

**Differences in the Teen Blogosphere: Insights from a Content Analysis of English-
and Czech-Language Weblogs**

Lukas Blinka, Kaveri Subrahmanyam, David Smahel and Francesca Romana Seganti

Young 2012 20: 277

DOI: 10.1177/110330881202000304

The online version of this article can be found at:

<http://you.sagepub.com/content/20/3/277>

Published by:



<http://www.sagepublications.com>

Additional services and information for *Young* can be found at:

Email Alerts: <http://you.sagepub.com/cgi/alerts>

Subscriptions: <http://you.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://you.sagepub.com/content/20/3/277.refs.html>

>> [Version of Record](#) - Aug 24, 2012

[What is This?](#)

Differences in the Teen Blogosphere: Insights from a Content Analysis of English- and Czech-Language Weblogs

Young
20(3) 277–296
© 2012 SAGE Publications and
YOUNG Editorial Group
SAGE Publications
Los Angeles, London,
New Delhi, Singapore,
Washington DC
DOI: 10.1177/110330881202000304
<http://you.sagepub.com>


Lukas Blinka

Faculty of Social Studies, Masaryk University
Czech Republic and Institute of Journalism and Communication
University of Tartu, Estonia

Kaveri Subrahmanyam

California State University
Los Angeles and Children's Digital Media Center @ Los Angeles, USA

David Šmahel

Faculty of Social Studies, Masaryk University, Czech Republic

Francesca Romana Seganti

John Cabot University and Fattorello Institute, Rome, Italy

Abstract

Extant research on youth online content and culture is mostly based on US and Western contexts. Our goal was to examine whether a dominant global online youth culture or whether the local context (for example, language and popular culture) influences youth online content. We compared English language blogs from the US blogosphere, and Czech language blogs from the Czech blogosphere, written by 13- to 17-year-old youth. The last three entries from each blog were selected for content analysis, yielding a sample of 1038 entries. Results showed that English-speaking bloggers presented less personal information, used a text-based style and wrote mainly about their peers and everyday structured life. Czech-speaking bloggers used visuals, and focused on the public scene. Meta-blogging played a significant role in both blogospheres. The pattern of similarities and differences suggested that

the blog authors' physical context likely influenced the particular format or content of their blog entries.

Keywords

online communication, weblog, blog, adolescents, social media, web 2.0, youth, global Internet culture, Internet

Introduction

Today's youth were born into a wired world—they are often referred to as the 'net generation' (Tapscott, 1998) or 'digital natives' (Prensky, 2001). With the Web 2.0, they access a range of popular applications include social networking sites (SNSs), blogs, massively multiplayer online games (MMOGs), and content sharing websites like YouTube. Most of these online tools enable the easy creation and uploading of content and young people are at the forefront of content creation earning the title 'generation C', where C stands for content creation (Bruns, 2006).

Research on young people's use of these new online tools suggests that they bring the issues and people in their offline lives to their online ones (Subrahmanyam and Smahel, 2011). For instance, important youth concerns such as identity (Huffaker and Calvert, 2005) and sexuality (Subrahmanyam et al., 2006) are salient in online chat rooms and blogs; similarly youth use social networking sites to connect with offline friends (Subrahmanyam et al., 2008). Viewing young people's virtual worlds as related to their offline worlds is a first step toward understanding young people's online activities and their impact on youth well-being.

Although the Internet is a global phenomenon among youth, research on young people's online worlds has mostly been done in the US and Western Europe and has been restricted to web content in English. We know very little about the kinds of content created by youth in languages other than English, and who live outside of the US and Western Europe; we also do not know whether extant findings about the connectedness between young peoples' online and offline lives holds in these other contexts. This is an important empirical question, given that young people's online activities do differ by context (for example, country of origin). For instance, on the 2008 World Internet Project, chat rooms were used by two thirds of youth in the Czech Republic but by only approximately a third of US youth (Subrahmanyam and Smahel, 2011). Furthermore, evidence suggests that young people's offline contexts might moderate their online behaviour; in his ethnographic work in Mauritius, a relatively conservative country, Rambaree (2008) found that youth used the Internet as a new and secret environment to explore and experience dating. These findings highlight the need to study online content created in languages other than English by youth living outside the US and Western Europe. Such studies will yield valuable insights as to whether youth online culture is more globalized or whether it is moderated by the local context of its users and will eventually help us understand how online activities mediate youth outcomes.

The present article compares online content from two different blogospheres—English language blogs created by youth primarily in the US and Czech language blogs created by youth in a transitional post-communist country (Czech Republic). The Czech Republic is a post-communistic Central European country with a 40 year history of socialism, and consequently Czech youth born after 1990 were the first generation to grow up in non-communist environment, and to have adopted digital technologies from an early age. We chose the Czech blogosphere for both theoretical as well practical reasons. First, the Czech blogosphere is written by Czech youth in the Czech language, in contrast to the US/English language blogosphere, which has been the focus of most extant research on online content. At the same time youth in both countries share some similarities in technology use and the broader individualistic culture within which they live. Data from the World Internet Project reveal that US and Czech 12- to 18-year-olds were similar in their frequency of writing and reading blogs and other aspects of their Internet use (for example, hours online, instant messaging, online games) (Subrahmanyam and Smahel, 2011). Thus, youth in both countries seem to have similar levels of affinity for the globalized media and the Internet. At a national level, both the US and the Czech Republic are individualistic societies, wherein the self is the focus and personal interests are more important than those of the group or collective; Suh et al. (1998) determined that on a 10-point scale of individualism/collectivism (1 = most collectivist and 10 = most individualistic), the US received a score of 9.55 and the Czech Republic received a score of 7.0. Given the similarities in individualistic orientation and technology use but differences in language and local youth culture, we felt that we could compare the two blogospheres to test the theoretical question of whether there is a dominant global online youth culture or whether the local context (for which language can be considered a proxy) influences youth online culture. At a more practical level, members of the research team were from the Czech Republic and the US and so we chose to compare the two youth blogospheres, since it was necessary to have a good knowledge of the local language, youth culture and specifics of each blogosphere.

Weblogs and their Occurrence

Weblogs (or blogs, from weblogs) are typically defined as personal web pages that are frequently updated, and where links are organized in reverse chronological order, that is, from the oldest to the newest. Although there are different types of blogs such as K-blogs (knowledge blogs, generally with a technological focus); filters (content is external to the writer), personal diaries are the most popular. In one study of 203 randomly selected blogs, 60 per cent of bloggers were adults and 40 per cent were youth (Herring et al., 2004) suggesting that blogs may have broad appeal to both adults and youth. However, it appears that adult and youth bloggers may write about different things; Argamon et al. (2007) found that youth bloggers wrote more about home, romance and used swear words, whereas adults wrote more about business, politics or religion. Some of these differences may stem from the fact that youth bloggers tend to be largely female (Subrahmanyam et al., 2009) and their writing

style is similar to that of adult female bloggers. Thus, differences in adult and youth blogs might also stem from gender differences and the greater presence of youth female bloggers. The issue of gender differences in youth blogs is addressed in greater detail below when discussing youth blogging, the focus of this article.

