

## **Çocukların Sosyal Ağlarda Kişisel Bilgi Paylaşım Eğilimleri**

### **Children's Information Disclosure Tendencies On Social Networks**

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#### **Özet**

*Bu betimleyici çalışma, çocukların sosyal ağlarda kişisel bilgi paylaşım eğilimleri, sosyal ağları kullanma alışkanlıkları ve potansiyel riskli davranışlarını belirlemeyi hedeflemektedir. Bu çalışma Türkiye'nin en büyük üç şehrinde (İstanbul, Ankara ve İzmir) gerçekleştirilmiş olup, veriler rastgele seçilen 9 ile 16 yaş aralığındaki sosyal ağ kullanıcıları 524 çocuk ve velileri ile yüz yüze görüşmeler yapılarak toplanmıştır. Bu görüşmeler esnasında her çocuk ve yanında bulunan velisine 25 sorusu çocukların sosyal ağ üyelikleri ve sosyal ağlardaki davranışları ile ilgili, 13 sorusu da velilerinin demografik bilgileri ile ilgili, toplam 38 sorudan oluşan 5'li Likert tipi soru sorulmuştur. Soruların oluşturulmasında EU Kids Online projesi ve PEW çalışması kapsamında geliştirilmiş anketlerden yararlanılmıştır. Veriler; çocukların sosyal ağ kullanımındaki eğilimleri ve kişisel bilgi paylaşım alışkanlıklarını etkileyen faktörleri elde etmek için betimsel ve karşılaştırmalı olarak analiz edilmiştir. Sonuçlar göstermektedir ki çocukların yaşları arttıkça sosyal ağ kullanımı artmaktadır. En çok kullanılan sosyal ağ Facebook'tur. Pek çok sosyal ağ sitesi üzerinde hesap oluşturabilmek için en az 13 yaşında olmayı gerektirirken, çalışmaya katılan çocukların neredeyse yarısı 13 yaşından küçük olmalarına rağmen sosyal ağlarda hesapları bulunmaktadır. Çalışmaya katılan çocukların çoğunluğu cep telefonu numaraları, ev adresleri ya da aile üyelerinin isimleri gibi kişisel bilgilerini herhangi bir kısıtlama olmaksızın üyesi oldukları sosyal ağlardaki tüm kullanıcılar ile paylaşmaktadırlar. Araştırmacılar yaşanabilecek herhangi bir olumsuz durumu önlemek*

adına hem ailelerin hem de çocukların sosyal ağ kullanımı konusunda bilinçlendirilmeleri ve ayrıca sosyal ağ geliştiricilerinin de çocukların çevrimiçi güvenliğini sağlamak adına gerekli çalışmalarını yapmaları gerektiğini bildirmektedirler.

**Anahtar Kelimeler:** Sosyal ağlar, Facebook, İnternet güvenliği, Çevrimiçi riskler

## Abstract

*This descriptive study aims to identify children's information disclosure tendency in social network environments, their social network use habits and potential risky behaviors. The study was conducted in Turkey's three largest cities (Istanbul, Ankara, and Izmir), and data were gathered with a survey through face-to-face meetings with randomly selected 524 children between 9 and 16 years old who used social networks, and their parents. The survey consisted total of 38 Likert-type questions that 25 of them were asked to children in order to learn about their social network memberships and habits, and 13 of them were asked to parents in order to collect data about their demographics. Data were analyzed to make descriptive and comparative analysis to see tendencies of children while using SNS and some factors influencing information disclosure. Results show that as children's age increases, the amount of Internet usage also increases. The most frequently used social network site is Facebook. Although the minimum age to create a profile on most social network sites is 13, results show that nearly half of the children who reported having a profile were younger than that. Most of the children share personal information such as mobile telephone numbers, home addresses and names of family members with anyone who accessed the networking site. The researchers suggest that parent's and children's awareness should be raised about the use of social networks to prevent the potential negative consequences of sharing private information. Moreover, social network developers must take necessary actions to protect children's online privacy.*

