A Technical Way to Control Risks of Satellite Media to Protect Children and Adolescents Health: Comparing Countries with Iran

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Background: This article is based on this view that by using the technology of satellite media, any related risk that can have impact on children and adolescents, are come about; consequently, some actions should be taken to deal with these risks for taking them under control.

Objective: In order to prevent any kind of direct and/or indirect negative impacts of satellite media on children and adolescents, such as self-harm and suicide (Blue Whale Challenge Game as a social network phenomena) and cyberbullying, the objective of this article was to display a technical way through which it is possible to identify risks of satellite media that children and adolescents are exposed to them as well as reaching to a result for Iran.

Methods: 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 children and adolescents. Therefore this research can be considered as an applied research too.

Findings: By comparing five countries which were randomly selected from almost each continent along with Iran, focused on Tehran as a metropolitan counting different ethnic groups, risks of satellite media which have impacts on children and adolescents and were in common among all those countries, were identified by risk management techniques. Then the comparative and analytical studies and appraisals as well as statistical processes revealed that Iran’s current media approach and its performance towards children and adolescents are quite different from the other five countries that Iran was compared to.

Conclusion: A new technical way to approach risks of satellite media to control them for preventing children and adolescents from any kind of media risks plus a new result for Iran obtained. As an applied research the new result showed that an immediate action is required to regulate media standards for children and adolescents and also to modify the current situation of Iran’s media approach towards them.
Introduction

The rapid speed of media progress due to the rapid growth of super-modern technology in the world is undeniable.

“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.” (1) (2) Consequently, rapid technology progresses may cause new risks to develop.

“The media today is a multi-faceted beast. The world is moving away from outlets like newspapers into a more technological and modern sphere of communication. Now, many of us get our news from social media and our broadcasts are consumed by television or by online streaming or video-sharing services. However, to understand the impact of certain technologies, we need to consider how we, as a society, consume them. Of course, no technology is responsible for all the convenience we have in technology today. One technology that has had a huge impact, though, is satellite technology.” (3) “Today’s children and adolescents are immersed in both traditional and new forms of digital media. Research on traditional media, such as television, has identified health concerns and negative outcomes that correlate with the duration and content of viewing. Over the past decade, the use of digital media, including interactive and social media, has grown, and research evidence suggests that these newer media offer both benefits and risks to the health of children and teenagers. Evidence-based benefits identified from the use of digital and social media include early learning, exposure to new ideas and knowledge, increased opportunities for social contact and support, and new opportunities to access health promotion messages and information. Risks of such media include negative health effects on sleep, attention, and learning; a higher incidence of obesity and depression; exposure to inaccurate, inappropriate, or unsafe content and contacts; and compromised privacy and confidentiality.” (4) Worse, all these media and media satellite can have negative impacts on the behavior of children and adolescents in the real life, such as self-harm and suicide just like the bitter terrible experience we had with Blue Whale Challenge Game or the effects of cyberbullying in their real life.

The role of globalization and the number increase in satellite media, including social media as well as satellite radio and TV networks are quite recognizable. Lots of researches and articles have been done on the impacts of media in different societies and this field has been almost always in the core of attention and as the result of everyday progress of this kind of technology, new discussions, arguments and perspectives have been started. By going through lots of studies on the impacts of media either positive or negative, and considering this point that each society has its own culture 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.

Though the globalization might have its own positive impacts but in fact the problem is that it can be considered as a risk too, which practically has this potential to be against the national culture and individual identities. The impact of technology progress is quite recognizable in daily changes. Unimaginable changes in social media occurs, such as continuous creation of new hardwares, softwares and applications as well as continuous updating of all kinds of social media such as Instagram, Telegram and the like, which are quite tangible. On the other hand, digital as well as satellite TVs by broadcasting programs, through a wide variety of local and satellite networks, as well as high-tech internet and social media 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 media have direct and indirect impact on children (C) and adolescents (A). Regarding penetrating impacts of media and nowadays penetrating impacts of super modern technology of media 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. Though it is an opportunity for C&A to get acquainted with nations’ culture, there is a risk for children and adolescents negatively to be affected by other nations’ culture 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. 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 and adolescents.

Social media has specifically provided the ability of transmission of information, concepts and ideas by users themselves. It means that a user who can be even a child or adolescent may be both a sender and/or a receiver (audience) unwanted or even at any time he/she wishes.

