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# Online Risks and Parental Mediation Strategies Comparison of Turkish Children/Adolescents Who Live In Turkey and Europe

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**Abstract** Keywords

The individuals who go online may face with both opportunities and risks. When developmental stages are considered, late childhood and adolescence is more tended to experience these opportunities and risks. One of the most influencial factors which shape online risks and opportunities is parental mediation strategies. The main aim of this study was examining online risks perceived parental strategies among Turkish children/adolescents who live in Turkey and Europe within a comparative approach.

Data of the study were based on EU Kids Online-II survey which aims to investigate children's/adolescents' and their parents' online experiences in 25 European countries. Turkey sample included 962 participants (513 male, 449 female; Mage= 12.19, SD=2.15). A total of 182 participants (103 females, 79 males; Mage=12.70, SD=2.30) were involved in European sample.

Results revealed that the associations between parental mediation strategies and online risks have differed in Turkey and Europe. Active mediation strategies were positively related with online risks in Turkey, while this relationship was insignificant in Europe. On the other hand, restrictive mediation strategies were positively related with online risks in Europe, while this relationship was insignificant in Turkey. Parental monitoring which was examined as the third parental mediation strategy was also functioning differently as a mediator across samples. It was found to mediate positively between active mediation strategies and online risks in Turkey, while it was mediating negatively between restrictive mediation strategies and online risks in Europe.

Online risks Parental mediation strategies Child Adolescent EU Kids Online

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#### Introduction

Internet has become increasingly more significant in determining child, adolescent and adult developmental stages in the past twenty years. Empirical data have shown that internet usage has become a part of daily life even after a few years of internet's proliferation (Anderson & Tracey, 2001; Bakardjieva & Smith, 2001). Today, widely usage of smartphones paves the way for people to stay online almost continuously. In this regard, every individual who is connected to internet is more vulnerable to online risks along with the opportunities it provides (Livingstone & Haddon, 2009; Livingstone & Helsper, 2010). When it comes to developmental stages, it appears that those who are in childhood and adolescence are more prone to both opportunities and risks internet provides (Lenhart, Purcell, Smith, & Zickuhr, 2010; Lupač, & Sládek, 2008).

Relevant opportunities and risks may vary depending on the means of internet access and knowledge of internet use that is a part of media literacy along with developmental stages. Also, knowledge of internet use may change depending on socio-economic conditions. For example, Van Dijk (2009) states that those who are in a stronger social, political and cultural positions benefit more from internet technologies compared to those who are not. This situation is defined as digital inequality. Digital inequality may be existent not only among countries but also between minority and majority groups within a country. A range of research has shown that there are digital inequalities between minorities who migrated to a particular country and those who are already residing (locals) in that country in terms of online opportunities (Dewan & Riggins, 2004; Hoffman, Novak, & Scholsser, 2001). A recent study has shown that one forth of the population in 27 countries that are members of European Union never used internet in their lives (Seybert, 2011). Seybert (2011) stated that these individuals who never met the internet are usually from ethnic minorities.