Although blogging has become a global phenomenon, there is some evidence that blogs reflect the societal norms and values held by their authors. Evidence on the role of the cultural context in blogging comes from two studies conducted in Japan (Miura and Yamashita, 2007) and South Korea (Kim, 2009). The studies found elements of collectivism (an orientation that emphasizes interdependence of people in a collective group and one well documented in east Asian cultures) displayed by Japanese and South Korean bloggers and blog readers (Kim, 2009). However, as Miura and Yamashita (2007) pointed out, to date no study has examined such cross-cultural differences in youth blogging. The present study addresses this gap by comparing youth blogs from the English and Czech blogosphere.

Youth and Blogging

Survey data from the Pew Internet and American Life Project (Lenhart and Madden, 2005) suggest that keeping a blog is popular among youth: 19 per cent of them have created their own blog (versus 7 per cent of adult Internet users), and 39 per cent have read others' blogs (versus 27 per cent of adults). Blogs were most popular among 15–17-year-olds in this survey, and 25 per cent in this age group reported creating a blog. The World Internet Project, showed that in their representative national samples of US 12–18-year-olds, 17 per cent reported writing their own blogs at least weekly (35 per cent at least monthly) and 29 per cent of youngsters reported reading the blogs of others at least weekly (58 per cent at least monthly). Similar results were found in the Czech Republic, where 18 per cent reported that they wrote their own blog at least weekly (31 per cent monthly), and 33 per cent reported that they read the blogs of others weekly (62 per cent monthly) (Subrahmanyam and Smahel, 2011).

Researchers have speculated (Schmitt et al., 2008) that blogging may be popular among teens because it allows a narrative to be created of one's life, and for this narrative to be kept for longer periods of time, which can help to show continuity of the self. Blogs can be seen as an ideal tool for identity construction: they allow the archiving of youngsters' memories, thoughts, feelings and events in their lives. At the same time, they allow other people to read and provide the writer with feedback. This is very important as peer relationships are important in youth identity construction (Brown, 2004). Hodkinson and Lincoln (2008) suggest that, like the bedroom, the interactive and multidimensional space of online blogs/journals offer a safe, personally owned and controlled space, which is used as part of the negotiation of youthful transitions via the marking out of territory and the exploration and exhibition of identity.

Scheidt (2006) has argued during adolescence, youth may have the egocentric feeling of always being watched by an imaginary audience, and sometimes may develop personal fables around the belief that their experiences are unique. 'These

developmental characteristics may push adolescents to perform their personal fables in diary weblogs for the audience they believe is already interested in watching them' (Scheidt, 2006: 197). Youth present themselves online by showing some idealized parts of the self and the positive feedback of others may help to endow this self presentation with social legitimacy (Livingstone, 2008; Manago et al., 2008; Siibak, 2009).

In line with these ideas, research has shown that for youth bloggers, online and offline contexts are psychologically connected. For instance, youth reveal a considerable amount of personal information such as first and sometimes last names, age and location in their blogs (Blinka and Smahel, 2009; Mazur and Kozarian, 2010; Subrahmanyam et al., 2009). They also provide diverse ways to contact them online such as an email address, an instant messenger user name or even a link to a personal home page. Much of this personal information is mostly true (Blinka and Smahel, 2009). Huffaker and Calvert (2005) have argued that online presentations demonstrate that blogs are an extension of the real world, rather than a place where people like to pretend. Although blogs are connected to authors' online worlds, the two are not mirror images of each other. For instance, some important developmental concerns like sexuality were not explicitly brought up in Subrahmanyam et al.'s study of youth blogs (Subrahmanyam et al., 2009).

Research suggests that common themes in youth blogs were peer relationships and structured life, for example, school and after school activities; romance, family and personal interests were addressed less frequently (Subrahmanyam et al., 2009) and when present, were deceptive more often (Blinka and Smahel, 2009). Sexual themes are rare in adolescents' blogospheres (Mazur and Kozarian, 2010; Subrahmanyam et al., 2009). This is surprising when compared to the general importance of sexual themes in adolescents' development (Weinstein and Rosen, 1991), and in online chat environments (Subrahmanyam et al., 2006). The level of deception in blogs is generally very low (Blinka and Smahel, 2009), and together with the pattern of results, suggest that youth bloggers likely know their audience in the offline world, and are thus adjusting their entries accordingly.

Another issue of relevance is the gender differences in youth blogging that have been documented (Davis, 2010; Herring et al., 2004; Huffaker and Calvert, 2005; Pedersen and Macafee, 2007). Initially, there was a similar distribution of male and female bloggers (Herring et al., 2004), but subsequently female bloggers outnumbered their male counterparts, yielding a gender gap in blogging. Trammell et al. (2006) reported slightly more females than males among Polish bloggers, and almost 90 per cent of US youth bloggers were identified as female (Subrahmanyam et al., 2009). Since youth blogs are being written predominantly by girls, this could influence the youth blogospheres as well (Pedersen and Macafee, 2007; Trammell et al., 2006).

The foregoing research on youth blogging is based mostly on an analysis of English language blogs written by authors from the US and Western Europe. In this study, we compare Czech- and English-language blogospheres, and will address the following research questions: (a) What are the demographic differences between

youth bloggers in both blogospheres?; (b) To what extent do the youth in each blogosphere reveal their personal information in blogs?; (c) What are the similarities and differences in the blog format (for example, text, pictures, etc.) utilized by young bloggers in both blogospheres?; (d) What kind of styles are used in both blogospheres?; and (e) What topics do youth blog about in their Czech- and English-language blogs? Addressing these questions will provide a rich understanding of the content created in the Czech language, and will be one of the first such studies to do so in a language other than English. The results of the study will speak to questions surrounding the existence of a global online youth culture and the methodological issue of whether results obtained from analysis of online content created in one context can be generalized to that created in a different context. Finally, is the study relevant to the important theoretical issue of connectedness between young people's online and offline lives, and in particular whether such connectedness is unique to youth in US and Western Europe or whether it is found more generally in youth living in other contexts.

