Abstract

Rapid Internet development shifted the focus of attention to the recognition of the Internet not as different world but as a social network demanding for studies of digital rules, competence and citizenship. The aim of the study was to reveal and describe the phenomena of “constant accompaniment” of any daytime and nighttime activities by the Internet and switching between online and offline as an important characteristic of digital socialization of contemporary adolescents. 1553 schoolchildren 12-17 years old from 15 cities of the Russian Federation and 1219 parents of adolescents of the same age participated in the study. Participants appraised their user activity, subjective relationship between “real” and virtual “worlds” and frequency of Internet use during different activities (“Immediately after awake”, “During eating”, “During school classes / at work”, “At school breaks / during work breaks”, “During homework / during homework duties”, “During communication with friends”, “On the way (in the bus, subway, car)”, “In public places (cafes, museums, shops, etc.)”, “In bath”, “Just before bedtime”, “When wake up at night”). According to the results, parents more frequently perceived themselves as living in the “real” world while adolescents perceived themselves as living both online and offline or switching between them. Almost any daytime and even nighttime activity could be supplemented by using the Internet, especially in adolescents. These phenomena are not explained by user activity and typical for both males and females.

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Keywords: Digital socialization, adolescents, Internet perception, user activity, Russian population study.

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1. Introduction

Traditional metaphor used to describe the Internet is the metaphor of the second “world” differentiating “real” and “virtual” worlds as two spheres of activity (Nosov, 2000). According to it, Internet is typically perceived as one of the personal activities (e.g., user activity) demanding special forms of learning (Gilster, 1997) that could sometimes lead to constringtion of the offline activities and substitution of them (Griffiths, 2010). Rapid Internet development shifted the focus of attention to the recognition of the Internet not as different world but as new social network demanding for studies of digital rules, competence and citizenship (Mossberger, Tolbert, & McNeal, 2008). The new metaphor of flowing modernity (Bauman, 2008) leads to consideration of the Internet not as a world but as a dimension supplementing any personal activities. Like a prism, the Internet transform (but not breaks) any personal activity.

2. Problem Statement

On the practice of psychology of Internet, it means that traditional methods of measuring “user activity” as frequency during weekdays and weekends (for example, Livingstone & Haddon, 2009; Soldatova et al., 2013) may be not ecologically valid enough anymore because people do not divide their time as online and offline. As contemporary changes in Internet perception, they should be more prominent in adolescents than in adults.

3. Research Questions

The study is devoted to the question of how adolescents and parents of adolescents perceive and use Internet comparing to their offline activities.

4. Purpose of the Study

The aim of the study was to reveal and describe the phenomena of “constant accompaniment” of any daytime and nighttime activities by the Internet and switching between online and offline as an important characteristic of digital socialization of contemporary adolescents. We hypothesized that:

1. Adolescents most frequently perceive themselves as living both online and offline or switching between them but not perceive online and offline as different “worlds” with the tendency to prefer one of them. On the contrary, parents perceive themselves as living in the “real” world that indicate subjective opposition of online and offline for them.
2. Nowadays online activities supplement (but not substitute) any daytime and even nighttime activities making online and offline interacting not opposing worlds. This is especially true for adolescents.
3. Higher user activity in adolescents is related to more prominent feeling of living in the virtual world and to the use of Internet in any other daytime and nighttime activities.
5. Research Methods

1553 schoolchildren 12-17 years old from 15 cities of the Russian Federation and 1219 parents of teenagers of the same age participated in the study (see table 01 for details). Among schoolchildren, 471 people were aged 12–13 years old (218 boys — 46.3%, 241 girls — 51.2%, 12 people did not indicate gender — 2.5%) and 1082 aged 14–17 years old (493 boys - 45.6%, 541 girls - 50.0%, 48 people did not indicate their gender - 4.4%).

Among parents, 220 people were men (18.0%), 959 were women (78.7%), in 40 cases the gender was not indicated (3.3%). In the group of parents, 409 people responded about their teenage children 12–13 years old (33.6%), 796 (65.3%) - about teenagers 14–17 years old, 14 did not indicate (1.1%). 510 people were parents of boys (41.8%), 645 were parents of girls (52.9%), in 64 cases these data were omitted (5.3%).