Literature shows that there are not many studies investigating internet usage of ethnic minorities. These studies often investigate internet usage frequency of minorities (Livingstone & Bober, 2004) or social networks that are either built up or maintained on the internet (de Wall, 2003; d'Haenens Koeman, & Saeys, 2007; Linders & Goossens, 2004; Mesch, 2011). Although as mentioned above, internet includes opportunities along with its risks. In this regard, a literature review showed that there is a few published empirical studies investigating the online risks minorities experience. In a study conduced by d'Haenens and Ogan (2013), Turkish children and adolescents living in different countries of Europe (Netherlands, Denmark, Germany, Austria and Bulgaria) were compared to their peers in ethnic majorities who live in Turkey and in Europe. Findings of the study showed that youth of ethnic majorities saw more sexual images and messages and also, they had more face-to-face contact with those met on the internet compared to others. On the Turkish adolescents, it was revealed that they experienced more cyber-bullying compared to other groups. When the adolescents in Turkey were compared to other two groups, they had the least amount of online risks. d'Haenens and Ogan (2013) argued that these differences between groups in terms of online risks rooted from digital inequality. In other words, according to researchers, the more children and adolescents had the chance to access to internet, more they experienced the risks internet provides along with its opportunities. Turkish Statistical Institute states that internet usage in Turkey is 55.9% (Turkish Statistical Institute, 2016). These ratios in terms of where Turkish minorities live show 92.9% for Netherlands, 90% for Denmark, 83% for Germany, 79.8% for Austria and 51% for Bulgaria (Internet World Stats, 2015). Altough these access ratios partially support researchers' general view; it carries a risk of a superficial approach in explaining the risks related with the means of internet access. DiMaggio and Hargittai (2001) argues that digital inequality includes not only the means of access to internet but also includes autonomous internet use and internet use with support. For this reason, it is believed that parental mediation strategies is a possible variable in explaining this concept which d'Haenens and Ogan's (2013) study lacks and only studied a few in other research. Parental mediation strategies include parents' all attitudes and behaviors towards children and adolescents to increase the opportunities while lowering the risks they face when on the internet (Kirwil, 2009). In a broad sense, parental mediation expresses parents' attitudes and behaviors they develop directed towards their children's media use (Mendoza, 2009).

Major studies on television and videogames (Austin, 1993; Van der Voort, Nikken, & Van Lil, 1992; Van der Voort, Van Lil, & Peeters, 1998) defines three main parental mediation strategies: *Restrictive Mediation, Active Mediation and Co-use. Restrictive Mediation* reflects parents' regulatory and controlling attitudes/behaviors towards both duration of media use and media content; *Active Mediation* reflects explanatory and guiding attitudes/behaviors towards media use; *Co-use* reflects participating in media use together by both parents and their children. Along with the discussion of how these main parental mediation strategies can be applicable to internet namely the new media, empirical studies show especially restrictive and active mediation strategies are in effect for internet (Lee & Chae, 2007; Livingstone & Helsper, 2008; Lwin, Stanaland, & Miyazaki, 2008).

Another factor in parental mediation strategies is parental monitoring when it comes to internet. Even though there are certain researchers (e.g. Livingstone & Helsper, 2008) arguing parental monitoring is a sub-dimension of restrictive mediation strategy that includes supervising the websites children visit and inspection of their e-mails, there are also other researchers arguing that parental monitoring is a distinct mediation strategy and it should be studied as a separate dimension (Eastin, Greenberg, & Hofschire, 2006). These contradictious views give rise to the idea that parental monitoring can be a mediating variable between two main dimensons that are restrictive and active mediation strategies and outcome variables.

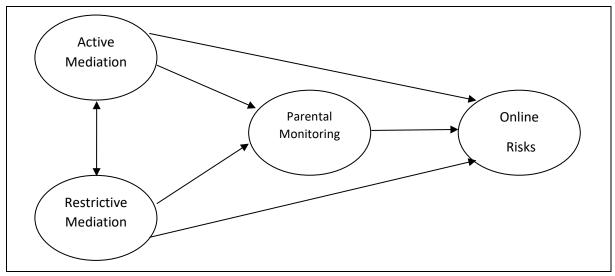
It is already known that parental mediation strategies are related with socio-economic context (Van Dijk, 2009; Pasquier, Simoes, & Kredens, 2012). Having in a lower socio-economic status and lacking a higher education results in a lower literacy in computers and internet which also results in tendency to use a restrictive parenting strategies towards their children's internet use. In parallel, those who have higher socio-economic status which results in a higher literacy in internet use, tend to use more of an active mediation strategy. Based on Van Dijk's (2009) proposition and findings of Pasquier et al. (2012), it can be argued that ethnic minorities may use restrictive mediation strategies since they are in a relatively lower socio-economic status. In parallel with d'Haenens and Ogan's (2013) study, online risks generally consist of four main dimensions: Content Risks, Communication Risks, Commercial Risks and Privacy Risks (Livingstone & Haddon, 2008; Valcke, De Wever, & Van Keer, 2011). Livingston and Haddon (2008) state that compared to other developmental stages, children and adolescents are more prone to content and communication risks. In this regard, researchers define communication risks as meeting strangers, perpetrating cyber-bullying, exposure to cyber-bullying and receiving sexual messages while defining content risks as excessive internet use and being exposed to pornographic images. It is known that these risks have been frequently found to be related with each other (Livingstone & Haddon, 2012). Also, Cumulative Risk Model which has been developed by Rutter (1979) and recently revised by Sameroff (2000) states that the risks shouldn't be approached one by one but as cumulatively especially in studies of Developmental Psychology. Thus, in light of Livingstone and Haddon's (2012) findings, online risks are considered in the Cumulative Risk Model which includes meeting strangers, perpetrating cyber-bullying, exposure to cyber-bullying, receiving sexual messages, excessive internet use and being exposed to pornographic images.