Method

Sample

The sample consisted of 160 weblogs from the Czech blogosphere collected from three websites, and 186 weblogs from the US blogosphere (Subrahmanyam et al., 2009). The American sample was downloaded from nine hosting sites: Xanga, LiveJournal, Blog-City, Blog Drive, Journal Space, blogsearchengine.com, Blurty, DeadJournal and Open Diary. Since the US blogosphere is larger and more diverse compared to the Czech blogosphere, we downloaded the sample entries for US blogs from many hosting sites. Xanga and LiveJournal were chosen because they were the most popular among US youth bloggers. To identify other potential sites, we conducted searches on Google using search terms such as 'teen blogging sites' 'teen blogs', etc. Of the results from these searches, we chose blog hosting sites that allowed us to search for blogs by the age of blog authors. Once blogs from the different blog hosting sites were identified, the last three entries were selected from each blog, yielding a total sample of 558 blog entries. The Czech sample was randomly selected and downloaded from lists of recently updated weblogs on three hosting sites (chosen by a net monitoring service for the frequency of web sites visits): blog.cz, blog.lide.cz and bloguje.cz. These sites, especially blog.cz, represent the majority of bloggers in the Czech Republic. Weblogs were downloaded for future offline analysis over a week-long period, at different times of the day. The last three entries were selected from each blog resulting in a final sample of 480 Czech blog entries.

The following criteria were used to identify blogs in both the US and the Czech study: (a) Blogs should be maintained by high school students between 14–17-years of age; this was ensured by searching either for specific age information such as a date of birth in the profile, or for references to attending high school. (b) Blogs had

to have been maintained for at least a period of three months or more. (c) There should be at least five blog entries during the four weeks prior to downloading; this was done to only sample entries written by regular bloggers. (d) Only blogs written in English were chosen from the US blogosphere, and only blogs written in Czech from the Czech blogosphere. All blogs that did not meet these criteria were excluded from the final sample.

Procedure and Coding

The coding system was first developed for the English language blog study at the Children's Digital Media Centre @ LA (Subrahmanyam et al., 2009), and was later adapted to analyze the Czech language blogs. The coding system was informed both by prior theoretical and empirical research on online applications including blogs as well as by our own reading of the blog entries. Based on prior work with chat rooms (Subrahmanyam et al., 2006) and blogs (Huffaker and Calvert, 2005) which showed that nicknames or usernames and user pictures are used to share identity information and for self-presentation, we decided to code the demographics of blog authors, mainly from information provided in author profiles and entries. The coding categories included age, gender, personal pictures, duration of blogging and contact information such as: address, email, IM number, phone number and other personal WebPages.

To analyze the content of blog entries, we turned to Subrahmanyam and Greenfield's (2008) theoretical framework, which distinguishes between different aspects of a media form such as its physical platform (for example, computer, video game system), formal features (the symbolic and representational systems it uses such as a text, audio visual, iconic, etc.), and content (topic or theme of its message). Because information about the physical platform cannot be deduced from the blog itself, we only coded the formal features and contents of blog entries. To create a coding system for the particular formal representational features (for example, text, pictures, etc.) and content themes of blogs, we first reviewed extant research on youth online content (blogs, chat rooms and web pages); as described earlier, this research has shown that youth bring themes and issues from their offline lives (for example, family, peers, school, romance, friendship, etc.) to their online contexts (Huffaker and Calvert, 2005; Schmitt et al., 2008; Subrahmanyam et al., 2006). Then we adopted a bottom-up procedure wherein all authors independently read a pilot sample of 20 weblogs to create a set of different codes. These codes were subsequently compared and unified to form a list of common codes in relation to the research questions. Next we created operational definitions for the coding categories; several blog entries were coded using these definitions to verify the applicability of the categories and their operational definitions. This began with two coders working together, and then later independently. Disagreements were discussed until it appeared that both coders understood the meaning of all the definitions. Using this process, we created a system to code the format, style, content, tone and the number of comments of each blog entry.

Three blog format categories were coded: (a) Text; (b) Audio, such as mp3; and (c) Visuals (for example, pictures, animations and videos). Six categories of blog style were coded: (a) Narratives, descriptions of events; (b) Reflective, where the author analyses people, ideas, situations and events; (c) Filter: An entry that primarily consists of content that is external to the blogger; (d) Feedback/response, specifically asks for feedback, a response, suggestions or information; (e) Creative (or creation), ideally includes song lyrics, poetry, jokes, quotes, artistic photography, music or drawings where the blogger was most probably the creator (acknowledged or not). Most often this category consisted of pictures modified using Photoshop or a similar programme (collages, inserted text to pictures of others, etc.); and (f) Quizzes and surveys. Ten blog content categories were coded: (a) Family: discussion of family members, including siblings, parents, pets or extended family; (b) Peers: discussion of friends but not including romantic relationships; (c) Romance/sexuality: discussion of romantic relationships or indications of a concern with romance; (d) Structured life, including school, extracurricular activities and part-time work; (e) Teen problem behaviour: discussion of drugs, drinking, shoplifting, abuse, eating disorders or abnormal/unhealthy behaviour that is typically associated with teens; (f) Life events/issues: Everyday issues such as dealing with braces, driver's licenses, car crashes, birthdays or holidays, excluding anything connected to the categories described above; (g) Public scene: discussion of news, politics, and pop culture, like video games, modern electronics, movies, books, etc.; (h) Identity: discussion of self-image, self-concept, self-description, self-esteem or body image/appearance concerns related to the religious, ethnic or sexual identity of the author; (i) Future: discussion of long-term plans; and (j) Blog-related issues, reflects the author's conscious awareness of the audience/reader. For example, asking for comments or feedback, discussion on layout features, or remarks about the cessation of writing.

Lastly, blog entries were coded in terms of the following seven categories of emotional tone: (a) emotion, if there was any prominent emotion present; (b) happiness; (c) sadness; (d) anger/frustration, explicit statements were not necessary; (e) love; (f) opinion approval: containing strong ideas/language of approval on a subject, explicitly stated; and (g) opinion disapproval: containing strong ideas/language of disapproval on a subject, using words like hate, sucks, dump, etc., explicitly stated.

Coding was conducted in steps by independent coders, two in the USA and two in the Czech Republic. The first round of coding was connected to the creation of the codes and their operational definitions. The second was to access inter-rater reliability. In both cases, coders coded 60 entries from the final sample. The final kappa coefficient was between 0.77 and 1.00. Subsequently the rest of the sample was coded. These steps were first completed for the US data. Because the Czech study was conducted after the US study, the Czech coders had to verify they interpreted the operational definitions similar to the American coders to ensure that the results were comparable. Both Czech coders coded 60 entries from the US blogosphere and the inter-rater reliability as assessed by the Kappa coefficient was between 0.70 and 1.00. A sample of 60 Czech blog entries was then coded; the Kappa coefficient ranged from 0.74 and 1.00, with most coefficients above 0.85. The rest of the Czech blog entries were then coded separately, and each coder coded half the sample. For

comparing occurrences of several phenomena in both blogospheres, results of Chi square in figures on two levels of significance ($p < 0.001$ or $p < 0.05$) are reported. The N in these analyses are same as the number of coded weblogs (N = 160 in the Czech blogosphere, N = 186 in the US blogosphere).

