form of risk treatment involving contingent arrangements for the provision of funds to meet or modify the financial consequences should they occur; or even "risk retention" that means the acceptance of the potential benefit of gain, or burden of loss, from a particular risk. Risk retention includes the acceptance of residual risks and should note that the level of risk retained can depend on risk criteria. Good to say that a residual risk is the risk remaining after risk treatment. The residual risk can contain unidentified risk. It can also be known as "retained risk". On the other hand by risk criteria, it means terms of reference against which the significance of a risk is evaluated. Risk criteria can be derived from standards, laws, policies and other requirements. And after risk treatment the next level of the risk management is "monitoring and reviewing" that involves regular checking or surveillance which can be periodic or ad hoc. Responsibilities for monitoring and review should be clearly defined. It should encompass all aspects of the risk management process for the purposes of:

- Ensuring that controls are effective and efficient in both design and operation;
- Obtaining further information to improve risk assessment;
- Analyzing and learning lessons from events, changes, trends, successes and failures;
- Detecting changes including changes to risk criteria and the risk itself which can require revision of risk treatments and priorities; and identifying emerging risks.

Risk management activities should be traceable, so the process of the risk management should be recorded."[16]

"What was considered for going through and starting the procedure of this article, was to select a range of five countries of which some of them have close similarities with Iran in culture and religion and on the other hand, of which some of them are of developed countries with unique specifications of their own, which are considered as the origin of the modern media or with regarding some other aspects, they are involved in it. The selected countries were England, South Korea, Malaysia, Turkey and The United States of America.

The sampling method of this research was as following: As a comparative study, countries understudy were randomly selected. However, in the selection process, it was tried to have one country from almost each continent as well as one country from south-east Asia.

Basically, the research done was a comparative study; therefore, in nature, it called for a qualitative research. So, a descriptive research along with case studies as well as an analytical study were applied too. Distributing questionnaires to get to the final result led to an exploratory research and consequently applying the Mann-Whitney U Test using the SPSS statistics concluded to a quantitative research. The final result can be applied by the related authorities to protect any society, the individual health, families, the social health, and as a whole humans and human dignity based on what has been considered as risks of satellite media in this research. Therefore this research can be considered as an applied research too.

The questionnaire, based on which the final model for Iran was designed, was made of twenty questions in Farsi language. This questionnaire were based on the twenty parameters (criteria) in this research. Ten of these questions related to cultural risks control and the remaining ten related to social risks control and distributed among related experts and filled by them and also by media professionals in Tehran.

The questionnaire prepared for this research was also formed by a five point Likert scale to allow the experts and all media professionals to express their own opinions by choosing among Very High, High, Medium, Low and Very Low with each particular question.

However as for other countries under this research, the Likert scale used was a three point Likert scale, accordingly at the end what had been considered for responses was “High” for “Very High and High” responses, “Medium” for “Medium” responses, and “Low” for “Very Low and Low” responses.

Regarding the questionnaires it is necessary to mention that by using questionnaires an exploratory and the necessary surveys, including any interview were done; 130 questionnaires, provided by applying the Likert Scale, were distributed among the related experts, professionals, graduate and post-graduate students as well as the related authorities of which 92 validated questionnaires returned. For obtaining the final result an exploratory research was required and at the end by applying the Mann-Whitney U Test using the SPSS statistics the research finalized as a quantitative research. So by distributing questionnaires in this way and by focusing on special groups of executors and the related authorities and persons, the opinions of the related focus group for this research were gathered and then by applying the

Mann-Whitney U Test using the SPSS statistics concluded, the content analysis was done, too.

The questionnaires distributed in Tehran. Tehran is a metropolitan. Therefore, in nature it has this capacity with high probability to include people even the related experts, professionals, students and

also high ranked authorities, who filled in the questionnaires, from different ethnic groups and/or from other provinces other than Tehran, living in it.

The organizations and university colleges and schools as well as individuals that returned the validated questionnaires after filling them in, were:

- Ministry of Culture and Islamic Guidance: Undersecretary for Press and Information
- Ministry of Science, Research and technology: Institute for Humanities and Cultural Studies
- Ministry of Culture and Islamic Guidance: Bureau of Media Studies and Planning
- Ministry of Culture and Islamic Guidance: Bureau of Cultural Activities Studies and Planning
- A Police Station
- IRIB: TV2
- School of News Network
- Telecommunications Company of Iran: TCI1
- Contacting some of the Iran's TV directors and requesting their cooperation to fill in the questionnaires

RESULTS

This is necessary to point that in the process of reviewing literatures not only the common parameters as social and cultural risks were determined but also the way each country treat the risks (parameters) and try to control or face with it, were identified too. Also each parameter was related to the questions of the questionnaire with the same order of the questions mentioned in the questionnaire. (Table 1)

There were 20 questions in the questionnaire, out of which 10 were related to social risks and 10 were related to cultural risks. Considering the Table 2, there were eight questions of the questionnaire which were statistically significant according to the followings:

Social risks: The questionnaire's question numbers 1, 2, 3, 7, 8, 9, 11, 12, 19 and 20 are related to social risks. Out of them numbers 2, 3, 8, 11, 19 and 20 are statistically significant.