It is known that parental mediation strategies lower risky media use (Atkin, Greenberg, & Baldwin, 2006). Few studies that investigated the relationship between online risks and parental mediation strategies revealed that different types of parental mediation strategies were effective on different types of online risks (Mesch, 2009; Livingstone & Helsper, 2008). For example, Mesch (2009) states that parents' use of an active mediation strategy lowers children's exposure to cyber-bullying. On the other hand, Livingstone and Helsper (2008) argued that restrictive mediation strategies were associated with decreased online risks. However, it shouldn't be overlooked that both studies investigated the relation of parental mediation strategies and online risks with one sample group. Therefore, there needs to be a comparative approach for a better understanding.

In relation with the topic in question, when the studies that took place in Turkey are reviewed, it stands out that descriptive findings on child and adolescent internet use and online risks show up frequently (Çağıltay et al., 2011; Çelen, Çelik, & Seferoğlu, 2011; Eren & Erdem, 2013). It has been found

that there were only two studies investigating parents' knowledge and their perceptions on their children's internet use (Demirel, Yörük, & Özkan, 2012; Tokel, Başer, & İşler, 2013). Also, there was only a single study which reported parents' mediation strategies in Turkey (Helsper, Kalmus, Hasebrink, Sagvari, & De Haan, 2013). In this report, Turkey was put to cluster analysis with similar countries but not taken into consideration separately. According to the findings, while children and adolescents in Turkey were included in low risk group together with Cyprus, Germany, Greece, Ireland, Italy, Poland, Portugal, Spain and UK, Turkey shows the least use of active mediation strategies in all European countries and use of restrictive mediation strategies above average. Along with Turkey; Austria, Belgium, France, Germany, Greece, Ireland, Italy, Portugal, Spain and UK remained in the restrictive mediation cluster. When the clusters of children's risk group and parental mediation strategies were compared, it was revealed that there shows an overlap between countries where parents used restrictive mediation strategies and countries in which children showed low online risks. Hence, these countries were defined as Protected by Restrictions cluster. However, researchers pointed out that these clusters were made towards the purpose of a generalization in Europe but the differences within the countries were more than the differences among countries. This was because the samples in these countries were formed in a way that represents different socio-economic level groups such as low, medium or high. As stated above, parental mediation strategies may differ depending on different socio-economic levels. In other words, even though Turkey was taken into Restrictive Mediation cluster, it should be considered that depending on the socio-economic status of the parents, both mediation strategies might be shown, and these strategies could be related with online risks in different directions. On the other hand, it is probable that Turkish families across Europe may use more restrictive parenting strategies resulting from a lower socio-economic status (d'Haenens & Ogan; 2013).

In light of this information, main aim of this study was to investigate the risks experienced on the internet by Turkish children/adolescents in Europe and their peers in Turkey and how these risks were related to their perceived parental mediation strategies through the model shown in Figure 1 with a comparative approach. According to this model, parental monitoring ranks as a mediator between restrictive / active mediation strategies and online risks. The model also examines the direct relationships between restrictive mediation strategies and active mediation strategies and also their relations to online risks.