Results

Demographics of Blog Authors of Czech- and English-speaking Blogs

As described earlier, blogs of adolescents aged between 14–17 years were analyzed. The mean self-declared age of the Czech authors was 14.94 years (SD = 1.04), and for English authors, it was 15.58 years (SD = 0.95). We could not determine the exact age for 49 of the English language bloggers (26.3 per cent), and for 16 Czech bloggers (10 per cent). The age distribution of bloggers is displayed in Figure 1.

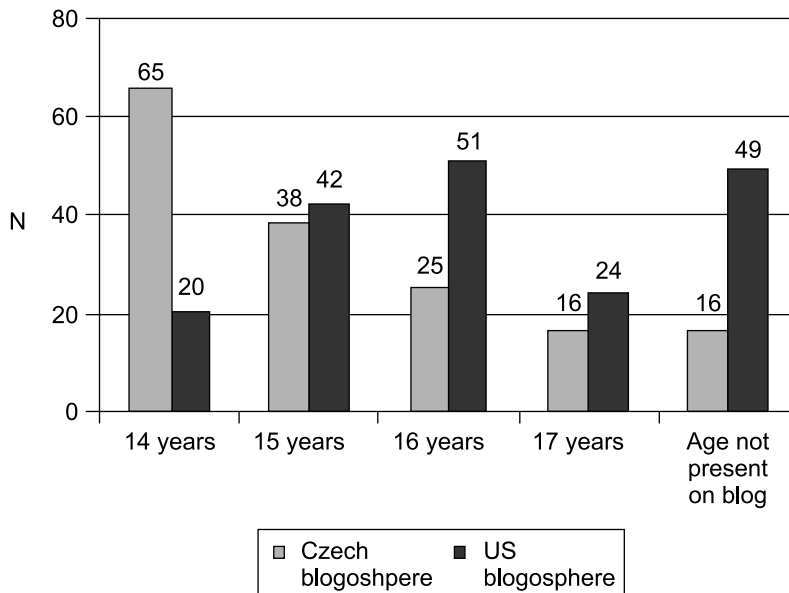


Figure 1. Self-declared Age of Bloggers in Czech and US Blogospheres (N)

Source: Authors' research.

Concerning gender distribution, 6.3 per cent of Czech bloggers were identified as males, and 93.8 per cent as females (N = 160). Among the English language bloggers, 4.3 per cent of the sample identified as males, 86.6 per cent as females, and gender could not be identified for 9.1 per cent of bloggers (N = 186). Excluding the bloggers for whom gender could not be identified, the females share is 95.3 per cent in the US teen blogosphere. Gender information was available for all Czech bloggers as gender identification is included in the grammar of the Czech language.

There is a noticeable similarity in the gender distribution in both cultural contexts. Because there was a very low number of male bloggers in both environments (10 in the US and 8 in the Czech blogosphere), gender differences in blog usage were not analyzed.

The bloggers in the US sample reported living in the following countries: United States ($n = 109$), Canada ($n = 10$), Australia ($n = 7$), the United Kingdom ($n = 5$) and Singapore ($n = 4$); there was one blogger each from Brunei, Indonesia, Malaysia and New Zealand. Location information was not provided by 30 per cent of the bloggers in the US study. The Czech bloggers were all from the Czech Republic.

Revealing Personal Information in Blogs

Figure 2 shows the frequency to which the youth bloggers revealed personal information, such as self-pictures, email addresses, instant messenger screen names and other contact details on their web pages.

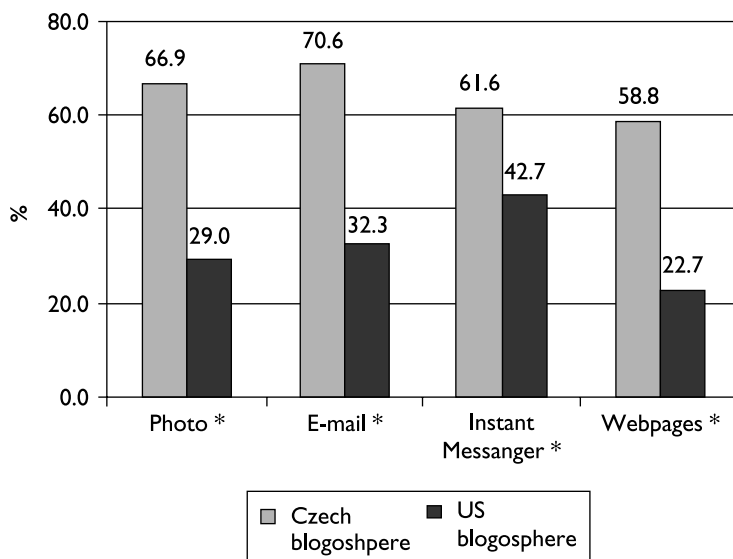


Figure 2. Revealing Personal Information on Blogs (* $p < 0.001$)

Source: Authors' research.

As can be seen from the Figure 2, the Czech bloggers consistently revealed more information about themselves in their blogs (all differences were significant, $p < 0.01$). In both samples, we found age differences with regard to presenting personal information on blogs. Among Czech bloggers, 79.6 per cent of 14–15-year-olds included their email address compared to 56.1 per cent of 16–17-year-olds [$\chi^2(1, N = 144) = 8.21$ $p = .005$]; among English bloggers, 50.0 per cent of 14–15 year-olds presented their email address, versus 25.3 per cent of 16–17 year olds

$[\chi^2(1, N = 137) = 8.91 p = .002]$. Similarly, younger adolescents presented IM number/login more often than the older group: among Czech bloggers 69.9 per cent of 14–15 year olds versus 53.7 per cent of 16–17-year-olds $[\chi^2(1, N = 144) = 3.41 p = .050]$ and among English bloggers 62.9 per cent of 14–15 year-olds versus 41.9 per cent of 16–17-year olds $[\chi^2(1, N = 136) = 5.96 p = .011]$.

Format of Blog Entries

In the US blogosphere, the majority of blog entries used text (98.9 per cent in English blogosphere versus 68.8 per cent in Czech), but in the Czech blogosphere, the majority used visuals (79.8 per cent in Czech versus 33.2 per cent in English). Audio was used slightly more often in Czech blogs (6.3 per cent) than in US blogs (2.3 per cent), but this difference was not significant. No age differences were found in both blogospheres with regard to the format used in the blogs.

Style Used by Czech and English Bloggers

Figure 3 shows the differences in style used in the US and the Czech blogospheres.

