

MEDIUM PREFERENCES OF CHILDREN AND ADOLESCENTS FOR CONTENT DISTRIBUTED BY THE MEDIA

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In this study, we examined the relationship between medium preference and content consumed, and the factors of preference by Israeli children and adolescents, with reference to socio-demographic characteristics. This is a mixed-method study. A total of 345 participants from Israel completed questionnaires. The findings indicate that the key factors in choosing a medium are availability, interactivity, diversity, and the ability to surf while performing other functions (Internet), and convenience (TV). Participants use the Internet most often, but when they can choose to watch certain content on the Internet or on TV, TV is the favorite medium for most content.

The media: A part of the child's life environment

Children today are exposed to a large selection of sources and channels of information. Many studies have shown that the media is playing an increasingly important role in the children's lives (Byron, 2008; Livingstone, Haddon, & Görzig, 2012; Livingstone, Mascheroni, Ólafsson, & Haddon, 2014; Ofcom, 2006; Taylor & Kitter, 2010; Zilka, 2016a, 2016b, 2014). Researchers (Atwal, Millwood-Hargrave, Sancho, Agyeman, & Karet, 2003; Comstock & Scharrer, 2007; Gatfield & Millwood-Hargrave, 2003; Holbert & Stephenson, 2003; Livingstone, 2008, 2007; Millwood-Hargrave, 2007; Millwood-Hargrave & Livingstone, 2006, 2009) have argued that because the media is part of our living environment, its influence in shaping the personality of a child is in its interaction with other environmental factors, which affect each other in different ways. The media is part of the natural social environment, which affects the children, and does not stand by itself. At the end of the day, the user decides what to use and when, according to his needs. A person grows, develops, and shapes his personality, attitudes, opinions, and beliefs, according to innate tendencies, and as part of a complex environment, which includes direct, face-to-face experiences, TV programs, virtual media, radio, and print

(Coleman, 2001; Eisen & Lillard, 2016; Millwood-Hargrave & Livingstone, 2009).

Researchers (Alexander & Hanson, 2003; Anderson & Murphy, 2003; Bryant & Zillman, 2002; Fowles, 2003; McQuail, 2005; Potter, 2003; Zilka, 2016b, 2014) have claimed that the media has a double effect on children and adolescents. On one hand, the media can make a positive contribution: it opens new horizons for their development and provides essential social learning. Exposure to a wide range of programs and media applications helps develop a worldview based on a broader continuum of experiences and stimuli than a worldview based on experiences without media, exclusively on face-to-face experiences in the immediate vicinity, and it broadens the mind and the possibility of equal opportunity and social mobility. On the other hand, children may build and consolidate their worldviews by exposure to content that is often unreliable, biased, and misleading (ACMA, 2007; Livingstone, 2013, 2015; Millwood-Hargrave & Livingstone, 2009; Ofcom, 2006).

Choosing a medium from the available supply

Because of the complexity of interactions between environmental factors that influence each other in different ways, researchers suggest testing diverse media according to similar parameters and questions, as well as the use of children and adolescents make of it, based on similar questions that relate to each medium (Millwood-Hargrave & Livingstone, 2009).

Many studies conducted in the US, Europe, and worldwide (Livingstone & Haddon, 2009; Millwood-Hargrave & Livingstone, 2009; Ofcom, 2006) found that television was the medium preferred by children and adolescents. Researchers found that children watched more than 15 hours of TV per week, and that 12- to 15-years-old watched even more than 17 hours per week. In the estimation of Comstock and Scharrer (2007), the significant feature that differentiates TV from the Internet is the interactivity of the Internet and the enormous variety of content, information, and applications available there. Millwood-Hargrave and Livingstone (2006) argued that the content selected is what is significant, whereas the channel or medium are less so. At times children watch the same program broadcast over the Internet in its entirety, without edits (for example, reality shows and programs in which certain parts had been cut out before broadcasting on television, are available online without censorship and editing).

Researchers (Leung, 2013; McQuail, 2010; West & Turner, 2007) found that media consumers are rational, thinking persons who choose from a variety of media, decide to what they will be exposed, and shape their consumption habits according to their needs.