**Figure 1.** Model Showing Mediator Role of Parental Monitoring between Restrictive and Active Mediation Strategies and Online Risks

#### Method

# Sample

Turkey sample of the study included 962 child and adolescent (512 males, 449 females; Mean Age= 12.19, SD=2.15). According to interviewer reports, 28.5% of the sample reside in villages with a population less than 2000, 57.5% of the sample reside in small towns with a population between 2000 and 20000 and last, 14% of the sample reside in cities with population more than 20000. According to parental reports, education level showed a mean of 3.07 (SD=1.48) on a scale from one to seven (1= didn't finish primary school, 7= PhD). This value equals to middle school education on the scale. Europe sample of the study included 182 child and adolescents (79 males, 103 females; Mean Age =12.71, SD=2.31). This sample was defined by the language spoken in the household. Density order of countries is as follows: Denmark, Bulgaria, Austria, Netherlands and Germany. According to interviewer reports, 23.3% of the sample reside in villages with a population less than 2000, 23.4% of the sample reside in small cities with a population between 20000 and 100000 and 20000, 31.7% of the sample reside in big cities with a population between 100000 and 500000. With the scale described above, education level of Turkish parents who live in Europe corresponds to middle school, similar with the Turkey sample (Mean= 3.31, SD=1.02).

#### Procedure

Data of the study was collected between April - October 2010 in 25 different cities of Europe simultaneously as a part of EU Kids Online-II survey that aims to investigate experiences of children, adolescents and parents on safe and risky internet use. During the study, 25.142 interviews were conducted with children and adolescents at the ages between 9 and 16. In each country, samples were formed to represent different regions and different types of urbanizations. In the sample, households were selected with a random walk strategy. Eligible children were selected again with a random sampling in every household. The data was collected by trained interviewers with the children and their parents in face-to-face settings. Interviews with the children were conducted in a room with their parents or in separate rooms with their parents' permission. EU Kids Online-II survey reports show that there is only a 2% difference between the interviews conducted with children while their parents were in the room or while not (Livingstone, Haddon, Görzig, & Ólafsson, 2011). In addition, children's of their parents' mediation strategies were conducted that their parents won't be able to see and also, the answers were enveloped. A professional support was provided by a company named Ipsos MORI for the scales to be designed and for a standard application in each country. The study was given permission by the London School of **Economis Ethics** Committee. More detailed information can found from http://www.lse.ac.uk/media@lse/research/EUKidsOnline/Home.aspx about the project.

In the study's data analysis, SPSS 20.0 were used for descriptive analyses and LISREL 9.1 for measurement model and structural equation modeling. In the structuring of the models, Covariance Matrixes and Maximum Likelihood Estimation were used. For a good fit of the models to the data, as suggested by Brown and Cudeck (1992), six different criteria were used; Chi-Square value, degrees of freedom with 1/5 or below, RMSEA (Root Mean Square Error of Approximation) value of below 0.8; CFI (Comparative Fit Index), NNFI (Non-Normed Fit Index), GFI (Goodness of Fit) and AGFI (Adjusted Goodness of Fit Index) value of above .90.

For *Restrictive Mediation Strategy* and *Parental Monitoring* variables represented as single indicator variables, a random assignment parceling method was used. Parcel is defined as an indicator variable which combines two or more items that are related with each other (Little, Cunningham, Shahar, & Widaman, 2002). Parceling is used to reduce random errors, to maintain the variance of the original structure, to conduct more effective analyses and to attain better fit indexes (Bandalos, 2002; Bandalos & Finney, 2001; Gribbons & Hocevar, 1998; Takahashi & Nasser, 1996; Thompson & Melancon, 1996). In addition, it is stated that parceling can be used with relatively low samples (for example Europe

sample of the current study) to obtain more meaningful psychological structures (Bagozzi & Heatherton, 1994).

In the analysis of mediator variables (indirect effect), LISREL 9.1 was used. Also, Sobel test was used to examine whether the mediator variable reduces the strength of the relationship between the two variables or not. Obtaining a *z score* with Sobel test between 1.96 and 2.50 indicates a significant mediating effect at p=.05 level while 2.51 or above indicating a significant mediating effect at p=.01 level.