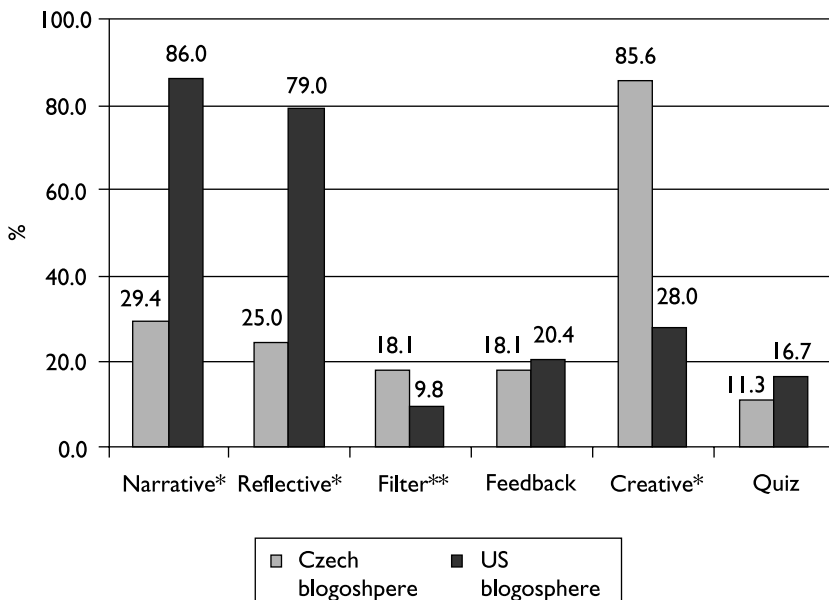


Figure 3. Styles Used by Czech and English Speaking Bloggers (* $p < 0.001$; ** $p < 0.05$)

Source: Authors' research.

In the US blogosphere the majority of bloggers used narrative (86 per cent) and reflective styles (79 per cent) whereas in the Czech blogosphere the majority of bloggers used the creative style in at least one of their entries (85.6 per cent). Czech

adolescents used filters somewhat more often in their blogs. Differences in the use of feedback in entries, and quiz use, were not significant. The differences in the use of narratives, reflection and creativity are mainly caused by the different formats used in both blogospheres: the text format in English speaking blogs more easily allows narration and reflection, and there is little narration and reflection in visual-only entries. However, the use of pictures allows for creativity when working with pictures. This hypothesis is supported by significant differences found through analyses of both blogospheres: 91.7 per cent of bloggers who did not use text in their entries were creative in their entries, but only 51.9 per cent of bloggers who used text were creative in their entries [$\chi^2(1, N = 346) = 14.28 p < .001$]. Similarly, only 54.4 per cent of bloggers whose entries contained visuals used narratives, but 73.5 per cent of bloggers who used text alone were narrative [$\chi^2(1, N = 346) = 10.59 p = .001$]. Concerning reflection, 66.3 per cent of bloggers who had not used visuals were reflective in their entries, but only 49.2 per cent of bloggers who used visuals were reflective [$\chi^2(1, N = 346) = 8.30 p = .003$]. These results indicate that use of visuals is more strongly connected with creativity, but the use of text alone is associated with narrative and reflective entries. The only significant age difference in regards to blog style was that among Czech bloggers, 14–15-year-olds asked for feedback more often than the 16–17-year olds (22.3 per cent versus 4.9 per cent) [$\chi^2(1, N = 144) = 6.23 p = .008$].

Topics in Blog Entries

Figure 4 shows a list of topics and the frequency with which they appeared in youth blogs.

In the US blogosphere, the most frequent topics were, family, peers, structured life, public scene and blog issues in that order. In the Czech blogosphere, the more frequent topics were public scene and blog related issues. Blog entries focusing on family, peers, romance/sexuality, structured life, identity and life events were more frequent in the English language blogs whereas entries about the public scene were more common in Czech blogs. This finding is related to the format of blogs: visual blogs more often had entries about the ‘public scene’—celebrities, actors and singers. The ‘text only’ entries focused more on family, peers and structured life. Confirming this, we found that whereas 4.2 per cent of blogs without text contained family issues, 40.4 per cent of blogs using text format contained family issues [$\chi^2(1, N = 346) = 12.45 p < .001$]. Similarly, 32.3 per cent of blogs with visuals dealt with family issues, versus 52 per cent of blogs without visuals [$\chi^2(1, N = 346) = 11.69 p = .001$]. Similarly, 68.1 per cent of blogs using visuals dealt with the public scene compared to 51.0 per cent of blogs without visuals [$\chi^2(1, N = 346) = 8.87 p = .002$]. Interestingly, there were no significant differences between both blogospheres in the topics of teen problem behaviour and blog issues.

When analyzing differences among age groups we found that younger Czech adolescents (14–15 years), blogged less about romance and sexuality compared to older bloggers (16–17 years) (14.6 per cent versus 29.3 per cent) [$\chi^2(1, N = 144) = 4.16 p = .038$]. Younger English bloggers (14–15 years) blogged less about life

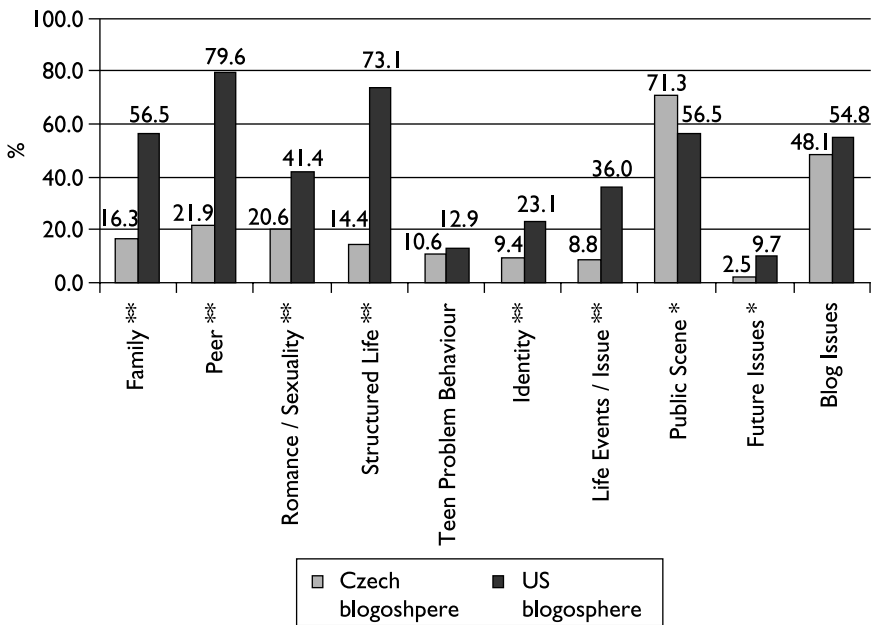


Figure 4. The Topics of Czech and English Speaking Blogs (* $p < 0.001$; ** $p < 0.05$)

Source: Authors' research.

events than the older bloggers (16–17 years) (24.2 per cent versus 44 per cent) [$\chi^2(1, N = 137) = 5.85 p = .012$]. No other significant age differences were found in both blogospheres.