This article tried to address those individuals for what they are responsible for, either who are responsible in medical health research centers and institutes, public health research centers and institutes, media firms and organizations or the related ones. Of course whole through any medical health, public health and media 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, particularly, here in this article, responsible in satellite media (all types of media that originates from and controlled and supported through satellites and their operations) to prevent any kind of direct and indirect physical and mental harm and bullying and cyberbullying and in general media risks that are caused by using satellite media that have impacts on individuals particularly on children and adolescents.

A long with formal individuals and authorities, these are parents who need to identify the risks which media may generate for their own children and adolescents 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 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.

Almost there is nowhere on the earth where is not under the control and coverage of satellites and 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. In nature, though quite shining the progress of technology is, this accessibility can be incredibly considered as a horrific step from some other point of views; it means it can be considered as a destructive risk too.

More specifically, the final result of this research is applicable in Iran, too. Though the research location was 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 question 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 identify, treat and confront with the satellite media threats and risks by applying “risk management process and managing risks in the related organizations” (5) (6) (7) (8) (9) (10) to manage and control the media risks, of any type, which are harmful for societies counting individuals including children and adolescents.

The process of risk management is easily able to cover and supports quite a wide variety of risks and risk areas in media and in general, the whole media and its operations as an entity. Also this article, though with limitations, tried to identify media risks for children and adolescents (C&A) and to display a new procedure to assist controlling the related risks to manage, treat or even prevent at least a part of harmful consequences in relation with satellite media, since unknown risks of modern communication technologies make the future of a society quite uncertain and even negative impacts of the media can lead any society to an unpleasant future; Therefore the generations and particularly young generations at any time can be affected by media risks and on the other hand, the national culture, the personalities and individual identities can be exposed to change. Important to say that, this change can have its own risks.

The final findings can be found useful particularly by medical health research centers and institutes, public health research centers and institutes, media firms and organizations and those organizations and the related departments which their responsibility is to supervise media activities to protect children and adolescents against risks due to using media.

Media and media areas of any kind need to operate risk management techniques and principles and also processes their own risks, which have impacts on children and adolescents; so at their next step they would be able to analyze, evaluate and treat the risks or in other words manage and control the risks they discover. Considering media and media management, “the risk management process (as ever) should be: an integral part of management, embedded in the culture and practices, and tailored to the business processes of the organization”. (11) (12)

It should be noticed that even in media “risk treatment involves a cyclical process of: assessing a risk treatment; deciding whether residual risk levels are tolerable; if not tolerable, generating a new risk treatment; and assessing the effectiveness of that treatment.

Risk treatment options are not necessarily mutually exclusive or appropriate in all circumstances. The options can include the following:

Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk; Taking or increasing the 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); and Retaining the risk by informed decision.” (13) (14)

And what that should never be forgotten is that in brief: “Risk is the effect of uncertainty on objectives and risk management coordinated activities to direct and control an organization with regard to risk.” (15) (16) The definitions of risk and control separately are small sentences but with main key keywords and concepts.

“An effect is a deviation from the expected — positive and/or negative.

Objectives can have different aspects (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization wide, project, product and process).

Risk is often characterized by reference to potential events and consequences, or a combination of these.

Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence. Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood. Control means measure that is modifying risk. Controls include any process, policy, device, practice, or other actions which modify risk.

Controls may not always exert the intended or assumed modifying effect.” (17) (18)

Here in this article, the way through which the media risks and risks control of countries under survey for
children and adolescents were identified, was based on the definition of risk according to the risk management techniques definitions, considering ISO 31000.

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’s 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.

The objective of this article, though based on limitations, is to identify risks of satellite media to prevent their negative impacts on children and adolescents by applying a new technical way.

Methods

Though there are a plenty of projects and researches done and conducted on different cases by applying the risk management techniques, this research is actually a new technical procedure which is done by considering the risk management techniques mixing with research methods on media and its related cases including children and adolescents health. And also though there are other researches considering risks of media on health, they are not based on the definitions of the risk management for identifying risks.

What was considered for going through and starting the procedure of this research, 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 procedure of selection it was tried to have a country from almost each continent plus one of the south-east Asian countries.

Regarding the media related question on children and adolescents, the questionnaires distributed among the related experts, professionals and students as well as high ranked related authorities 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.