Table 01. Sample description

<table>
<thead>
<tr>
<th>Sample description</th>
<th>Adolescents 12-13 years old</th>
<th>Adolescents 14-17 years old</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>471</td>
<td>1082</td>
<td>1219 (409 parents of adolescents 12-13 years – 33.6%, 796 – of adolescents 14-17 years – 65.3%, 14 didn’t report)</td>
</tr>
<tr>
<td>Gender of adolescents</td>
<td>218 boys (46.3%), 241 girls (51.2%), 12 didn’t report (2.5%)</td>
<td>493 boys (45.6%), 541 girls (50.0%), 48 didn’t report (4.4%)</td>
<td>510 boys (41.8%), 645 girls (52.9%), 64 didn’t report (5.3%)</td>
</tr>
<tr>
<td>Gender of parents</td>
<td>–</td>
<td>–</td>
<td>220 males (18.0%), 959 females (78.7%), 40 didn’t report (3.3%)</td>
</tr>
<tr>
<td>Mean age of adolescents</td>
<td>12.51±.50 years</td>
<td>15.40±1.04 years</td>
<td>14.45±1.71 years</td>
</tr>
<tr>
<td>Mean age of parents</td>
<td>–</td>
<td>–</td>
<td>28 – 65 years (41.14±5.73 years)</td>
</tr>
<tr>
<td>City</td>
<td>• Vladikavказ, Volgograd, Kazan, Petropavlovsk-Kamchatsky, Kemerovo, Kirov, Rostov-on-Don, St. Petersburg, Tyumen, Khabarovsk, Yekaterinburg, Vologda – 24 subjects each (5.1%); • Moscow and Moscow region –</td>
<td>• Vladikavказ, Volgograd, Kazan, Petropavlovsk-Kamchatsky, Kemerovo, Kirov, Rostov-on-Don, St. Petersburg, Tyumen, Khabarovsk, Yekaterinburg – 75 subjects each (6.2%); • Rostov-on-Don – 68 (5.6%); • Vologda – 63 (5.2%); • Moscow and Moscow region – 147 (12.1%) и 62 (5.1%); • Makhachkala – 82 (6.7%); • Novosibirsk – 47 (3.9%)</td>
<td></td>
</tr>
</tbody>
</table>
User activity was assessed by two questions: “How much time do you spend on the Internet on weekdays?” and “How much time do you spend on the Internet on weekends?” There were 14 variants for answers for each item from “Almost no” and “Less than half an hour per day” to “12 hours per day and more”. Participants have chosen one variant between: “I live mostly in the real world”, “I live mostly in the virtual world”, “I live equally in both worlds”, “I don't see any difference between online and offline. They are similar for me”, “I switch between these two worlds depending on the situation”, “Real and virtual worlds for me are totally independent”.

Subjective relationship between “real” and virtual “worlds” were appraised by single item: “Today it is often said that we live in two worlds - real and virtual. What world do you live in?”

Supplementation of different daytime and nighttime activities by the Internet was measured by 11 items describing different activities. Participants were asked to appraise how frequently they use Internet during each of the activities using 5-point Likert scale (from “Never” to “Always”): “Immediately after awake”, “During eating”, “During school classes / at work”, “At school breaks / during work breaks”, “During homework / during homework duties”, “During communication with friends”, “On the way (in the bus, subway, car)”, “In public places (cafes, museums, shops, etc.)”, “In bath”, “Just before bedtime”, “When wake up at night”.

6. Findings

6.1. Internet use during other daytime and night time activities

In contemporary world people combine Internet with any activities: even waking up and in the bath almost half of parents and adolescents are online (Figure 01). Leading “Internet-supplemented” activities are those before bedtime and during waiting. On the road, every second younger teenager and two out of three older teenagers often or always surf the Internet, and two out of three parents go online at least sometimes. Before going to bed, about half of the youngest adolescents are always or often online, and two out of three older ones (for the parents there is one out of three). Internet surf during home tasks and breaks between school classes is almost as frequent in adolescents as Internet surf before bedtime. Moreover, almost every second teenager 14–17 years old often or always checks his “online world” immediately after waking up (for comparison, for parents and younger teens it is one of four or five people). Less than half of adolescents 12-13 years old and one teenager of 14-17 years old out of five do not use the Internet at school (comparing to every third in their parents who don’t use it at work). Half of the respondents, at least sometimes, are online when communicating “face-to-face” with friends; half of adolescents - during a meal; every third - when waking up at night.
For any activities, adolescents are more active Internet users that parents (F=23.73-262.99, p<.05, η²=.02-.18).

In adolescents 12-13 years old there is only one difference in the Internet use: girls more frequently use Internet in bath than boys (t=-2.29, p<.05). In adolescents 14-17 years old females more frequently use Internet than males just after wake up, on the road and before sleep (t=-4.63 - -2.83, p<.01). Similarly, mothers more frequently use Internet than fathers on the road and before sleep (t=-3.82 - -2.14, p<.05).

In all cases, parents use the Internet less often than children during the day and night.