Discussion

We conducted this study to describe Czech blogs maintained by youth and to compare the teen blogosphere in English and the Czech language in order to assess whether there is a dominant global online youth culture or whether the local context (for example, language, popular public scene) impacts youth online culture. We examined general differences with regard to revealing personal information, format, style and topics used in blog entries. Our comparisons revealed both similarities as well as differences.

Age and Gender Distribution: Youth Bloggers are Mostly Younger Teenage Girls

Results from both blogospheres suggest youth bloggers are between 14 and 15 years of age (M age of US bloggers = 15.6 years and M age of Czech bloggers = 14.9 years) suggesting that online content creation by Western youth might be more common among those in the middle of adolescence. Interestingly, we found that in both

blogospheres most youth bloggers were female (95 per cent in the US and 94 per cent in the Czech blogosphere). Although a few studies have shown that there are equal numbers of male and female bloggers (Herring et al., 2004; Schmitt et al., 2008), others showed significantly more female among bloggers (Blinka and Smahel, 2009; Huffaker and Calvert, 2005; Mazur and Kozarian, 2010; Subrahmanyam et al., 2009). As Subrahmanyam et al. (2009) pointed out, keeping diaries is more often associated with girls than with boys. Lenhart et al. (2008) also found that writing after school for self-enjoyment is more popular among teenage girls than boys and keeping a journal is more than twice as common among girls. Overall, our results reveal that the gender and age of the youth bloggers are very similar in the English- and Czech-language blogospheres.

Personal Information in Blogs: Are Teens Revealing too Much?

With regard to revealing personal information on blogs we found that in the US blogosphere, a third of the bloggers revealed their email; slightly more revealed their IM screen name, and slightly fewer revealed their personal picture. The latter numbers are a bit lower than those reported by Mazur and Kozarian (2010)—in their study of blogs maintained by US youth, about 50 per cent of the bloggers displayed personal photographs, with about 44 per cent presenting pictures of themselves. This discrepancy is probably because Mazur and Kozarian's participants were a bit older with a mean age of about 17 years. Additionally, younger bloggers in the English blogosphere may be more cautious because of wide publicity in the media and education and enforcement efforts in the US about predators and other dangers online. In the Czech blogosphere, about two thirds of blogs contained links to personal web pages, instant messenger user names/numbers, email addresses and personal photos. Clearly Czech youth reveal personal information in their blogs much more often than the English language bloggers suggesting that they may not be very afraid for their safety on the Internet. In fact, Hasebrink et al. (2008) have identified the Czech Republic as a country where youth are more at risk from Internet use than in other countries. Perhaps, Czech youth are influenced by the 'disinhibited environment' effect (Suler, 2008), where the invisibility of potential attackers makes them feel comfortable sharing personal information that they would not share with strangers in the offline world.

Notwithstanding these safety concerns, revealing and sharing basic information about oneself may help youth feel more identified with the content of their blog, reassuring themselves that it is the self that is involved in the act of creating this personal narrative. Similar sharing of identifying information about the self has been found in anonymous chat environments, where the 'a/s/l' code (age, sex, location) was one of the most frequent utterances (Subrahmanyam et al., 2006).

Blog Formats: Different Cultures—Different Format of Self-expression

We also found major differences in the format of the blog entries most commonly adopted in the two blogospheres. Czech blogs contained visuals more often

(79.9 per cent of entries) compared to English language blogs (33.2 per cent of entries) and the latter contained text more often (98.9 per cent of entries) compared to the Czech blogs (68.8 per cent of entries). In the Czech blogs, the main message was more often the picture—text was used to comment on the pictures and thus played a more minor role. In contrast, in the English language blogs, the main message was mostly expressed in text format. This consistent difference in format also led to other differences in blog styles and themes, which will be discussed further on in the paper. We speculate that this difference in blog format may be caused by differences in the education systems and curriculums in the USA and the Czech Republic. Given the emphasis on language arts in the US, school children there tend to write many essays throughout the school year. However, children and teens in the Czech Republic write only a few essays during a school year, and usually only in Czech language classes. Essays and reflections are not generally perceived as important and therefore Czech youngsters are not trained and skilled in this kind of writing. According to Pew Internet Project, US youngsters write almost every day, with more than 90 per cent perceiving writing as important for their life and future success (Lenhart et al., 2008). We suggest that as a result of these different curriculums, English language bloggers (and the majority of these bloggers were from the US) expressed themselves mostly through written text, and the Czech language bloggers used visual formats to express themselves. Although the youngsters from transitional countries such as the Czech republic possess greater knowledge capital compared to older generations (Kalmus and Vihalemm, 2008) in these countries, the gap between them and youngsters from more developed countries like the US is still present. Such a gap is likely leading to different ways of Internet use, especially with regard to more advanced content creation activities such as blogging, the focus of this study.

Blog Styles: Feedback, Quizzes and Surveys as a Communication Form

Another consistent distinction between the Czech and English blogospheres was in the style of blog entries. Narrative and reflective styles were mostly found in the English blogosphere perhaps because these styles are more consistent with text-based blogs. On the other hand, the creative style was used more often by the Czech bloggers. Despite this basic difference, other elements of blog styles were stable across both blogospheres. First, about a fifth of the Czech and English language bloggers asked for feedback in their blogs; feedback was requested regardless of the particular format of the blog. Both groups of bloggers also used quizzes and surveys in similar ways in their blogs. Requesting feedback and posting quizzes are a means for bloggers to communicate with their audience. Such self-presentation and asking for advice may also help with establishing a sense of intimacy between friends and for youth identity construction. In fact, Davis's qualitative study (2010) found that friends often read and comment on each others' entries; the study also showed the importance of quizzes in girls' blogging —finding the answer to questions such as 'what kind of song are you?' is akin to answering the fundamental question of adolescence 'who am I?' (Erikson, 1968).

Blogs Themes: Daily Life in English Language Blogs versus Public Scene in Czech Blogs

One important area of difference between the two blogospheres was the topic of the entries. Youth blogs in English were often about bloggers' families, peers, romance, structured life, identity, and life events, whereas blogs in Czech were more often about the public scene, often connecting it with pictures of singers and actors. Topics such as teen problem behaviour and blog related issues were addressed to similar extents in the two blogospheres. Problem behaviour had a surprisingly low occurrence in both blogospheres, and appeared only in 10 to 13 per cent of the entries. Perhaps the youth bloggers did not write about them because most of their blogs were public and they were aware that peers from their offline life read their blogs. Not wanting to reveal problem behaviours to their audience, they might have instead presented themselves in a positive light. Consistent with this finding, we have found in other work that Czech adolescents often lied in their blogs about their partner relationships, skills, family and sexual experience suggesting that they were trying to embellish their image; interestingly they rarely lied about their age and gender (Blinka and Smahel, 2009).