**Keywords:** Social Networks, Facebook, Internet Safety, Online Risks

## 1. Introduction

In recent years, social networks have become a part of daily life, affecting social life, communication, education, and business. Social networks aim to increase communication among people in an online context. Personal information, photographs, videos, and news can be shared via social networks by their users, who can also see other users' profiles and communicate online and offline using messaging tools (Pempek, Yermolayeva, & Calvert, 2009; Boyd & Ellison, 2007; Lin & Lu, 2011; Hew, 2011). Using social networks is one of the most common activities of today's children and adolescents (O'Keeffe & Clarke-Pearson, 2011). One of the most popular social networks designed by two Harvard University students to increase interactivity among students is Facebook (Boyd & Ellison, 2007). According to Statista.com (2014), there are 1.317 billion active Facebook users all around the world during the second quarter of 2014. Based on Socialbakers.com April 2013 Facebook users rankings, the last report that shows numbers of Facebook users based on country, the US has the highest usage rate among all countries with 163 million users; Brazil with 66.5 million users is second; India with 63 million users is third; Indonesia with 47.2 million users is fourth; Mexico with 40 million users is fifth; and Turkey with 32.5

million users is sixth (Socialbakers, 2013). In the EU Kids Online II project, which collected data from 25.000 European children who are ages of 9 to 16, 58.9% of them had Facebook accounts. Among them, 31.4 % were under 13 years old. In Turkey, 43.8 % of children who reported using Facebook were under 13 (Livingstone, Had-don, Görzig, & Ólafsson, 2011).

Users have different purposes for using social networks. Sener's (2009) study, which focused on Turkey's Facebook usage, showed that the 13-17 year old age groups created and attended more events than other age groups. They also used more Facebook applications. These children used Facebook as a tool to express themselves, as well as to spend time and communicate with friends. Furthermore, Turkish people mostly use Facebook to communicate with their friends (66.2%), to find their old friends (37.7), to know better about their friends (22.6%), and to share photos/videos they like (20.6%) (Sener, 2009). Similarly, research conducted by the Pew Research Center in the US showed that 12-17 year-old users' aims for using Facebook were to reinforce communication with close friends (91%), to maintain communications with friends seen less often (82%), to make plans with friends (72%) and to meet new people (49%) (Lenhart & Madden, 2007).

### **Risks and Safety of Social Networks**

Social networking sites have become a part of daily life routines of young adults and they allocate approximately half an hour for social networking (Pempek, Yermolayeva, & Calvert, 2009). Children all over the world have extremely high tendencies toward addiction to social networks, raising questions about reasons (Boyd, 2008). Kuss and Griffiths (2011) showed that social networking site usage is negatively correlated with social participation and academic achievement. Moreover, social networks usage is moderately related to expose the online risk among children (Staksrud, Ólafsson, & Livingstone, 2013).

Both youths and adults are attracted to social networks because they are curious and want to observe their peers. After joining social networks, children often share alarming amounts of personal information. Children are not aware of consequences of the sharing personal information (Davidson & Martellozzo, 2013). While adding new friends children have higher tendency to disclose their information (Kisekka, Bagchi-Sen & Rao, 2013). Their social presence in an environment where they frequently perceive encouraging reactions might cause addiction (Valkenburg, Peter & Schouten, 2006). Moreover, extensive information sharing may put children at risk of cyberbullying (Erdur-Baker, 2010; Siegle, 2010); "sexting," the sending or receiving of sexual messages (McLoughlin & Burgess, 2009); and an addiction that obstructs offline social life (Livingstone et al., 2011).

Adding strangers to friend list may lead serious threats for social network users such as cyber or sexual abuse. In a survey study conducted by Li (2007), in two ran-

domly selected schools, it was revealed that 40% of children facing with cyberbullying did not know their abusers. Li (2007) explains that the reason for this is the option to use some online communication tools anonymously. Further, people can hide themselves with fake identities in online environments. In Europe, it was found that about 50% of children reported cyberbullying in social networks; and a 50% of children interfaced with abusing via instant messaging services (Livingstone et al., 2011). In addition, 60% of children who have met someone in person after first meeting online stated that their introductions occurred via social networks. All these findings point to the substantial ability of social networks to affect social lives. Friendship with an unknown person is not necessarily a risky behavior, but people can hide their true information, making it very easy to abuse children under a false identity. In Turkey 13% of children add an unknown person in their friend lists (Livingstone et al., 2011).