Needs met by television

Children and adolescents have a need to understand the society in which they live; TV programs meet this need and serve as an alternative socialization process, which children need to experience. In the 1970s, researchers became aware of this source of socialization and claimed that TV programs provide an extended family of sorts, which represents a microcosm of society as a whole (Bandura, 1971, 1986; Nobel, 1976). Television programs are the arena where a child creates para-social interaction with a large number of stable and transient characters. Para-social interaction refers to the relations that viewers develop toward TV characters. The child identifies with the characters, which creates the para-social interaction. Viewers feel that they know the characters and perceive that they have the same feelings toward them as they do toward flesh-and-blood acquaintances, but they are not concerned that the TV character will criticize them (Bandura, 1971, 1986; Cole & Leeds, 1999; Hough & Erwin, 2010; Livingston & Das, 2010). The relationship that children develop with TV characters is similar to the relationships children used to have when they lived as part of an extended family within a tribe or a clan (Cole & Leeds, 1999), but without worrying about becoming the object of embarrassing, even humiliating criticism. Para-social interactions, which can provide opportunities to examine “how to behave” in a variety of situations, play the same role for children and adolescents as do real social interactions. They provide essential social learning: how to react to the extended social group, how to integrate into society, and how to avoid certain situations. Although TV programs can present models for many social roles, they do not provide consumers with a mirror image of themselves, nor with the feedback necessary for total development (Morgan & Shanahan, 2010; Rideout, Foehr, & Roberts, 2010; Vandewater, Bickham, & Lee, 2006; Wilson, 2011; Zilka, 2014). In recent years, reality shows have been gaining popularity. Researchers (Coyne, Robinson, & Nelson, 2010; Haridakis & Rubin, 2009; Hough & Erwin, 2010; Nelson, Springer, Nelson, & Bean, 2008) have found that these programs, devoid of script, staging, and editing, are rife with aggression, gossip, tale-telling, exclusion, and social manipulation to a much greater degree than recorded programs. Research has revealed that children identify with the characters on reality shows and with their behavior. Children and adolescents whose TV viewing is unbalanced, who watch many hours on their own, without involving parents or friends in the contents they are viewing, may be harmed (Conners-Burrow, McKelvey, & Fussell, 2011).

Needs met by the Internet

The Internet is an arena that hosts both modern and conventional media, offering a vast array of interactive possibilities. Internet users differ in their capacity to understand, analyze, appraise, create, and distribute content. They also differ in their success in using communication, information, and media technologies; in identifying and coping with harmful content; and in utilizing it for democratic and humanistic purposes, as well as for individual communal purposes (Livingstone *et al.*, 2012; McGonagle, 2011; Van Dijk, 2006; Zilka, 2016b, 2017).

The present study focuses on the relationship between the preference for a medium and the content consumed, and on the factors affecting that preference, among Israeli children and adolescents, with reference to their socio-demographic characteristics. Preference studies seek to understand a person's choice of a particular medium from a variety of media available to him. The study seeks to characterize the combination of characteristics and factors that contribute to preferring a certain medium of content.

The research focuses on individuals, on the child's choice of medium and content. What is the favorite medium of children and adolescents? Which is the favorite content of children and adolescents? Which is the favorite medium for consuming a specific content by children and adolescents? Is there a correlation between medium preference and content consumption, and the background characteristics of children and adolescents?

Method

Sample

The sample included 345 Israeli children and adolescents. The age range was 8-18, with a median of 15 ($M = 14.41$, $SD = 2.86$), and there were slightly more girls (52.4%) than boys. Participants were divided into two age groups: children (up to 8th grade or age 14; 46.2% of respondents), and adolescents (9th-12th grade, 53.8% of respondents).

Most participants (83.2%) were native Israeli, and the rest were born in the CIS (8.8%), Ethiopia (3.1%), or other (5.0%). Most (80.1%) reported that their parents were married; the rest reported their parents' marital status as divorced (13.8%), separated (3.7%), or other (5.7%). Regarding domicile, 41.9% reported living in an apartment owned by their parents, 33.5% in a house owned by the parents, and 24.6% in a rented apartment. A little over half of the participants (50.8%) reported that their financial situation was average, 30.6% above average, and 5% as significantly higher than average. Only 13.6%

reported that their financial situation is below average, of whom 3.7% described their financial situation as significantly below average.

Tools

This is a quantitative mixed-method study with a qualitative element. Ninety children and adolescents were interviewed. The research tools are based on those of the Office of Communications (Ofcom, 2010, 2016), Livingstone *et al.* (2012), Livingstone and Bober (2005), Livingstone (2013), and Millwood-Hargrave and Livingstone (2009).