Cultural risks: The questionnaire's question numbers 4, 5, 6, 10, 13, 14, 15, 16, 17 and 18 as of numbers 5 and 13 are statistically significant.

Considering equal numbers of questions for each type of risks, i.e., social risks and cultural risks (ten questions each and twenty in total), it can be noted that the number of the social risks which were statistically significant were more than the number of cultural risks (6>2).

In "other countries mean ± SD" column, when 3±0 it means that all the countries show the same value for that special parameter, therefore there is not any standard deviation for that parameter.

Here the aim was to do a research based on risk management process by a comparative study to present how to apply them to face with the risks arising from satellite media that have negatively

impacts on the attitudes and mental health of individuals that even may lead to physical harm, as well as families and consequently the social health and as a whole, humans and human dignity. Therefore, there was no aim to reject or accept any countries' method for confronting with social and cultural risks so there was no null and alternative hypothesis in this respect. However for the attention of the related organizations and authorities, this article presented the related statistical significance for Iran and all other countries under study. Therefore, for the applied objective of this research, making decisions and taking strategies and policies by the authorities could be more accurate.

Table 1. Comparing Countries based on Criteria (Parameters)

Criteria (Parameters) / Countries	South Korea	Malaysia	Turkey	The United Kingdom	The United States	Islamic Republic Of Iran
1-Country Independency	High	High	High	High	High	High
2-Media Owners Concentration on Profitability and inattention to Social and Cultural Issues	Medium	Low	Low	Low	Low	Low
3-Social and Cultural Combinations such as towns and cities, ethnic combinations, religious combinations, and as the result producing special programs for different ethnic groups and minorities	Low	High	Low	High	High	High
4-Penetration and Content provided by users	High	High	High	High	High	High
5-Families Norms and Values	Low	Medium	Low	Low	High	High
6-Media and Kids	High	High	High	High	High	Low
7-Civil and Social Activities	High	High	High	High	High	Medium
8-Limitations to Reaching and connecting to Media	Low	Low	Medium	Low	Low	Medium
9- Censorship (Obstacles to Internet Freedom)	Medium	Medium	High	Low	Low	Medium
10-Limitations on contents	Medium	Medium	High	Low	Low	Medium
11-Violations of Users Rights	Medium	Medium	High	Low	Low	Medium
12-Connection Speed	High	High	Low	High	High	Low
13-Pornography and Nude	Low	Low	Low	Medium	High	Low
14-Violence	High	High	High	High	High	Medium
15-Insulting to Ethnic Groups	High	High	High	High	High	Low
16-Language	High	Medium	High	High	High	High
17-Crime	Medium	Low	High	High	High	Low
18-Sexual Rapes and Media Influences on Sexual Intention and/or the related News in Media	High	High	High	High	High	Low
19-Anti-American Activities which may have Influence on producing programs	Low	Low	High	Low	Medium	High
20-Speech Freedom (Press Freedom)	Medium	Low	Low	Medium	Medium	Medium

Table 2. Comparing Countries based on Criteria (Parameters) Based on the questionnaires through the Mann-Whitney U Test using SPSS Statistics

Criteria (Parameters)	Iran mean±SD	Other Countries mean±SD	p-value
1-Country Independency	2.82±0.46	3±0	0.361
2-Media Owners Concentration on Profitability and inattention to Social and Cultural Issues	2.75±0. 5	1. 2±0.44	<0.001
3-Social and Cultural Combinations such as towns and cities, ethnic combinations, religious combinations, and as the result producing special programs for different ethnic groups and minorities	2.89±0.3	2. 2±1.09	0.022
4-Penetration and Content provided by users	2.74±0.51	3±0	0.24
5-Families Norms and Values	2.74±0.57	1.6±0.89	<0.001
6-Media and Kids	2.67±0.61	3±0	0.213
7-Civil and Social Activities	2.55±0.72	3±0	0.143
8-Limitations to Reaching and connecting to Media	2.51±0.69	1.2±0.44	0.001
9- Censorship (Obstacles to Internet Freedom)	1.85±0.79	1.8±0.83	0.888
10-Limitations on contents	2.31±0.73	1.8±0.83	0.152
11-Violations of Users Rights	2.48±0.72	1.8±0.83	0.045
12-Connection Speed	2.85±0.43	2.6±0.89	0.481
13-Pornography and Nude	2.5±0.69	1.6±0.89	0.018
14-Violence	2. 8±0.47	3±0	0.327
15-Insulting to Ethnic Groups	2. 91±0.28	3±0	0.488
16-Language	2. 91±0.38	2. 8±0.44	0.22
17-Crime	2. 68±0.55	2.4±0.89	0.437
18-Sexual Rapes and Media Influences on Sexual Intention and/or the related News in Media	2.82±0.44	3±0	0.34
19-Anti-American Activities which may have influence on producing programs	2.43±0.76	1.6±0.89	0.031
20-Speech Freedom (Press Freedom)	2.72±0.57	1.6±0.54	<0.001