### **Information Disclosure Behavior on Social Networks**

The age of first Internet use is decreasing every year. EU Kids Online Project results showed that children in Denmark and Sweden start using the Internet at age 7; in Northern Europe at 8. According to TurkStat (2013), it is 9 in Turkey. Children in Turkey access the Internet 74 minutes every day (Livingstone et al., 2011; Livingstone, Cagiltay & Olafsson, 2015). Among the same population, 59% of children use social networks, and 85% of them have a profile on Facebook. One-third of these children is under 13, and 26% of the children stated that their profiles could be seen by everybody (Livingstone et al., 2011). In Turkey, use of social networks is the fourth most popular activity for children in 0-15 years old (TurkStat, 2013). Social network habits of children may cause potential risks for their personal and social lives. Even displaying a full name on public profile constitutes a risk for users (Taraszow, Aristodemou, Shitta, Laouris, & Arsoy, 2010). Public profile pictures, birthdays, names of family members, phone numbers, home addresses, e-mail addresses, former school information, workplaces, professions, and hobbies, pose serious threats to personal privacy (Taraszow, Aristodemou, Shitta, Laouris, & Arsoy, 2010).

Using social networks at younger ages may expose children to security and privacy problems, cyberbullying, and information theft. Consumer Reports (2011) estimated that more than 1 million children are already exposed to cyberbullying. Unless children secure their profiles and protect their information from potential abusers, the likelihood of being cyberbullied will increase (Benson, Saridakis & Tennakoon, 2014; Houghton & Joinson, 2010). Cyberbullying is quite common among young person online, and can cause severe psychosocial problems including depression, anxiety, isolation, and suicide (Hinduja & Patchin, 2010).

As social network users maintain friend lists, offline social interaction often continues on social networks (Livingstone, 2008). Users compete for a virtual presence, and teens especially tend to show different sides of themselves, seeking appreciation from their friends (Boyd,

2008). Moreover, children thought that on social network having lots of friends is cool whether they have met them or not (Lin & Lu, 2011). Curiosity about the status updates of others can lead to an addictive behavior, which influence offline activities (Karaiskos, Tzavellas, Balta, & Paparrigopoulos, 2010).

Social networks have become phenomena with Facebook, but there is still a research gap determining how and in what way social networks influence children. Therefore, social networks should be investigated to understand overall effects on users, particularly children. Since there is an age limit for using these environments, social network studies with users below the age of 13 is important. Children are the most vulnerable user group in these environments. Also parents do not know how to cope with children and adolescents who willingly take these risks, and educators, administrators and policy makers must help them to find solutions (Duncan, 2008). Therefore, the current study aims at investigating information disclosure among children in Turkey using social networks, specifically focusing on the sharing of personal information, risk taking behavior and negative effects of social networks on children.

## **2. Method**

### **Data Collection Tool**

In this study, a survey based on two different surveys were used; one of them was EU Kids Online II Project (2011) and the other one was Pew Internet and American Life Project (Lenhart & Madden, 2007). EU Kids online survey was basically related Internet use and risks. The survey was refined and revised by the researchers, all of whom had relevant previous experience and had contributed to a similar survey for a Europe-wide project, by considering the main themes of the original survey. The themes of the survey consisted of “demographics”, “SN use habits” (i.e. Which SNs do you use?), “SN sharing habits” (i.e. Which of your information do you share, to whom do you share?), and “SN literacy” (i.e. Do you know the rules to save your personal information on SNS?), “risk taking behavior on SNS” (i.e. What if you get contact request from someone who you did not know before?) and “effects of SNs on children’s life” (i.e. Select the issues that you face because of SNs in your daily life”). Survey also consisted some questions for parents to obtain family’s demographic information and socio-economic status (i.e. Educational levels of parents, the number of family members, monthly expenditure). A pilot study was conducted with 10 children as a cognitive interview, which assesses whether children understood the questions (Ogan, Karakus, Kursun, Cagiltay & Kasikci, 2012). The final survey consists of 38 questions, 25 for children and 13 for their parents, which include Likert-type scale and multiple-choice questions.