Below is the description of the research tools:

1. Preference of medium for the consumption of broadcast content
 - a) Closed table including 22 items: What types of content do you prefer to consume in each of the following media:

Content: music videos; drama; teen magazine; satire and comedy; movies; family series; reality; talk shows; news and current affairs; documentaries; sports; entertainment; game shows; investigative programs; nature; design and fashion; consumption; craftsmanship; cooking; music; health.

Medium: Internet; TV; DVD video; VOD; YouTube; computer; tablet; radio; newspaper; smartphone.
 - b) Open-ended questions: These questions focused on the considerations and reasons for choosing a particular medium when exposed to the same content:
 - Consider all types of media: What are your three favorite types of content in media of each kind?
 - Sometimes you can be exposed to the same content through different media: television, video, YouTube on the computer, tablet, or radio, and newspaper. What are the considerations and reasons for you to choose a medium on which to be exposed to that content? When I choose television, it is because... When I choose video or DVD, it is because... When I choose Youtube, it is because... When I choose a tablet, it is because... When I choose movies and programs on the computer, it is because... When I choose the smartphone, it is because... When I choose the radio, it is because... When I choose the newspaper, it is because...
 - When it comes to the same content (for example, a TV show that may be watched either on television or on the Internet), when and under which circumstances do you prefer the television? When and under which circumstances do you prefer to watch a video or a

DVD? When and under which circumstances do you prefer to watch YouTube? When and under which circumstances do you prefer the Internet? When and under which circumstances do you prefer the tablet? When and under which circumstances do you prefer the smartphone? When and under which circumstances do you prefer the radio? When and under which circumstances do you prefer the newspaper? When and under which circumstances do you prefer a book?

2. Content preference. Rating the degree of preference for each type of content being watched on a 5-point scale, ranging from 0=Not at all, to 4=A lot. Closed table including 21 questions.

Check next to each type of content you watch how much you like watching it: video clips; drama; teen magazine; satire and comedy; movies; family series; reality shows; talk shows; news and current affairs; documentaries; sports; entertainment; game shows; investigation; nature; design and fashion; consumerism; craftsmanship; cooking; music; health.

Open questions:

What are the three sites you browse most? What is there on each of these three sites? Why do you like to browse each of these three sites?

What are your three favorite TV programs? What are these programs about? Why do you like these programs?

3. Media consumption habits: How many hours a day do participants spend using, watching, or browsing TV, DVD, VCR, VOD, Youtube, computer, tablet, Internet, radio, newspaper, smartphone? Participants answered nine closed questions on a 7-point scale: 0=Not at all, 1=Less than an hour, 2=One hour, 6=Five hours or more.
4. Questions about background characteristics: age, class, gender, country of birth, type of home, number of rooms, number of people living in the home; sector.
5. Personal interviews: Interviewees were asked questions to clarify the quantitative findings, to help us understand the reasons behind the findings and the factors affecting the preference for a given medium. The semi-structured interviews covered all the subjects included in the research topics, but the order of questions was determined by the dynamics of the interview. The interviewees wanted to share events they lived through, positive and negative experiences, and some gave detailed descriptions.

Statistical procedures

Quantitative analysis

In addition to descriptive statistics, based mainly on the distribution of frequencies and averages, we conducted exploratory factor analysis with Quatrimax-type rotation, which indicated that it is possible to group various types of media into four main types. We also conducted linear regression analyses.

Qualitative analysis

We analyzed qualitatively the free-text answers of the children concerning their content consumption preferences and the factors behind these preferences. Our analysis identified the principal themes in the children's answers. We also analyzed the interviews with the children.

Findings

Viewing habits

Participants were asked to note the degree to which they consume various communication media. Results appear in Table 1.

Table 2 compares the average times children and adolescents spend on different media, and lists Pearson correlations.

As seen in Table 2, children and adolescents spend significantly more time browsing the Internet than engaging in any other activity examined. Furthermore, we found significant and positive correlations between the amount of time they browse the Internet and the time they spend watching TV ($r = .28, p < .01$), movies and TV content ($r = .39, p < .01$), YouTube ($r = .30, p < .01$), and watching content on a tablet ($r = .19, p < .01$). We also found significant and positive correlations between the amount of time adolescents watch TV and the time they spend watching movies and TV content on the computer ($r = .16, p < .01$), the time they spend watching YouTube ($r = .21, p < .01$), the time they spend watching content on a tablet ($r = .21, p < .01$), and the time they spend watching DVDs ($r = .21, p < .01$).

