Engagement with science through audiovisual media is, at least to a certain extent, an active rational behaviour of audiences, which have two analytically different expressions: selection of science content in audiovisual media and reception of science content in audiovisual media. The aim of this paper is to discuss what motivates different audiences to watch science programmes on television, and to compare results and analyses between different European countries. Data was obtained by carrying out 40 focus group discussions; these took place in five European member states: Germany, Finland, Greece, Bulgaria and Ireland.

Results

Table 1 shows the categories into which motives of engaging with science (through media use) are classed. Categories and classification were taken from Katz and Gurevitch (1976: p. 220)

<table>
<thead>
<tr>
<th>Referent</th>
<th>Self</th>
<th>Peers</th>
<th>Society</th>
<th>Tradition, Culture</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition (acquiring, increasing knowledge, understanding)</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Affect (increasing/acquiring emotional experiences)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Integration (rising social status, trust, stability)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

The following list gives motives for engagement with science as expressed in the focus group discussions.
Cognitive motives

- Expanding the limits of individual worlds by getting insights into completely unknown worlds
- Enrichment of known worlds by unknown scientific explanations
- Increasing understanding the world around
- Increasing understanding of self

Affective motives referring to self

- Becoming fascinated
- Becoming surprised
- Becoming inspired to search for further information
- Avoiding the feeling of wasting time
- Increasing ability to unwind from daily routine (self)

Integration

- Becoming orientated to the world in the future (world)
- Becoming orientated to behave rationally (self)
- Formation/confirmation of own identity (self)
- Rising social status (peers)
- Gaining expertise which will be requested by others (peers)

Interaction

- Gaining interesting things to talk about (peers)

In focus group discussions, motives did not appear clearly distinguishable one from the other. The statements by participants indicate that different motives are strongly connected with each other. The perception that science provides new information is crucial for understanding the motivation for engagement with science by participants in all focus group discussions. The motive of increasing knowledge about the unknown is generally connected with other motives.

The next section is a more qualitative description of selected motives for engagement with science as expressed by participants in focus group discussions.

Cognitive motives connected with cognitive arousal and integration

German participants expressed views that science (or science programmes) provides insights into completely or largely unknown phenomena: this is why participants liked science and/or science programmes. Statements were sometimes accompanied by remarks like “getting fascinated”, “getting impressed”; “getting inspired to go deeper into a subject”. Some German participants found that science provides explanations for well-known phenomena; this was why participants liked science programmes especially.
Learning about the unknown is also connected with the adjustment and/or development of individual world views by new scientific findings. Florian, 39, when asked what prompted his interest in science responded by saying: “The acquisition of understanding, of insight – for me, personally. In the best case to also create a new conception of the world”. Some German participants liked science because it orients them in different areas of everyday life and new scientific findings influence every day routines and habits.

According to Finnish participants new knowledge helped them understand how things work and new ideas helped them to understand themselves and other human beings as well as past and present societies. In a group composed of students of upper secondary schools practically everyone replied to the question by saying how science could help them personally in orientation in life or in becoming a better person. “When you learn more you can understand bigger entities and how things are linked with each other.” (Iiris K., group no. 3).

Bulgarian participants talked about education and knowledge the most and described their interest and engagement with science as an internal need they felt. The reasons they gave were, among others: “an opportunity to gain knowledge of the world”, “need for knowledge”, “need for information”, “teaches you something new”, “to know who we are and where we came from”, “We can learn from these shows what can be expected in the future in various areas of science and technology, what will happen in the future”, “to get facts and information on different topics”, for example: “Only in shows like these you can see the progress that mankind has made, what is the newest thing in different spheres of science. More or less we must be informed”.

In Greece older participants added the dimension of education or information. This was done exclusively by the 50+ group. Participants liked science because of the fact that “you learn something” [Rosa, 54] and “get informed about problems” or “learn about the unknown you would like to understand better” [Aristidis, 61].

Cognitive motives connected with other affective motives

This combination did appear less often compared to other combinations, it was explicitly mentioned in discussions in Germany, Bulgaria and Ireland. In Germany, Martin, aged 32 said: “It’s also a pastime activity, to be quite trivial. When I switch on the TV there’s quite some bullshit on and these programmes (science programmes) stand out against the other ones by letting time fly by rapidly. They’re also quite interesting even if you don’t derive any personal utility from them and just watch them to relax and to learn something about a topic you’d never heard of.”

Bulgarian participants mentioned entertainment and recreation as contributing to their interest in science and science programmes. Specifically, they mentioned that it: “helps you unwind from the daily grind”, “pleasurable intellectual effort”, these programmes, according to participants, are more interesting than most of the entertainment programmes and talk shows shown on TV (“We prefer them to the Turkish soap operas, which have flooded television”).

Watching science programmes, particularly blue-chip documentaries rather than more entertainment-based formats, was perceived by Irish participants as being a worthwhile activity. Participants said that they enjoyed watching high-quality programmes. One 16-year-old
male student said he liked to watch such programmes because: “It gives you a break away from all the reality TV. It gives you interesting stuff that is real”.

Summary
The focus group discussions illustrated that participants engage with science by choosing to watch science programmes on television. They are motivated to watch these programmes because of:
(a) the perceived personal functionality of science (in media)
(b) the perceived characteristics of the medium that transmits science content
(c) their perceived personality traits (curiosity)

In this paper we focused on the first two aspects. The results obtained show that participants often did not draw a clear line between motives for their engagement with science and motives for engagement with science through watching science television programmes. Mixing up content and media was most clearly observed in Finland and Germany; both these countries have an estimated (comparatively) high number of science television programmes.

All in all, no meaningful differences with regard to motives for engagement with science across the different European countries studied were observed. There was not enough evidence to allow us to link differences in science programmes offered in a country with the expectations of participants in that country, which in turn could be linked to cultural differences or the like. Our findings suggest that participants, who claimed to be interested in science and claimed to use science in media frequently share very similar views across European borders.

References

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