#### Measurement Tools

All data collection tools mentioned below were structured based on theoretical and empirical knowledge as part of EU Kids Online-II survey by the team responsible for measurement tools. For this reason, names of the individuals who developed the tools were not mentioned. In addition, only the tools that measure parental mediation strategies and excessive internet use were in scale format. Therefore, internal consistency analyses were only conducted for these tools on the data set. Other variables were evaluated within the questionnaires.

Parental Mediation Strategies: Four types of parental mediation strategies were measured with a 4 point Likert Scale (1: Never/Almost Never, 4= Very Frequently). Mediation strategies are as follows: Active Mediation on Internet Use (Sample Item: My mother and father to explore and learn things on the internet on my own; Turkey and Europe samples' Cronbach Alpha Values = .85, .82 respectively); Active Mediation on Internet Safety (Sample Item: My mother and father suggests me tways to use the internet safely; Turkey and Europe samples' Cronbach Alpha Values=.90, .82 respectively); Restrictive Mediation (Sample Item: My mother and father allows me to have a social networking profile only under their permission/ supervision or they never allow it; Turkey and Europe samples' Cronbach Alpha values = .91, .87 respectively); Parental Monitoring (Example Item: My mother and father checks which websites I visit; Turkey and Europe samples' Cronbach Alpha values = .91, .92 respectively).

*Online Risks:* Based on the reports of children and adolescents, six different online risks were evaluated; meeting face-to-face with those met on the internet, receiving sexual messages, being exposed images/videos with sexual content, perpetrating cyber-bullying, being exposed to cyber-bullying and excessive internet use.

Meeting face-to-face with those met on the internet was measured with two items. First the Hquestion "have you ever had contact on the internet with someone you have not met face to face before?" was asked and if the answer was yes, then the question "Have you ever gone on to meet anyone face to face that you first met on the internet in this way?" was asked. In the study, both questions were combined and if both were answered "yes", they were coded as 2, if only the first question was answered "yes" but second question was "no", they were coded as 1, and if both questions were answered "no", then they were coded as 0. Hence, a continuious variable was attained.

Receiving sexual messages was measured with two items. First, the question "In the past 12 months, have you seen or received sexual messages of any kind on the internet?" was asked and if the answer was "yes" then the question "How often have you seen or received sexual messages of any kind on the internet in the past 12 months?" was asked. The questions were answered on a 5 point Likert Scale (1: Less often, 2: Every day or almost every day) and was used as a continuous variable.

Exposure to images/videos with sexual content was measured with two items. First, the question "In the past 12 months, have you seen an explicit sexual image or video on any website?" was asked and if the answer was "yes", then the question "In the past 12 months, how often have you seen images/videos with sexual content?" was asked. The questions were answered on a 5 point Likert Scale (1: Less often, 2: Every day or almost every day) and was used as a continuous variable.

Cyber-bullying was measured with two items: "Have you acted in a way that might have felt hurtful or nasty to someone else in the past 12 months by mobile phone calls, texts or image/video texts?" and "Have you acted in a way that might have felt hurtful or nasty to someone else in the past 12 months on internet?" If both of the questions were answered "yes", they were coded as 2, if the first

question was answered "yes" and second question was answered "no", they were coded as 1, and if both of the questions were answered "no", they were coded as 0. Hence, a continuious variable was attained. Exposure to cyber-bullying was measured by changing the questions to a passive form.

Excessive Internet Use was measured with a 4 point Likert Scale (1: Never/ Almost Never, 4= Very Often) with five items which has been used in EU Kids Online project by Smahel and Blinka (2012): "I have gone without eating or sleeping because of the internet", "I have felt bothered when I cannot be on the internet", "I have caught myself surfing when Im not really interested", "I have spent less time than I should with either family, friends or doing schoolwork because of the time I spent on the internet" and "I have tried unsuccessfully to spend less time on the internet". Total scores were computed from these five items as indicator variable. (Turkey and Europe samples' Cronbach Alpha values = .84, .81 respectively).

#### Results

### Comparison of the Hypothesized Model between Groups

*Correlations among Online Risks:* In order to be able to apply Cumulative Risk Model in this study, correlations among online risks were measured and all risks had been found to have correlation coefficients changing between .23 and .57 in both groups, and significantly correlated with each other at p<.001 level.