Content and media

Although we found that children and adolescents use the Internet more than any other medium, we also found that television is the preferred medium for consuming most types of content. Indeed, with the exception of video clips, which respondents prefer to consume on YouTube (Mo = 58.4%), and of

Table 1
Viewing habits of children and adolescents (average hours per day)

	<i>Dispersion measures</i>							<i>Distribution</i>					
	<i>N</i>	<i>M</i>	<i>Md</i>	<i>SD</i>	<i>Not at all</i>	<i>Less than one hour</i>	<i>1 hour</i>	<i>2 hours</i>	<i>3 hours</i>	<i>4 hours</i>	<i>5 hours</i>	<i>6 hours and more</i>	
Browsing the Internet	332	3.1	3	2.0	4.5%	9.6%	13.0%	16.3%	13.0%	15.7%	7.2%	20.8%	
TV	341	2.1	2	1.7	12.3%	14.4%	13.2%	24.9%	16.1%	8.5%	5.3%	5.3%	
Watching TV content on the computer	335	1.6	1	1.8	29.9%	14.0%	16.4%	13.1%	8.7%	8.4%	3.6%	6.0%	
You Tube	336	1.6	1	1.5	10.4%	30.1%	21.1%	15.2%	10.4%	7.7%	2.4%	2.7%	
Browsing on a tablet	335	0.8	0	1.4	62.1%	8.4%	11.9%	6.9%	3.3%	4.2%	.9%	2.4%	
Watching a DVD	335	0.5	0	1.2	75.5%	9.3%	5.7%	2.7%	2.4%	1.5%	1.5%	1.5%	

Table 2
Viewing habits of children and adolescents: Differences between viewing patterns and Pearson correlation

	Dispersion measures		Differences in the number of viewing hours (Pearson correlation)							
	M	SD	Browsing the Internet	TV	Movies and TV content on the computer	YouTube	Browsing on tablet	Watching DVD	Listening to radio	Reading a newspaper
Browsing the Internet	3.1	1.7								
TV	2.1	1.5	1.08** (.28***)							
Movies and TV content on the computer	1.6	1.2	1.55** (.39***)	0.47** (.16**)						
YouTube	1.6	1.8	1.61** (.30***)	0.53** (.21**)	0.06 (.21**)					
Browsing on tablet	0.8	1.4	2.49** (.19**)	1.41** (.21**)	0.94** (.27**)	0.88** (.30**)				
Watching DVD	0.5	1.1	2.77** (.02)	1.69** (.21**)	1.22** (.30**)	1.16** (.22**)	0.28** (.32**)			
Listening to radio	0.4	0.6	2.76** (.02)	1.67** (.06)	1.20** (.06)	1.14** (.07)	0.26** (.18**)	-0.01** (.28**)		
Reading a newspaper	0.3	1.2	2.88** (.01)	1.80** (.03)	1.33** (.13*)	1.27** (.16**)	0.39** (.17**)	0.11 (.33**)	0.12 (.16**)	
Reading a book	0.8	1.2	2.37** (.00)	1.28** (-.13*)	0.81** (.00)	0.75** (-.01)	-0.13 (-.07)	-0.40** (.06)	-0.39** (.07)	-0.51** (.36**)

$p < 0.05^*$, $p < 0.01^{**}$

music, which they prefer to consume both on YouTube ($M_o = 34.7\%$) and on TV (26.2%), television is the preferred medium for the consumption of other types of content, such as news and current events, satire and comedy, and movies (Table 3).

Content preference

Participants were also asked to indicate the extent to which they prefer to consume various types of content. Exploratory factor analysis with Quatrimax rotation indicated that it is possible to group content preferences into four main types. The first group includes preferences for entertainment content such as entertainment programs and shows, as well as drama, reality, and variety shows. Note that respondents indicated their preferences on a 5-point scale, ranging 0= No preference to 4=Great preference. On average, respondents showed medium-high preferences for this type of content ($M = 2.16$). The second group included content related to thematic niches such as design, consumerism, health, music, cooking, or art. On average, participants had a low level of preference for this type of content ($M = 1.67$). The third group included news and current events, as well as documentary and nature programs. On average, there was a low preference for this type of content ($M = 1.53$). The last group included sports, and on average there was a low level of preference for consumption of this content ($M = 1.83$) (Table 4).