### **Participants**

Data for this study were collected from Istanbul (n=325), Ankara (n=118), and

Izmir (n=81), the three largest cities in Turkey, in January of 2011 from 524 randomly selected children who were members of at least one social network (Facebook, Twitter, MySpace, etc.). The participants were selected from children aged 9 to 16, and the survey was administered via face-to-face interviews. 18 interviewers, who were a team from a professional research and consulting company, done the fieldwork of this study. The sampling began with interviewers asking parents whether they have a child between the ages of 9 and 16, then whether the child uses a social network. Children who did were invited to the study, and permission was sought from parents or conservators. The survey was administered in each child's house, where the parents or conservators were available but far enough away to allow children to answer freely. A total of 43.5% of parents had jobs; 56.5% did not, and 88% of the non-working parents were responsible for households. Only 48.9% of the parents had graduated from elementary school, and 38% had completed high school. While 84% of the parents were married, 4.8% were single. With regard to interview with parents, 63.5% were the mother of the child, 19.8% were the father, 12.1% were siblings older than 18, and rest were other relatives.

Of the children participants, 11.5% were nine years old; 13.2% were ten, 11.3% eleven, 12.6% twelve, 11.6% thirteen, 12.4% fourteen, 14.9% fifteen, and 12.6% sixteen. There were 33% elementary school, 38% junior high school and 29% high school students. The students were nearly evenly divided with regard to sex: 48.1% female and 51.9% male. Age distributions within both genders were also similar, as seen in Table 1.

**Table 1. Number of participants**

Age	Boys (N)	Girls (N)	Total (N)
9	28	32	60
10	32	37	69
11	28	31	59
12	32	34	66
13	29	32	61
14	33	32	65
15	39	39	78
16	31	35	66
<b>Total</b>	<b>252</b>	<b>272</b>	<b>524</b>

### Data Analysis

Since this study focused on the children SNs use habits, risk taking behaviors and effects of social networks, only those questions addressing this purpose were analyzed descriptively and comparatively. Data of the study were transferred to SPSS 20 analyze software in order to perform descriptive analysis such as frequency and percentiles.

### 3. Findings

Results of the study are presented in the following four subsections.

#### Internet and Social Network Usage

Results showed that 38.4% of children used the Internet once a day, 30.0% used the Internet more than once a day, and 22.9% used the Internet more than once a week (see Table 2). A Pearson Correlation Coefficient test was conducted to learn if there is a relationship between age and Internet usage. According to test results, there is a positive linear relationship between age and Internet usage ( $r = .163$ ,  $n = 524$ ,  $p < .001$ ). The number of boys who used the Internet more than once a day (32%) is greater than the number of girls who did so (27.8%).

**Table 2.** *Frequency of Internet access*

Frequency	Percent (%)
More than once a day	30.0
Once a day	38.4
More than once a week	22.9
Once a week	8.8

As indicated in the method section of the study, this research was conducted with children who had at least one social network account. Facebook was the most popular social network among participants with a ratio of 99%. Furthermore, 9% of participants use Twitter, 8.6% use MSN Livespace, 4.6% use Netlog, and 1.7% use Eksenim as well. When their reasons for joining a social network were asked, 83.6% of children stated that they wanted to contact current friends, 32.3% wanted to see what was happening in the greater social network, 30.7% wanted to find old friends, and 28.2% stated to learn what their friends and other people were doing (see Table 3).

**Table 3.** *Reasons to join a social network*

	Percent (%)
To communicate with current friends	83.6
To see happenings in social network	32.3
To find old friends	30.7
To learn what my friends and other people are doing	28.2
To be cool	6.9
To share my private life	6.3
To get friends	1.0
To play games	0.8
For school work	0.4
To communicate with my relatives	0.2

Like most social networks, Facebook has an age restriction. Users must be 13 years or older to create an account. Even though 48.6% of the participants in this study were younger than 13 (ages 9 to 12), they became members of Facebook by declaring their age to be older than 13.