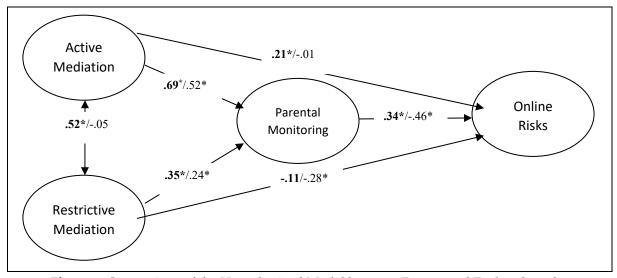
Correlations among Latent Variables: Before measurement models, correlations among latent variables were analyzed. As can be seen in Table 1, relationship between online risks and restrictive mediation strategies in Turkey sample and also, relationship between online risks and active mediation strategies in Europe sample were found to be non-significant. Apart from these, all correlation coefficients were found to be significant at p<.001 level.

**Table 1.** Correlations between Latent Variables in the Models (Values on upper half refer to Turkey Sample)

	Active Mediation Restrictive Mediation Parental			Online Risks
	Strategies	Strategies	Monitoring	Online Kisks
Active Mediation		.42*	.45*	.39*
Strategies	-	.42	.43	.37
Restrictive Mediation	.11	-	.24*	12
Strategies				
Parental Monitoring	.35*	.22*	-	.21*
Online Risks	09	24*	35*	-

*Measurement Models:* Before Structural Equation Modeling, measurement models that were applied to see whether the suggested relationships among indicator variables and latent variables had a good fit to the model, it was found that in both samples, measurement models fulfilled six criteria stated above which showed an adequate fit; for Europe sample:  $(\chi^2$  (48, N = 182) = 84.23, p = .07, RMSEA = .07, GFI = .92, AGFI = .90, CFI = .91, NNFI = .90), for Turkey sample:  $(\chi^2$  (45, N = 962) = 186.54, p < .001, RMSEA = .06, GFI = .97, AGFI = .94, CFI = .90, NNFI = .90). At this point, it should be stressed that values of Turkey model were provided with the correlated errors among cyber-bullying, exposure to cyberbullying, receiving sexual messages, exposure to images/videos with sexual content, excessive internet use and meeting face-to-face with those met on the internet.

Structural Equation Models: Hypothesized model was found to had an adequate fit to the data in both Europe and Turkey samples; for Europe sample:  $(\chi^2$  ( 48, N = 182) = 84.23, p = .01, RMSEA = .06, GFI = .93, AGFI = .90, CFI = .90, NNFI = .90), for Turkey sample:  $(\chi^2$  ( 45, N = 962) = 186.54, p < .001, RMSEA = .06, GFI = .97, AGFI = .95, CFI = .90, NNFI = .90). All paths among indicator variables and latent variables were statistically significant at p<.01 level.



**Figure 2.** Comparison of the Hypothesized Model between Europe and Turkey Samples (Note: Bolded values refer to Turkey sample, \*p<.01)

When the models were compared, it was found that the main difference was the relationship between active mediation strategies and online risks. This relationship was positively significant in Turkey sample while non-significant and negative in Europe sample. Although both relationships between restrictive mediation strategies and online risks were negative in both samples, it was only significant in Europe sample but not significant in Turkey sample. Another difference between groups was that in Turkey sample, active and restrictive parental mediation strategies were found to be correlated. However, this correlation was not significant in Europe sample (see Figure 2). When parental monitoring was examined between mediation strategies and online risks, it was found to be a mediator both in Turkey sample, between active mediation strategies and online risks (Standardized Indirect Effect = .27, p<.001), and in Europe sample, between restrictive mediation strategies and online risks (Standardized Indirect Effect = -.27, p<.01). Sobel Test showed that in both samples, parental monitoring significantly reduced the strength of the relationship between mediation strategies and online risks (for Europe and Turkey samples respectively z = 2.61, p<.01, z = 2.65, p<.01).