So based on the explanations above, both probability and non-probability samplings were applied in this research. Also due to having a determined target to reach to the final result, the purposive sampling was applied too.

The main aim of this article was to do a research that its results can be applied in managing the risks of satellite media for children (C) and adolescents (A) (C&A). Also as above mentioned five countries with particular features including development in media technology, as well as historical, social and religious similarities with Iran, were selected randomly and surveyed. One of the common criteria was C&A and Media that went under survey and then studied and analyzed, and then the selected countries as the paradigms were compared with each other.

The framework of this research was a comparative study that at the outset it required a qualitative research. A descriptive research was what needed for studying and comparing the parameter or in other words the criterion. Case studies and analytical studies were of high importance, to gather data of any kind related to the research including statistical data as well as information, to be studies and analyzed. Then 130 questionnaires 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.

It should be noted that after comparing and analyzing the criterion in the countries under-survey to Iran.
based on all the facts gathered and analyzed, the researcher proposed a related action to be taken in Iran, that after the statistical processes of the questionnaires mentioned above, the new result was matched with the action that the researcher had proposed.

Based on the studies done on the selected countries and also considering the risk management process, “C&A and Media” was considered as one of the cultural independent variables which was common among all the selected countries.

**Findings**

This is necessary to point that in the process of reviewing literatures not only the subjects relating to Media and C & A were studied and analyzed but also the way each country treat its related risks and try to control them were identified too. (Tables No. 1 & 2)

**Figure 1: The Dependent and Independent Variables Based on the Question Surveyed**

![Figure 1: The Dependent and Independent Variables Based on the Question Surveyed](image)

**Table No.1: Classification of Media, Children and Adolescents in each and every country understudy: Current Situation**

<table>
<thead>
<tr>
<th>Paradigm (Country)</th>
<th>Media and C&amp;A</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea (19) (20) (Republic of Korea)</td>
<td>High</td>
</tr>
<tr>
<td>Malaysia (21) (22) (23)</td>
<td>High</td>
</tr>
<tr>
<td>Turkey (24)</td>
<td>High</td>
</tr>
<tr>
<td>United Kingdom (25) (26) (27) (28) (29) (30)</td>
<td>High</td>
</tr>
<tr>
<td>United States (31) (32) (33) (34) (35) (36)</td>
<td>High</td>
</tr>
<tr>
<td>Iran (37) (38)</td>
<td>Low</td>
</tr>
</tbody>
</table>

Hint: Level of legislation (including blocking and filtering issues), counselling and prevention for children and adolescents wellbeing in using media as well as supporting parents by government or any organization and also efforts taken for media literacy. The best level which is here required is a “High Level”.

In this article, after providing the current situation, a proposed situation was determined based on the evidences and conditions of Iran- limited to Tehran. Then the related question along with other questions
as a questionnaire were distributed among the related experts and professionals. In “other countries mean ± S.d” column, when 3±0, 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 by a comparative study to present the final applied result based on facts. Therefore, there was no aim to reject or accept any countries’ method of media risks control, 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, if any. Therefore, for the applied objective of this research, making decisions and taking strategies and policies by the authorities could be more accurate.

Here:
A P-Value which is between 0 and 1 is what usually the level of statistical significance can be displayed by.
When a P-Value ≤ 0.05, it means it is statistically significant.
When a P-Value > 0.05, it is not statistically significant.
The Final result, displayed in the last column of the Table No.5 below, was designed based on the highest demands chosen by the respondents of the related question. The related percentages were displayed in the Table No.4. Then the final result compared with the current situation and the proposed situation and all were shown in the Table No.5.

The question, based on which the final result for Iran was obtained, was distributed among and filled in by the experts and media professionals in Tehran.
The Question related to Media and C&A:
“Considering the application of specific standards to make an overall impression on the group under 18 years old against inappropriate cultural intrusions of other countries, to what extent is the concentration of overall media operations of special importance?”