A comparison of preferences with regard to respondents' background characteristics suggests the presence of gender differences. Girls ($M = 2.24$) showed significantly higher preference ($t(264) = 2.053, p < .05$) for content related to entertainment than boys did ($M = 2.03$), and higher preference ($M=1.85, t(263)=4.369, p<.01$) for thematic niche content than boys did ($M = 1.33$), whereas boys ($M = 2.59$) showed a higher preference ($t = 238$) = $9.490, p < .01.$) for sports content than girls did ($M = .96$).

We also found that the older age group ($M = 2.20$) showed a significantly higher preference (248) = $2.179, p < .05$) for entertainment content than did the younger age group ($M = 1.97$). Similarly, the older age group ($M = 1.65$) had a significantly higher preference ($t(247) = 3.08, p < .01$) for current events and news content than did the younger group ($M = 1.26$). At the same time, the younger age group ($M = 2.30$) had a higher preference for sports content ($t(245) = 4.924, p < .01$) than did the older age group ($M = 1.33$).

We also found that immigrants ($M = 2.25$) preferred sports content more than native Israelis did ($M = 1.75$), and that participants who live in private homes ($M = 2.19$) showed a higher preference for sports content than did respondents living in apartments ($M = 1.51$).

Table 3
Distribution of respondents by the preferred medium for consumption of various types of content
(the most prevalent medium for each type of content is emphasized)

<i>Content</i>	N	No pref.	<i>Preferred medium</i>							Nensp.	Total
			<i>Video or VOD</i>	<i>Tablet</i>	<i>TV</i>	<i>YT</i>	<i>Comp.</i>	<i>Sm. phone</i>	<i>Radio</i>		
Video clips	281	12.1%	1.1%	1.1%	13.9%	58.4%	7.5%	5.7%	.4%	0.0%	100.0%
Drama	281	20.3%	2.8%	.7%	54.8%	6.8%	12.1%	2.1%	.4%	0.0%	100.0%
Youth magazine	276	42.8%	1.1%	1.1%	5.8%	3.6%	6.9%	6.2%	.4%	32.2%	100.0%
Satire & comedy	278	13.3%	1.4%	2.5%	43.9%	17.6%	13.7%	6.8%	.7%	0.0%	100.0%
Movies	276	8.3%	9.1%	1.8%	60.1%	1.4%	17.0%	1.1%	.4%	.7%	100.0%
Family series	278	18.0%	4.0%	1.1%	61.9%	3.2%	9.4%	1.8%	0.0%	.7%	100.0%
Reality	277	20.2%	1.1%	1.1%	64.6%	1.1%	9.0%	1.8%	1.1%	0.0%	100.0%
Talk shows	279	30.5%	.4%	1.4%	49.5%	5.4%	8.6%	1.4%	2.2%	.7%	100.0%
News & curr. ev.	277	22.4%	0.0%	1.4%	53.1%	1.8%	6.9%	5.4%	1.8%	7.2%	100.0%
Documentaries	273	46.5%	1.1%	1.1%	37.7%	3.7%	4.4%	2.9%	.7%	1.8%	100.0%
Sports	279	33.0%	.4%	.7%	46.2%	4.7%	6.8%	3.6%	.7%	3.9%	100.0%
Telenovelas	276	37.0%	2.5%	1.1%	48.2%	2.5%	4.7%	2.5%	.7%	.7%	100.0%
Entertainment	277	13.7%	1.4%	2.5%	57.8%	8.7%	10.5%	4.0%	1.4%	0.0%	100.0%
Games	274	19.7%	1.1%	1.5%	63.1%	3.6%	6.6%	2.6%	.4%	1.5%	100.0%
Investigations	265	30.9%	1.1%	1.1%	51.3%	2.6%	9.1%	2.6%	.8%	.4%	100.0%
Nature	274	29.6%	1.1%	1.8%	52.9%	4.7%	5.5%	2.2%	.7%	1.5%	100.0%
Design & fashion	276	39.1%	1.4%	1.4%	35.9%	4.3%	9.1%	5.1%	1.1%	2.5%	100.0%
Consumerism	271	44.6%	1.1%	1.1%	33.9%	3.7%	7.4%	3.7%	1.8%	2.6%	100.0%
Art	275	35.6%	.7%	1.5%	39.3%	4.4%	10.5%	4.4%	1.1%	2.5%	100.0%
Cooking	272	29.0%	1.1%	1.5%	51.5%	5.5%	5.5%	3.7%	.7%	1.5%	100.0%
Music	271	13.7%	1.8%	2.2%	26.2%	34.7%	10.3%	8.1%	2.6%	.4%	100.0%
Health	270	42.2%	2.2%	1.5%	35.6%	3.3%	6.3%	4.4%	1.9%	2.6%	100.0%