A frequently discussed issue related to social networks is the number of friends that a user has. The average friend number of participants in this study was 102. Age predicts the number of friends by 15%. That is, when age increases, number of friends increases as well. This might be caused by the fact that as age increases, the frequency of accessing Facebook increases. There is no difference between girls and boys on the number of friends; on average, girls had 103 friends, boys had 102 friends.

According to usage frequency results, 43.1% of the participants visited social networks once a day, 24% visited more than once a week, and 23.7% visited more than once a day. While most participants (42.7%) spent an average of one hour on the sites each time they visited, 31.3% spent more than one hour there (see Table 4). Children 13 and older spent more time than the others on social networks.

**Table 4. Average duration children spend on social networks based on age**

Average Duration	Age								Total (%)
	9 (%)	10 (%)	11 (%)	12 (%)	13 (%)	14 (%)	15 (%)	16 (%)	
10-30 min.	33.3	39.1	35.6	28.8	21.3	15.4	19.2	16.7	26.0
31-60 min.	43.3	44.9	37.3	40.9	44.3	43.1	43.6	43.9	42.7
61-120 min.	18.3	14.5	20.3	24.2	23.0	29.2	29.5	30.3	23.9
121-360 min.	5.0	1.4	6.8	6.1	11.5	12.3	7.7	9.1	7.4

### Information Disclosure on Social Networks

As seen in the Table 5, a considerable number of children share their private information with everyone. In this study, 70% of children shared their Wall Posts with everyone, 50.2% for profile photo, 42.6% for status, 41% for birth day, and 35.2% for photo album; 38.7% allowed anyone to comment on their postings. Another 3.5% share their home address with everyone; 4% share mobile or home phone numbers, 10% share the names of their family members. While most children did not share contact information with everyone, they did share some of their private information such as photos and status updates. Compared to girls, boys share more personal information with everybody. A quarter (25%) of the boys shared their e-mail address versus 15.5% of girls.

About 44.3% of children expressed that they felt it secure to publish personal information on social networks; however, 39.7% of them felt it insecure. On the other hand, 15.8% stated that they did not know whether sharing personal information was secure or insecure. The ratio of boys who found sharing personal information on social networks secure (47.4%) was higher than for girls (30.9%).



While rules protecting personal information on social networks were not known by 46.9% of participating children, 15.8% stated that they read but did not understand these rules. Another 36.8% read and understood those rules. Therefore, it can be asserted that the majority of children were unfamiliar with how their identities should be kept safe on social networks. The percentage of girls who knew about the rules (39.7%) was higher than that of the boys (34.4%).

### Risk-Taking Behavior

Meeting someone first encountered on the Internet is considered a risky activity by many people, especially parents. Questions were asked in order to learn about the children's attitudes on this issue. Half (50.2%) of the participant children in the study stated that they only accept friendship requests from people who they know in real life. While 33.2% of them indicated that they accept requests from people who are at the friend list of their friends and their friends, 15.1% accepted all requests. Considering three groups, children who accept all friendship requests share significantly more information than other groups ( $M=5.3$ ,  $p<0.00$ ). Those who check profile of strangers who sent request share averagely 4.3 of information and the groups of never accept strangers share averagely 2.7 of information listed on Table 5.

**Table 5. Information shared on social networks**

	With everybody (%)	With friends only (%)	With nobody (%)
Wall Post	70.0	27.3	1.1
Profile Photo	50.2	44.5	3.2
Status	42.6	51.7	3.1
Birth Day	41.0	44.8	11.1
Allow Comments on Posts	38.7	56.7	2.1
Tagged Photos	37.0	56.7	3.4
Photo Album	34.5	58.4	4.8
Relationship Status	25.4	35.9	32.4
E-mail Address	20.4	44.7	31.5
Name of Family Members	10.1	38.0	49.0
Mobile or Home Number	4.4	21.8	70.8
Home Address	3.6	16.8	74.6

Slightly less than half (48.1%) of the children reported that when they receive a friendship request from an unknown person, they check the profile of that person; if they know the person, they accept the request. Another 36.8% of children stated that they did not accept friendship requests from people they do not know; 12.6% stated that they accept all friendship requests. Boys (16.5%) accept unknown people's requests more often than girls (8.3%), and high school children (16.8%) accept them more often than primary school children (10.9%).