Here: The P-Values can be seen in the Table 2 and the Table 3. Also in the Table 3, in comparing Iran with the other selected countries the P-Values both for cultural risks control and social risks control are ≤ 0.05, so it means they are statistically significant.

Referring to the related percentages which were displayed in the Table 4, the Final Model, displayed in the last column of the Table 5 below, was designed based on the highest demands chosen by the respondents of the questionnaires. Though, the related percentages were displayed in the Table 4, needed some explanations. These explanations presented down here too. Then the Final Model compared with the present situation and the proposed situation, and all were shown in the Table 5.

Table 3. Comparing Countries based on Criteria

Risks	Iran mean±SD	Other Countries mean±SD	p-value
Social Risks	2.58±0.28	2±0.07	<0.001
Cultural Risks	2.71±0. 27	2. 52±0.19	0.047

Table 4. The questionnaires after going through the process of the Mann-Whitney U Test using SPSS Statistics

Criteria (Parameters)	Low	Medium	High
1-Country Independency	3(3.4%)	10(11.2%)	76(85.4%)
2-Media Owners Concentration on Profitability and inattention to Social and Cultural Issues	3(3.4%)	16(18.0%)	70(78.7%)
3-Social and Cultural Combinations such as towns and cities, ethnic combinations, religious combinations, and as the result producing special programs for different ethnic groups and minorities	0(0.0%)	9(10.1%)	80(89.9%)
4-Penetration and Content provided by users	3(3.3%)	17(18.9%)	70(77.8%)
5-Families Norms and Values	6(6.9%)	10(11.5%)	71(81.6%)
6-Media and Kids	7(7.8%)	15(16.7%)	68(75.6%)
7-Civil and Social Activities	12(13.5%)	16(18.0%)	61(68.5%)
8-Limitations to Reaching and connecting to Media	10(11.4%)	23(26.1%)	55(62.5%)
9- Censorship (Obstacles to Internet Freedom)	36(39.6%)	32(35.2%)	23(25.3%)
10-Limitations on contents	14(15.9%)	33(37.5%)	41(46.6%)
11-Violations of Users Rights	12(13.3%)	22(24.4%)	56(62.2%)
12-Connection Speed	3(3.3%)	7(7.8%)	80(88.9%)
13-Pornography and Nude	10(11.6%)	23(26.7%)	53(61.6%)
14-Violence	3(3.3%)	12(13.2%)	76(83.5%)
15-Insulting to Ethnic Groups	0(0.0%)	8(8.9%)	82(91.1%)
16-Language	3(3.3%)	2(2.2%)	85(94.4%)
17-Crime	4(4.4%)	21(23.1%)	66(72.5%)
18-Sexual Rapes and Media Influences on Sexual Intention and/or the related News in Media	2(2.2%)	12(13.5%)	75(84.3%)
19-Anti-American Activities which may Have Influence on Producing programs	15(16.9%)	20(22.5%)	54(60.7%)
20-Speech Freedom (Press Freedom)	6(6.6%)	13(14.3%)	72(79.1%)

Table 5. The Final Model displayed on the last column; Comparing Iran based on the present paradigm, the researcher's proposed paradigm and the questionnaires for Iran"1

Criteria (Parameters): Iran	The Classification of Criteria in Iran (Present Situation)	The Proposed Classification of Criteria in Iran	The final model for Iran Based on the Questionnaires Through the Mann-Whitney U Test using SPSS Statistics
1- Country Independency	High	High	High
2- Media Owners Concentration on Profitability and Inattention to Social and Cultural Issues	Low	Low	Low
3- Social and Cultural Combinations such as towns and cities, ethnic combinations, religious combinations, and as the result producing special programs for different ethnic groups and minorities	High	High	High
4- Penetration and Content provided by users	High	High	High
5- Families Norms and Values	High	High	High
6- Media and Kids	Low	High	High
7- Civil and Social Activities	Medium	Medium	High
8- Limitations to Reaching and Connecting to Media	Medium	Medium	Low
9- Censorship (Obstacles to Internet Freedom)	Medium	Medium	Medium
10- Limitations on contents	Medium	Medium	Low