Table 4
Exploratory factor analysis with Quatrimax rotation and reliability
(Cronbach's α)

	<i>M</i>	<i>SD</i>	<i>Factor loading</i>
Video clips	2.2	1.5	.623
Drama	1.9	1.3	.618
Youth magazine	1.2	1.3	.505
Satire & comedy	2.6	1.4	.665
Movies	2.9	1.3	.572
Family series	2.2	1.3	.623
Reality	2.2	1.5	.719
Talk shows	1.5	1.3	.558
Entertainment	2.7	1.3	.683
Games	2.1	1.3	.594
Entertainment	2.16	.86	a=.833
Design & fashion	1.5	1.5	.640
Consumerism	1.1	1.2	.478
Art	1.6	1.4	.753
Cooking	1.7	1.4	.742
Music	2.6	1.4	.487
Health	1.4	1.3	.706
Thematic niche	1.67	.99	a=.756
News and curr. ev.	1.5	1.2	.779
Documentaries	1.3	1.4	.739
Investigations	1.7	1.3	.786
Nature	1.6	1.4	.459
Current events & investigations	1.53	1.01	a=.823
Sports	1.83	1.59	.811

Preferred content and media: Qualitative analysis

The following is based on a qualitative analysis of free-text answers by respondents concerning their medium and content consumption preferences, and of factors or conditions behind these preferences. In the analysis of the answers, we attempt to identify the central themes with respect to each question separately. The following review pulls together all the themes we identified in the course of the analysis. The nature of the analysis made it possible, in some cases, to identify several themes in a single (qualitative) response, and therefore the summary of percentages may exceed 100%.

Preferred content. Qualitative analysis of the children's and adolescents' answers showed that the leading content is music and videos (26%), followed by entertainment content such as reality shows, entertainment shows, and game shows of all sorts (22%), movies (19%), satire and comedy (10%), and drama series (9%). Eight percent preferred sports and 6% preferred news content, nature and science, or art, cooking, and fashion.

Conditions and factors affecting the selection of different media

Internet. The Internet serves as hypermedia: it contains old and new media and a variety of interactive possibilities. The most common answer regarding the preference for content consumption on the Internet, cited by 37% of respondents, is a preference in principle for using the Internet "at any moment," "almost always," "under any conditions," and the like. By contrast, 12% indicated that using the Internet was their fallback choice because "I do not have a TV" or "when I'm out of all other options."

For 26%, the Internet is the preferred means of searching for content of different types and for accessing unique content. Fourteen percent mentioned that the use of the Internet is associated with the use of the computer, smartphone, and tablet; 12% claimed that the use of the Internet allows flexibility in time and place, for example, while traveling, surfing while doing other work, or surfing at certain hours of the day (especially in the evening and at night). Fifteen percent claimed that the Internet allows simultaneity so that surfing takes place while performing another task.

Children and adolescents use the Internet on the computer, smartphone, and tablet.

Computer. The responses of children and adolescents indicate that 97% consume any content in this format. Twenty percent of respondents said that they do so because they like the computer, and it is fun for them to work with the computer ("I like it" and "it's more fun"), and a similar percentage noted that they have no special reason for preferring watching movies and shows online on the computer.

Twenty-four percent preferred the computer for reasons related to its unique characteristics; 20% commented on control over the time and manner of watching; 18% on the viewing process ("because I'm right there and I can stop whenever I like") and on the possibility of searching for other things simultaneously ("it's possible to do things at the same time"); 14% referred to the availability of the computer compared to other means.