While 44.8% of children indicated that they do not respond to messages from

people they do not know, 30.3% responded according to the content of the message. Only 9.4% expressed that they would definitely respond to messages on social networks sent by unknown people. As age increases, the ratio of responding to messages from strangers increases as well. This ratio is higher for boys (11.4%) than for girls (7.1%). Finally, 63.4% of children never reveal where they are to their social networks, 33.4% do sometimes and 2.5% generally share that information. Lastly, children were asked whether they had ever experienced regret because of an old post and 93.1% reported they had not. As seen from these results, risk-taking behaviors are higher among boys and increase by age.

### Negative Effects of Social Networks on Children

While 36.1% of the children stated that the time they spent on social networks negatively affected them, 61.8% indicated that it did not. The ratio of children in high school who indicated social networks affected their lives negatively (49%) was more than the children in elementary school (30.3%). Children who expressed that time spent on social networks had negatively effects specified problems allocating enough time for their courses (60.3%), friends (24.3%), family (21.2%), and social activities (10.1%). In addition, 16.9% stated exposure to inappropriate information and content as a negative effect of social networks (see Table 6). The issues reported as influenced by social network use increase by the time the children spent on social networks ( $r=.18$ ,  $n=524$ ,  $p<0.00$ ). The number of friends also influences the time they spent on social network ( $r=.28$ ,  $n=524$ ,  $p<0.00$ ).

Researchers are aware that children have a sense of social desirability, and children believe that they need to give socially acceptable responses to sensitive questions. Social desirability bias can be defined as the tendency of people to answer questions so they are viewed favorably. As stated by Brener, Billy and Grady (2003), because of fear of reprisal, children avoid responses not consistent with moral implications. When researchers asked how children saw their friends regarding problems resulting from Facebook, the number who answered negatively was much higher due to the social desirability bias. The differences in answers are significant in  $p<.001$  level except social activity question.

**Table 6. Negative effects of social networks on children's and their friends' lives**

	For themselves (%)	For their friends (%)
Reduce the time to allocate for homework	60.3	64.1
Reduce the time to allocate for friends	24.3	53.2
Reduce the time to allocate for family	21.2	29.9
Encountering inappropriate content for age	16.9	17.3
Reduce the time to allocate for social activities	10.1	13.4

A total of 44.1% of children who participated in the study stated that time their friends spent on social networks negatively affected their friends' lives. Among those children whose friends were affected in negative ways, 64.1% believed that their friends could not allocate enough time for coursework, while 53.2% felt the friends did not allocate enough time for other friends. They also believed that their friends did not allocate enough time for family (29.9%) or social activities (13.4%), and they reported that their friends encountered inappropriate content on social networks (17.3%). While only one in four children stated that they did not allocate enough time for their friends because of social networks, more than half of them indicated that their friends allocated less time for other friends.

#### **4. Discussion and Conclusion**

Currently, the Internet has made social networks an important part of daily life due to various communication tools. Considering the time that children spend on social networks and Internet, it can be interpreted that using social networks has become a major goal of children using the Internet. On the other hand, awareness of security of personal information on social networks is not adequate among children. Results of this study showed that there is a positive linear relationship between age and Internet usage. That is, as the age of children increases, Internet usage also grows. The majority of children believe that social networks are confidential, and not many of them read the privacy guidelines. Further, many of them add people as friends who they do not know in person. The reason of this might be that most of children perceive contacting with strangers is not a risk-taking behavior (Davidson & Martellozzo, 2013). A considerable number of children share their home addresses, cell phones or home phones, and names of family members either with just their friends or with everyone. Even though some children have restricted their profiles to their friends, since they have unknown people on their lists, they are still at risk (Lenhart & Madden, 2007; Livingstone, 2008). They do not have enough awareness about sharing personal data and how a reliance on social networks leads to riskier online behaviors (Strater & Lip-ford, 2008). Half of the children did not read the privacy guidelines or could not understand them. Boys have more tendency to share information and they have more trust towards social networks. That might be because they do not expect that they become a target of malicious groups. Another reason might be that boys believe that they can overcome any problem if they encounter on Internet.