11- Violations of Users Rights	Medium	Low	Low
12- Connection Speed	Low	High	High
13- Pornography and Nude	Low	Low	Low
14- Violence	Medium	Low	Low
15- Insulting to Ethnic Groups	Low	Low	Low
16- Language	High	High	High
17- Crime	Low	Low	Low
18- Sexual Rapes and Media Influences on Sexual Intention and/or the related News in Media	Low	Medium (training based on Islamic doctrines via media)	High
19- Anti-American Activities which may Have Influence on Producing Programs	High	High	High
20- Speech Freedom (Press Freedom)	Medium	Medium	High

Required Explanations and Interpretations for Some Parts in the Table 5 Needed for Designing the Final Model

Regarding the question number 2, the result of "High" response was due to the way the question was asked, as in the questionnaire the word "must not" applied in the related question. Therefore, based on the "High" response, what here should be considered is to choose "Low" in the final model.

Considering the question number 8, the majority agreed there is no need to have restrictions on an overall access to the media for users. Therefore, the researcher used "Low" for the final model.

Considering the question number 10: Most respondents believe that there is no need to have restrict on contents. So, it means that Limitations on contents should be "Low". Therefore, the researcher considered "Low" in the final model.

Also, for the question number 11, most respondents believe that there is no need to ban users' activities so it shows "High". Therefore, it means that there should be "Low" Violations on Users' Rights. So "Low" was used for the final model.

Also the same happened for the question number 13. Based on the question number 13, most responses were based on emphasizing to ban nude and pornography. So the "High" response emphasize on banning nude and pornography, therefore "Low" applied in the final model.

The same for the question number 14 happened as well. "High" is the result for the question number 14. It means that most respondents agreed on this point that the violence in Iran should be "Low". Therefore we have "Low" in the final model.

For the question number 15 most respondents agreed that media are obliged to impose special controls to prevent offenses against official minorities. So the response "High" means that there should be no insulting to ethnic groups, so the answer for the final model is "Low"

For question number 17: With the restrict control of the authorities, to what extent should cybercrime in Iran be reduced to zero? The result is “High”, therefore what considered for the final model was “Low” that means the crime should be reduced to zero.

DISCUSSIONS AND CONCLUSIONS

By going through the literature review and for designing a new final model for Iran, in this article, based on a comparative method, different contexts of the process of satellite media operations studied to discover the social and cultural risks control of satellite media in the randomly selected countries, i.e. England, South Korea, Malaysia, Turkey and The United States of America and then compared with Iran itself. What was considered for designing the final model, was to select a range of five countries of which some of them have close similarities with Iran in culture and religion and on the other hand, of which some of those developed countries with unique specifications of their own, which are considered as the origin of the modern media or with regarding to some other aspects, they are involved in it. Based on the studies which were done for this research, twenty variables as independent variables which were common among all the selected countries, were identified. Ten of the total twenty were related to the social risks control and the remaining ten were related to the cultural risks control. Taking this point into account that the social risks control and the cultural risks control were both considered as dependent variables. For identifying independent variables in this article, the risk management process and its exact definition on risk and its related definitions and expressions, based on ISO 31000 and other related books and articles, studied while considering the subtle risk management point of views as well.

Then a questionnaire with twenty questions based on the same twenty variables which were common among the selected countries, was provided and over 130 of them distributed among the related experts and media professionals including high official authorities working in related organizations as well as graduates and post-graduate students studying in different majors of media. However of 130 questionnaires distributed, just 92 validated questionnaires were returned.

Finally the data gathered went through a statistical process by the Mann-Whitney U Test using SPSS Statistics. With regard to social risks control 6 out of 10 questions are statistically significant, i.e. question numbers 2, 3, 8, 11, 19 and 20 were statistically significant.

On the other hand with regard to cultural risks control just 2 out of 10 questions were statistically significant which were the question numbers 5 and 13. Also in comparing Iran with the other selected countries, the P-Values both for cultural risks control and social risks control were ≤ 0.05, so it means they are statistically significant.

The new final model (the last column of the Table No.5), as an applied model, helps the medical health research centers and institutes, public health research centers and institutes, media firms and organizations and the related organizations get familiar with the fact of the society in Iran-limited to

Tehran. The related authorities can consider this result in their own decision makings and procedures, and also medical health and public health professionals as well as media experts and professionals can consider this when fulfilling their own duties and responsibilities.

Also this process of assessment that obtains an applied model can be developed to AI and the Metaverse or any other new technologies of this kind that are being born or not born yet.

Though there are plenty of researches and operational cases done by risk management in different fields and also, though there are different types of researches done related to the parameters of this article, during the period of time that this research was started and finished, there was no research like this, it means applying the risk management approach and techniques along with other research methods and then using the Mann-Whitney U Test and SPSS statistics. It is just a new way and method that has been introduces by this research."[1]

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