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**Figure 01.** Internet use in adolescents and parents during different activities in day and night.
6.2. Subjective appraisals of relationship between “real” and virtual “worlds”

Adolescents are more sensitive to this “constant accompaniment” of Internet than their parents. When we asked them in which world they feel they live - virtual or “real” - most adults (67.9%) confidently answer that in the real world (Figure 02). Among older teenagers only one third replied in the same manner. One adolescent out of four - both for 12-13 and 14-17 years old - answers that he/she switches between worlds depending on the time and task, supporting ideas about the development of multitasking as a modern socio-psychological phenomenon. It should be noted that adolescents reporting that they live mainly in the virtual world are few (1.4-2.4%), which corresponds with their parents (.8%). However, one teenager of eight or nine reports that he lives in both worlds equally. In other words, there is no evidence that the online world has “surpassed” or “captured” the world offline - rather, it has become no less important for teenagers than the “real” world. Comparisons of parent and adolescents reveal much higher feeling of living in both worlds or switching between them in adolescents comparing to parents ($\chi^2=318.14, p<.01, \text{Cramer’s V=.24}$).

In adolescents, boys and girls do not differ in their appraisals of “real” and virtual “worlds” while in parents there is a very weak difference ($\chi^2=14.09, p<.05, \text{Cramer’s V=.11}$) in that men more frequently say that they live equally in both “worlds” than women.

![Figure 02. Relationship between “real” and virtual “worlds” in adolescents and parents](https://doi.org/10.15405/epsbs.2019.07.90)

6.3. Switching between online and offline: relationship to the user activity.

In both adolescents and parents, the role of online versus offline “world” is related to their user activity (for adolescents 12-13 years old $F=7.43, p<.01, \eta^2=.08$ for weekdays and $F=6.19, p<.01, \eta^2=.07$ for weekends; for adolescents 14-17 years old $F=12.27, p<.01, \eta^2=.08$ for weekdays and $F=16.90, p<.01, \eta^2=.10$ for weekends; for parents $F=12.11, p<.01, \eta^2=.06$ for weekdays and $F=14.87, p<.01, \eta^2=.08$ for weekends). Adolescents feeling that they live mostly in the real world spend least time online and those feeling that they live mostly in the Internet spend their most time while all the other variants are in between (Figure 03). For parents feeling of living equally in the both “worlds” is related to the higher user activity while feeling of living in the virtual “world” is associated with rather low user activity.
Figure 03. User activity in adolescents and parents with different subjective relations between online and offline “worlds”

In all three groups more active Internet users more frequently switch to the Internet during any daytime activities and even when wake up at nights (Table 02). Notably, in adolescents all the correlations tend to be stronger than for parents.

Table 02. Correlations between frequency of Internet use during different activities and user activity in adolescents and parents (all the correlations are significant, p<.01)

<table>
<thead>
<tr>
<th>Internet use during different activities</th>
<th>Adolescents 12-13 years</th>
<th>Adolescents 14-17 years</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time online - weekdays</td>
<td>Time online - weekends</td>
<td>Time online - weekdays</td>
</tr>
<tr>
<td>Immediately after awaking</td>
<td>.46</td>
<td>.42</td>
<td>.33</td>
</tr>
<tr>
<td>During eating</td>
<td>.37</td>
<td>.38</td>
<td>.35</td>
</tr>
<tr>
<td>During school classes / at work</td>
<td>.37</td>
<td>.33</td>
<td>.32</td>
</tr>
<tr>
<td>At school breaks / during work breaks</td>
<td>.39</td>
<td>.38</td>
<td>.30</td>
</tr>
<tr>
<td>During homework / during homework duties</td>
<td>.37</td>
<td>.32</td>
<td>.22</td>
</tr>
<tr>
<td>During communication with friends</td>
<td>.19</td>
<td>.22</td>
<td>.20</td>
</tr>
</tbody>
</table>
7. Conclusion

In accordance with the first hypothesis, while parents perceive themselves as living more in the “real” world than in the Internet, adolescents more frequently perceive themselves as switching between the worlds or living equally in both of them. To our mind, this result indicates that the dichotomy of “real” versus virtual “worlds” is not as prominent for adolescents as for parents. We could further speculate that their socialization is not going partially online and partially offline as their parents would probably perceive it. Rather their socialization has a digital dimension that constantly supplement their offline activities.

As a further support for this hypothesis, almost any daytime and even nighttime activity could be supplemented by using the Internet. This supplementation is more typical for adolescents although it is not as rare in parents as one could suggest. Even waking up, communication “face-to-face” with friends and in bath people remain their online activity.

Both feeling of living merely online than offline and being online during any other daytime activities are more typical for active Internet users. However, wide-spread in adolescents feeling of switching between the “real” and virtual “worlds” and their equivalence seems to be not explained by user activity. We hypothesize that this phenomenon demands psychological analysis from multitask perspective and capability for switching between different tasks that is much more recognized by adolescents than by parents.

Thus, according to our data, for contemporary adolescence but not parents world is not divided into online and offline. Rather, Internet is a dimension of any activities forming their socialization process in the world. From theoretical perspective, this hypothesis demands for further studies of capabilities for switching between different tasks especially when some of them are online and others are offline. In practice, special attention could be paid to the formulation of research questionnaires to be closer to subjective relationships of adolescents to the Internet.

Acknowledgments

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References