Smartphone. The two most common reasons for using a smartphone are its ease of use (28%), the fact that the smartphone is light and mobile, and

the availability of the device (27% noted that the smartphone is “always with me” and “always available”). One-fifth of respondents indicated flexibility in time and place. The smartphone is used mostly outside the home (e.g., at school, traveling, or on a trip). About 10% of respondents indicated that they use the smartphone when they need something “immediate.” Fourteen percent mentioned that they chose a smartphone for the purpose of communication (texting and Whatsapp), and as a means of maintaining social relationships (“talking with friends”). In addition to the social media function of smartphones, several specific communication contexts were raised for which smartphones are considered preferable: games, viewing pictures, and listening to music.

YouTube. The main reasons for using YouTube had to do with content: the leading reason was to consume music: 47% of children cited this reason. Indeed, apart from listening to music and watching clips, the only other content-related aspect that the children mentioned was watching instructional and other videos that impart knowledge, but only 5% cited this reason. Additionally, 13% mentioned the great variety of content that exists in this medium and the richness of content offered to them as the reason for using YouTube. Another 2% of respondents indicated that YouTube offers unique content that cannot be accessed by other means. Eight percent noted that YouTube viewing serves social needs, either as shared entertainment or as a means of consuming content that is considered up-to-date and innovative.

Tablet. Examining the reasons for the preference of tablets shows that about one-sixth of respondents mentioned the convenience of use as far as mobility and accessibility are concerned, and an additional 7% mentioned specific features of the tablet, especially those having to do with technical aspects, such as screen size and user interface (especially when compared to a smartphone). Two percent mentioned using a tablet as a means of passing the time in parallel with some other activity, and the fact that use of the tablet is sometimes a result of circumstances, such as during driving, when they are alone at home, or in the evening (9%). About a fifth reported that they had no access to a tablet. In addition, 10% of respondents indicated that they use the tablet only after they have given up on the TV and the computer.

Television. The most common reason for watching TV was the convenience involved. Twenty-eight percent mentioned such features as “large screen,” “convenience,” or “because it’s next to me.” Twenty-five percent said that they watched TV for no particular reason (e.g., “I like it”), but a similar rate (24%) noted that television viewing was a fallback option, usually as a result of circumstances, such as “accessibility at the moment,” “when I don’t

have Internet,” or “when I’m home.” Sixteen percent of the children and adolescents said that they watched television because of the quality of the programs and the broadcast, and because of their interest in it. Seven percent stated that they watched TV because of a specific content being broadcast.

Conditions under which participants watch TV: 24% noted that they watch television as a last resort (“If the TV is on, then I’d rather watch it,” “If I’m not near the Internet”); nineteen percent watch TV whenever broadcast quality, screen size, and image quality are important, and another 12% said that they watched television to see a favorite program. Eleven percent watch television because of the convenience of watching it, for example because it involves sitting on a couch rather than on a computer chair. A similar rate noted specific times, such as “evening,” “night,” or “before going to bed.” Eighteen percent stated that they preferred watching television in general (“I will always prefer television”), and another 12% stated that television was on whenever they were at home.

DVD. Twenty-three percent usually watch DVDs when other means are unavailable (“no Internet,” “nothing to see”) or when they are bored. Sixteen percent prefer to watch DVD for unique content that is difficult to obtain by other means. These include, among others, films of personal experiences (such as tours and family events), old movies or series, or titles that cannot be located normally. Five percent cited the elements of viewing itself, such as good quality, ad-free viewing, and the ability to control the viewing process.

Radio. Only 5% of the respondents have a general preference for listening to the radio. About half said that they had no preference for listening to the radio. Nine percent indicated that they chose the radio for lack of other alternatives, for example when one of the family members was listening (while driving or when cleaning of the house).

Newspapers. Examination of the reasons for choosing to read a newspaper shows that 24% of readers read a newspaper in order to consume news and current events (“I want to know what’s happening”). In addition, 8% noted that they read a newspaper because of specific content areas and interests.

An examination of the conditions for preferring newspapers reinforces these findings. Thirty one percent of respondents noted that they have no preference at all for reading a newspaper, and 21% noted that reading the newspaper is their last resort.

Books. Eleven percent of the respondents consider reading a book as a leisure activity, and another 6% describe the reading as an activity aimed at relaxing, detaching, or enjoying some quiet. Ten percent of respondents read

books out of interest and 4% because it is an obligation, usually as part of school assignments.