The question related to Media and C&A, as a cultural fact, prepared for this research along with other media related questions was 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.
The organizations and university colleges and schools as well as individuals that returned the validated questionnaires after filling them out, 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
- The School of News Network
- Telecommunications Company of Iran: TCI1
- Some of the Iran’s TV directors and requesting for their co-operations to fill in the questionnaire

Table No.2: Comparing Countries based on Media and C&A: Current Situation

<table>
<thead>
<tr>
<th>criterion (Parameter) / Countries</th>
<th>South Korea</th>
<th>Malaysia</th>
<th>Turkey</th>
<th>The United Kingdom</th>
<th>The United States</th>
<th>Islamic Republic Of Iran</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media and C&amp;A</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>
Discussions and Conclusions

No exact similar studies and researches done by applying the risk management technical way mixing with other research methods as applied in this research for media cases of any kind including Media and C&A. This is the first ever study and research done using the risk management techniques for identifying media risks considering children and adolescents mixing with other research methods. However the risk management techniques have been applied and they are quite necessary as a standard technical way and method to identify and treat risks by applying its procedure in any aspect of life and there are lots of researches and operational cases done by the risk management in several fields, cases and projects. Applying the risk management and its analysis techniques in media based on the way that was conducted in this research had not been already done.

Considering the Children and adolescents health researches based on risks point of views, it can be referred to a research titled as “Social Media and Health Care Professionals: Benefits, Risks, and Best Practices” cited on the National Center for Biotechnology Information (NCBI) website, which is still not based on the Risk Management Techniques. Another research that was conducted titled as “Maximizing Opportunities and Minimizing Risks for Children Online: The Role of Digital Skills in Emerging Strategies of Parental Mediation” (The Journal of Communication, Wiley Online Library, 2017) mostly focused on parents roles but still not mentioned anything regarding the risk management techniques mixing with the research methods to get their results.

Also in a research done titled as “Assessment and Management of Suicide Risk in Children and Adolescents” cited on the US National Library of Medicine National Institutes of Health website (ncbi), there is a closer look on the risk assessment of suicide among children and adolescents which can be considered as a part of the risk management techniques. However first of all it is not directly related to media at all and on other hand the procedure which was conducted through the mentioned above research is quite different from the research conducted in this article.

Considering the comparative study, by going through the literature review and for obtaining a new result for Iran, different contexts of the process of satellite media operations studied, to discover the methods applied to control the risks of satellite media to protect children and adolescents in the randomly selected countries, i.e. England, South Korea, Malaysia, Turkey and The United States of America and then they were compared with Iran itself. What was considered for obtaining the final result, 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 were 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, Media and Children and Adolescents were

Table No.3: Comparing Countries based on Criterion (Parameter) through the Mann-Whitney U Test using SPSS Statistics

<table>
<thead>
<tr>
<th>criterion (Parameter)</th>
<th>Iran mean±S.d</th>
<th>Other Countries mean±S.d</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media and C&amp;A</td>
<td>2.67±0.61</td>
<td>3±0</td>
<td>0.213</td>
</tr>
</tbody>
</table>

Table No.4: The percentages obtained for the question of the criterion after going through the process of the Mann-Whitney U Test using SPSS Statistics

<table>
<thead>
<tr>
<th>criterion (Parameter)</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media and C&amp;A</td>
<td>7(7.8%)</td>
<td>15(16.7%)</td>
<td>68(75.6%)</td>
</tr>
</tbody>
</table>

www.jbe.tums.ac.ir
identified as a criterion which is common among all the selected countries. The Media and C&A criterion was considered as a cultural risk. For identifying the independent variable in this article, it means Media and C&A, the risk management process and its exact definition on risk and its related definitions and expressions, based on ISO 31000 and the other related books and articles, studied while considering the subtle risk management point of views as well. Then a media related questionnaire including the Media and C&A question along with other related media questions based on the related variables which were common among the selected countries, was provided and over 130 of them distributed in Tehran 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 Mann-Whitney U Test using SPSS Statistics. With regard to the Media and C&A question, with 0.213 as its P-Value, the question was not statistically significant. The Table No. 5 shows that the action proposed by the researcher was verified based on the answers of the questionnaires and statistical processes. It means that the level of legislation, including blocking and filtering issues for children and adolescents, as well as counselling and taking actions for further preventions to protect children and adolescents from any kind of media risks and also supporting their wellbeing in using media as well as supporting parents by government or any organization and also taking all efforts for media literacy in this regards should be considered of high importance and necessary immediate urgent actions should be taken by the related authorities.

The new final result (the last column of the Table No.5), as an applied result, 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.

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