In contrast, blog issues or 'blogging about blogging' was mentioned by about half the sample in both blogospheres. The high occurrence of this 'meta-blogging' may not be all that surprising. According to Schmitt et al. (2008), creating a blog is connected to positive feelings about mastery and competence, and 88 per cent of the bloggers in their study confirmed that they were proud about their blogging abilities. Similarly, Kalmus et al. (2009) suggest that blogging is among the more advanced online activities engaged in by youth. Only a minority are active and willing enough to go beyond simple Internet use, such as communicating with their peers. It takes time, skills, and energy to 'climb the ladder of online opportunities' to be able to use more advanced online applications, which can lead to creative Internet use and content creation. Thus, it appears that blogging may not be just a means for youth self expression or a means to communicate with peers, but may also serve as a test of young people's computer-related skills and possibly even a prelude to more sophisticated content creation in the future.

The Relation between Online and Offline Worlds: The Case of Blogs

We undertook this study to compare English and Czech language blogs and to examine whether young peoples' online and offline worlds were connected in a context other than the US and Western Europe. Like the English language blogs, Czech blogs were maintained by mostly female youth suggesting continuity with offline preferences for diary and journal writing. At the same time there were differences between the two sets of blog entries suggesting the blog authors' physical context likely influenced the particular format or content of their entries.

As noted earlier, sharing of personal information was very common and significantly higher within the Czech blogosphere compared to the English blogosphere. But the biggest differences were in the format of blog entries, which also led to

differences in style and content. English blog authors used text format, and entries that were narrative and reflective in style and focused on their everyday lives; Czech bloggers used more visual content leading to more creative blog content and entries about the public scene. We suspect that these differences may be related to the youth sub-culture that the authors of the two blogospheres belonged to. In effect, youth of similar ages and gender were using the Internet for the same purpose of blogging, but were doing so in quite different ways.

Overall our results suggest continuity between the online and the offline among youth bloggers regardless of whether they wrote in English or Czech. For youth, blogs serve as a communication tool and provide opportunities to play with technology rather than being only an intimate personal diary. Despite these underlying similarities, our comparative analysis suggests that although the Internet may have become globalized, findings from one context do not easily generalise to another context, even when both are Euro-American cultures.

Limitations

One limitation of our comparative analysis is that some of the differences that we found in blogging might have stemmed from variations in technical capabilities rather than cultural differences. Blogging servers do vary. For example, some of the English blogging servers (that is, LiveJournal) set an age limit during the data collection period of this study and only those older than 14 years were allowed to create a blog. There were no such limits in the Czech blogosphere and this could have led to the younger age of the Czech bloggers. Other blog server features such as the amount of storage for pictures and other design options might have also influenced the format and content of blog entries.

Another limitation is the asymmetry in the sample—the US/English blogosphere is much larger and diverse compared to the Czech blogosphere. First, in contrast to the US, the Czech Republic has a very homogenous population with a low rate of immigration; with more than 90 per cent of native Czech, who only speak the Czech language, Czech youth are culturally quite unified. Second, even though one third of our 'US sample' did not explicitly disclose their country of residence, they all wrote in English on US-based blogging sites, and so were considered a part of the US blogosphere. Thus the US blogosphere is more diverse and thus our results and interpretations about the differences between the blogospheres must be tempered. A final limitation is that the analysis was mostly descriptive because of the nature of the data and the largely female composition of our sample of blog authors.

Conclusions and Future Directions

In conclusion, our study is a first step in examining the similarities and differences in the online content created by youth. Our results suggest that for youth who live in Westernized Industrialized countries such as the US, Australia, United Kingdom, Western and Eastern Europe, there may be continuity between young people's offline

lives and the online worlds that they create. At the same time, there may be national patterns or differences even in today's globalized and Internet-connected world. Future research should examine online activities as they relate to users' cultural and national characteristics such as the role of school systems, language, political philosophy, values and beliefs.

Acknowledgement

The study was supported by a grant from the Ministry of Education, Youth and Sports of the Czech Republic, MSM0021622406 and grant No. 8527, financed by the Estonian Science Foundation.

References

- Argamon, Shlomo, Koppel, Moshe, Pennebaker, James W. and Schler, Jonathan (2007) 'Mining the Blogosphere: Age, Gender and the Varieties of Self-expression', *First Monday* 12 (9) URL (consulted March, 2012): http://firstmonday.org/issues/issue12_9/argamon/index.html
- Blinka, Lukas and Smahel, David (2009) 'Fourteen is Fourteen and a Girl is a Girl: Validating the Identity of Adolescent Bloggers', *Cyberpsychology & Behavior* 12(5): 735–39.
- Brown, Bradford B. (2004) 'Adolescents' Relationships with Peers', in Richard M. Lerner and Laurence Steinberg (eds) *Handbook of Adolescent Psychology. Second Edition*, pp. 363–94. Hoboken: Wiley.
- Bruns, Axel (2006) 'Towards Prodisage: Futures for User-led Content Production', in Fay Sudweeks, Herbert Hrachovec and Charles Ess (eds) *Cultural Attitudes Towards Technology and Communication 2006*, pp. 275–84. Murdoch: Murdoch University.
- Davis, Katie (2010) 'Coming of Age Online: The Developmental Underpinnings of Girls' Blogs', *Journal of Adolescent Research* 25(1): 145–71.
- Erikson, Erik H. (1968) *Identity, Youth, and Crisis (1st ed.)*. New York: W.W. Norton.
- Hasebrink, Uwe, Livingstone, Sonia and Haddon, Leslie (2008) *Comparing Children's Online Opportunities and Risks across Europe: Cross-national Comparisons for EU Kids Online*. London: LSE. URL (consulted September 2011): <http://eprints.lse.ac.uk/21656/>
- Herring, Susan C., Scheidt, Lois Ann, Bonus, Sabrina and Wright, Elijah L. (2004) *Bridging the Gap: A Genre Analysis of Weblogs*. Proceedings of the 37th Hawaii'i International Conference on System Sciences (HICSS '04)/track 4, URL (consulted April, 2010): <http://www.computer.org/portal/web/csdl/proceedings/h#4>
- Hodkinson, Paul and Lincoln, Sian (2008) 'Online Journals as Virtual Bedrooms: Young People, Identity and Personal Space', *Young* 16(1): 27–46.
- Huffaker, David A. and Calvert, Sandra L. (2005) 'Gender, Identity and Language Use in Teenage Blogs', *Journal of Computer-Mediated Communication* 10(2), article 1.
- Kalmus, Veronika and Vihalemm, Triin (2008) 'Patterns of Continuity and Disruption: The Specificity of Young People's Mental Structures in Three Transitional Societies', *Young* 16(3): 251–78.
- Kalmus, Veronika, Runnel, Pille and Siibak, Andra (2009) 'Opportunities and Benefits Online', in Sonia Livingstone and Leslie Haddon (eds) *Kids Online. Opportunities and Risks for Children*, pp. 71–82. Bristol: The Policy Press.
- Kim, Jeong Hee (2009) 'Falling into Silence and Fears of Mad Cow Disease in the South Korean Blogosphere', *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 3(1), article 1.