Discussion

In the present study we examined the relationship between medium preference and consumed content, and factors of that preference, among children and adolescents, with reference to their background characteristics.

Findings indicate that the media indeed is a significant portion of the children's and adolescents' routine. This finding is consistent with those of other studies, which found that the media occupies an important place in the children's lives (Byron, 2008; Livingstone *et al.*, 2012; Livingstone *et al.*, 2014; Ofcom, 2006; Taylor & Kitter, 2010; Zilka, 2016a, 2014).

The findings show that children and adolescents make informed choices of media, and that their choice is the result of their awareness of the unique characteristics of each type of medium, its capabilities, and its advantages over other media. At the same time, their choice is influenced by the various types of content being consumed. For example, media attributes that affect their choice include image quality, interactivity, and control over the viewing process with respect to computers, YouTube, and DVD compared with television; and ease of operation, flexibility in time and space, and the possibility of simultaneous activity with respect to smartphones and tablets. Many studies on media literacy (Hobbs, 2008, 2011; Livingstone, Papaioannou, del Mar Grandío Pérez, & Wijnen, 2012) indicate that children and adolescents choose what to watch and when.

As far as content is concerned, we found that certain means of communication are related to specific types of content, as for example, the use of smartphones is related to social communication and the use of YouTube is related primarily to music consumption. In contrast to the findings of Millwood-Hargrave and Livingstone (2006) that the choice of content is significant and the medium is less so, the present study revealed factors and considerations for choosing each medium that have to do with its unique characteristics, independent of content, and which are no less important than the content itself.

We found a wide range of content preferences among children and adolescents. The leading types of content among children and adolescents are music and video, followed by entertainment content such as reality shows, entertainment programs and shows, movies, satire, comedy, and drama series. By contrast, preference for sports, news, nature, science, art, cooking, fashion, and games is relatively low.

This finding is consistent with those of studies reporting that at the end of the day, it is the users who decide what to use when, in accordance with their needs (Atwal, Millwood-Hargrave, Sancho, Agyeman, & Karet, 2003; Comstock & Scharrer, 2007; Gatfield & Millwood-Hargrave, 2003; Holbert & Stephenson, 2003; Livingstone, 2008, 2007; Millwood-Hargrave, 2007; Millwood-Hargrave & Livingstone, 2009).

Children and adolescents use the Internet more than any other media, but when it comes to media preference for specific types of content, they prefer to consume most content on television. Indeed, with the exception of video clips, which respondents prefer to consume on YouTube, and of music, which they prefer to consume both on YouTube and on television, we found that television was the preferred medium for most content.

Another question raised by the study concerned possible connections between medium preference and consumed content, and the background characteristics of children and adolescents. We found both gender- and age-related differences. We found that girls preferred to consume content related to entertainment, as well as content associated with thematic niches such as fashion, art, cooking, health, etc. more than boys did. By contrast, consistent with many other studies, we found that boys showed a higher preference for sports than girls did.

As far as age differences are concerned, we found that the older age group preferred to consume entertainment content, as well as news and current events content more than the younger age group did, whereas the younger children preferred to consume more sports content than did the older age group. Differences between age groups and gender have been found in other studies (Livingstone & Haddon, 2009; Millwood-Hargrave & Livingstone, 2009; Ofcom, 2006) concerning media consumption.

In sum, the key factors in choosing a medium are availability, interactivity, diversity, and the ability to surf simultaneously while doing other things (Internet on a computer, smartphone, and tablet), and convenience (TV). The leading content is music and video clips, followed by entertainment content such as reality shows, variety shows, satire, comedy, movies, and drama series. Children and adolescents make informed choices about content consumption and media, which are based on familiarity with the characteristics of each medium available to them, and on the selection of the content that meets their needs. They use the Internet frequently, but when they can choose to watch certain content on the Internet or on TV, they prefer to watch television. Some types of content are preferred more or less by boys than by girls, and some types of content are preferred more or less by younger children than by

adolescents. Children and adolescents' viewing choices are by no means random or incidental, but based on informed choice.

Limitations of the study

The study examined children and adolescents. It is recommended that follow-up studies also investigate young people up to the age of 24, and examine whether media preferences and the factors affecting them are different among young people.

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