Many children believe that social networks influence their lives significantly. Some believe that the time they spend on social networks influences their school performance and many of them indicate that they allocate less time for their friends and family because of social networks. Livingstone (2008) is also pointed out this finding that social networking is time wasting and socially isolating. As the time spent on social networks increase, the issues related neglecting social life reported by children increase. As the friend list lengthen, the time children spent on social network increase

too. When age increases, number of friends increases as well. This might be caused by the fact that as age increases, the frequency of accessing Facebook increases. Thus, results of the study supports the finding of De Souza and Dick (2009) study which investigated that young social networkers disclose their information because they see their friends share in that way or to present themselves in a certain way.

Although there are many issues, which seem risky for children, they do not bother them much. Very few children reported that they regretted because of sharing personal data. This might be interpreted that we may not need to panic about the vulnerability of our children on the Internet because although they share their personal information with others they do not bother that much. Or, they might be careful about their sharing such that they consider the consequences of them. Their lack of awareness of that how their personal information might be used in malicious ways might be another reason. To find a better answer, further studies should investigate which kind of personal disclosure might be risk-taking activity on social networks.

## **5. Recommendations**

Teachers and families have a key role in raising children's awareness about personal privacy and the drawbacks of sharing information online. For example, in the UK and Ireland very few children open their profiles to everyone as a result of awareness-raising efforts (Livingstone et al., 2011). First, teachers and parents should be educated about online security issues. Current legal framework should be reconsidered, for instance by imposing an obligation on parents to be media literate so that they can help and support their children (Wauters, Lievens & Valcke, 2015). Then, they can work with their children to adjust privacy settings. Another effective method to protect young users is to add a family member to the child's friend list to monitor his or her actions. As Collier and Magid (2011) indicate in their guide for families using Facebook, observing children on a social network might easily provide information about the personal and social situations of their child that would take considerable effort in real life. Further, parents can pick up on clues about how other children treat their kids. Families can also take precautions to prevent cyberbullying attacks but must remember the fact that children can hide posts and send private messages. Children can online and connect their social network accounts anytime, anywhere by help of the mobile technology. Restricting access was seen as solution to expose fewer risks and harm, but it also causes to benefit fewer online opportunities (Durerager & Livingstone, 2012). Therefore, another strategy that families can apply is including parents' e-mail addresses in children's profiles so they see all messages that their children receive and can intervene in a harmful or dangerous situation (Collier & Magid, 2011). Moreover, families might use their children's ID and password to enter their profile or trace their actions by purchasing tools like SafeWeb, SocialShield, ZoneAlarm, or SocialGuard (Consumer Reports, 2011). Although social networks seem they restrict accounts of 13 and under, they do not have any control mechanism for

that. If one of the social network user reports child's account that owner is under 13, social network providers examine and suspend that account. Social networks have many privacy options; however, it is even complex for adult users (Leyden, 2009). Users have to use many settings to provide their privacy. They have lengthy, confusing privacy guidelines displayed in small, crowded fonts. Therefore, social network sites need to simplify and virtualize their privacy options and agreements. Further, kid-friendly, restricted social network services should be provided to protect younger users. Simpler new methods should be developed to enable users to change privacy settings. Also, Internet service providers should provide information to families about using the Internet safely at home. Finally, major players of the ICT industry have to collaborate with the policymakers to put into effective solutions. "The ICT Coalition for the Safer Use of Connected Devices and Online Services by Children and Young People in the EU (<http://www.ictcoalition.eu/>)" is a good example of this attempt. It aims to help younger Internet users across Europe to make the most of the online world and deal with any potential challenges and risks. In 2012, members of the ICT Coalition signed up to a set of guiding principles to ensure that the safety of younger internet users is integral to the products and services they develop.

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## **7. Resources**

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