- Lenhart, Amanda and Madden, Mary (2005) 'Teen Content Creators and Consumers', *Pew Internet & American Life Project*, URL (consulted January, 2010): <http://www.pewinternet.org/Reports/2005/Teen-Content-Creators-and-Consumers/1-Summary-of-Findings.aspx>
- Lenhart, Amanda, Arafeh, Sousan, Smith, Aaron and Macgill, Alexandra (2008) 'Writing, Technology and Teens', *Pew Internet & American Life Project*, URL (consulted January, 2010): <http://www.pewinternet.org/Reports/2008/Writing-Technology-and-Teens.aspx>
- Livingstone, Sonia (2008) 'Taking Risky Opportunities in Youthful Content Creation: Teen-agers' Use of Social Networking Sites for Intimacy, Privacy and Self-expression', *New Media & Society* 10(3): 393–411.
- Manago, Adriana M., Graham, Michael B., Greenfield, Patricia M. and Goldie, Salinkham (2008) 'Self-presentation and Gender on MySpace', *Journal of Applied Developmental Psychology* 29(6): 446–58.
- Mazur, Elizabeth and Kozarian, Lauri (2010) 'Self-Presentation and Interaction in Blogs of Adolescents and Young Emerging Adults', *Journal of Adolescent Research* 25(1): 124–44.
- Miura, Asako and Yamashita, Kiyomi (2007) 'Psychological and Social Influences on Blog Writing: An Online Survey of Blog Authors in Japan', *Journal of Computer-Mediated Communication* 12(4): 1452–71.
- Pedersen, Sarah and Macafee, Caroline (2007) 'Gender Differences in British Blogging', *Journal of Computer-Mediated Communication* 12(4): 1472–92.
- Premsky, Marc (2001) 'Digital Natives, Digital Immigrants', *On the Horizon* 9(5): 1–6.
- Rambaree, Komalsingh (2008) 'Internet-Mediated Dating/Romance of Mauritian Early Adolescents: A Grounded Theory Analysis', *International Journal of Emerging Technologies and Society* 6(1): 34–59.
- Scheidt, Lois Ann (2006) 'Adolescent Diary Weblogs and the Unseen Audience', in David Buckingham and Rebekah Willett (eds) *Digital Generations: Children, Young People and NewMedia*, pp. 193–210. London: Lawrence Erlbaum.
- Schmitt, Kelly L., Dayanim, Shoshana and Matthias, Stacey (2008) 'Personal Homepage Construction as an Expression of Social Development', *Developmental Psychology* 44(2): 496–506.
- Siibak, Andra (2009) 'Constructing the Self through the Photo selection—Visual Impression Management on Social Networking Websites', *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 3(1): article 1.
- Subrahmanyam, Kaveri, Smahel, David and Greenfield, Patricia M. (2006) 'Connecting Developmental Constructions to the Internet: Identity Presentation and Sexual Exploration in Online Teen Chat Rooms', *Developmental Psychology* 42(3): 395–406.
- Subrahmanyam, Kaveri and Greenfield, Patricia (2008) 'Media symbol system and cognitive processes', in Sandra L. Calvert and Barbara J. Wilson (eds) *The Handbook of Children, Media, and Development*, pp. 166–87. Hoboken: Wiley-Blackwell.
- Subrahmanyam, Kaveri, Reich, Stephanie M., Waechter, Natalia and Espinoza, Guadalupe (2008) 'Online and offline social networks: Use of social networking sites by emerging adults', *Journal of Applied Developmental Psychology* 29: 420–33.
- Subrahmanyam, Kaveri, Garcia, Eddie C.M., Harsono, Lidwina Stella, Li, Janice S. and Lipana, Lawrence (2009) 'In Their Words: Connecting Online Weblogs to Developmental Processes', *British Journal of Developmental Psychology* 27(1): 219–45.
- Subrahmanyam, Kaveri and Smahel, David (2011) *Digital Youth: The Role of Media in Development*. New York: Springer.
- Suler, J. (2008) *The Psychology of Cyberspace*. URL (consulted November, 2010): <http://www-usr.rider.edu/~suler/psyber/psyber.html>

- Suh, Eunkook, Diener, Ed, Oishi, Shigehiro, Trinadis, Harry C. (1998) 'The Shifting Basis of Life Satisfaction Judgements Across Cultures: Emotions Versus Norms', *Journal of Personality and Social Psychology* 74(2): 482–93.
- Tapscott, Don (1998) *Growing up digital: The Rise of the Net Generation*. New York: McGraw-Hill.
- Trammell, Kaye D., Tarkowski, Alek, Hofmokl, Justzna and Sapp, Amanda M. (2006) 'Rzeczpospolita blogów [Republic of Blog]: Examining Polish Bloggers Through Content Analysis', *Journal of Computer-Mediated Communication* 11(3): article 2.
- Weinstein, Estelle and Rosen, Efreem (1991) 'The Development of Adolescent Sexual Intimacy: Implications for Counseling', *Adolescence* (26): 331–40.

Lukas Blinka is a doctoral student of social psychology at the Faculty of Social Studies, Masaryk University, the Czech Republic, and of media and communication at the Institute of Journalism and Communication, University of Tartu, Estonia. He has published several book chapters and articles; for example, in *Cyberpsychology & Behavior* and *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*. [e-mail: blinka@fss.muni.cz]

Kaveri Subrahmanyam is Professor of psychology at California State University, Los Angeles, and Associate Director of the Children's Digital Media Center @ Los Angeles. She studies the cognitive and social implications of interactive media use. She is the co-author (with David Šmahel) of *Digital Youth: The Role of Media in Development* (Springer, 2011). Dr. Subrahmanyam is an Associate Editor for the *International Journal for Research on Cyber Behavior and Learning*. [e-mail: ksubrah@calstatela.edu]

David Šmahel is Associate Professor at the Institute of Children, Youth and Family Research, Masaryk University, the Czech Republic. He directs the workgroup "Cyberpsychology" which researches social psychological implications of the internet and technology. He is the editor of *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* (www.cyberpsychology.eu). [e-mail: smahel@fss.muni.cz]

Francesca Romana Seganti obtained her PhD (in 2007) from the London Metropolitan University with a dissertation concerning the role of an online community in the lives of Italian migrants in London. She currently works as Adjunct Assistant Professor of Communications at the American University of Rome. [e-mail: fseganti@johnrobot.edu]