# Discussion

As far as is known, this was the first study to investigate the relationships between experienced online risks and perceived parental mediation strategies of Turkish children and adolescents who live in Turkey and Europe.

In the study, hypothesized model had a good fit to the data in both samples. When the model was compared between samples, three main differentiations were observed. First, direct relationship between active mediation strategies and online risks was found to be positively correlated in Turkey sample while it was negatively correlated but not significant in Europe sample. Even though this finding could lead to an interpretation that active mediation stretegies reduce online risks, the positive relationship between the two can also be interpreted as reciprocal increase of the variable values and their coevolution. According to Helsper et al. (2013), children and adolescents in Turkey show the least online risks in Europe. As for parents in Turkey, they show to be one of the groups with most restrictive parental strategies in Europe. However, it doesn't necessarily mean that parents in Turkey do not use active mediation strategies. The strong relationship between active and restrictive strategies in Turkey sample indicated that parents in Turkey use both strategies. When considered from this point of view, it can be argued that parents may employ active mediation strategies as much as children and adolescents experience online risks. Helsper et al. (2013), also Garmedia, Garitaonandia, Martinez, and Casado (2012) stated that the positive relationships between active mediation strategies and online risks may signify this reciprocal coevolution.

Second main difference that emerged from the comparison of models is that even though the relationship between restrictive mediation strategy and online risks was in a negative direction, it was non-significant in Turkey sample. This finding can be interpreted as that restrictive mediation stretegies could be becoming less determinant in reducing online risks in Turkey sample. On the other hand, it appears that Turkish parents who live in Europe still use restrictive strategies to reduce online risks which children experience. Literature shows that parents primarily develop restrictive strategies to reduce online risks for their children but in parallel with their increased media literacy over time, they attain more of an active strategy (Kirwil, 2009; Livingstone & Haddon, 2008). However, it should be noted that this finding should be tested with longitudinal studies. Otherwise, it could be argued as choices rather than changes in parental mediation strategies over time.

Third difference that shows between samples is parental monitoring and its relation as a role of mediator variable. It was found that parental monitoring acts as a mediator variable between active mediation strategies in Turkey sample while restrictive mediation strategies in Europe sample and online risks. This finding, as it supports Eastin et al. (2006), shows that parental monitoring can be an independent dimension that can be related with both active and restrictive mediation strategies. It appears that parents in Turkey develop their active mediation strategies as they follow their children's experiences on the internet in parallel with children's experienced online risks increase. On the other hand, Turkish parents in Europe could be using monitoring as an extension of their restrictive strategies in reducing their children's online risks. In other words, depending on the context, parental monitoring acts as a mediator variable between online risks and active/restrictive mediation strategies and also, functions in different ways depending on the mediation strategies.

Although this study contributes both to the literature and to the applied fields of psychology, there are certain limitations. First, children and adolescents were paired together and therefore, an examination of how these developmental stages differ (or similar) from one another in terms of online risks and perceived parenting mediation strategies was not conducted. This path was chosen because there was a limited sample in Europe and Structural Equation Model wouldn't be applicable in case of a split between children and adolescents. Second limitation was that measurements were based on children's and adolescents' reports. Self-reports increase risk of bias. However, it is important to point out that on situations where parent reports and children/adolescent reports were combined, hypothesized model did not fit the data adequately. In other words, it appears that mediation strategies parents reported don't concide with children/adolescents' perceptions about strategies. In addition, it is believed that when it comes to developmental outcomes, what is perceived is more determinant rather than what happens. Third limitation was that the data was relatively aged. Also as stated in methods section, EU Kids Online-II survey data were collected in the year 2010. It is inevitable that there were rapid changes in the past 6 years especially in digital life. However, since there are very few studies that investigate the relationship between online risks and parental mediation strategies in Turkey, findings will surely contribute to the literature on the matter. On the other hand, it is suggested that especially those who wish to have a knowledge with more depth on parental mediation strategies should have a look on Kalmus, Blinka, and Olafsson's (2015) study investigating the relationship between excessive internet use and parental mediation strategies and also, Clark's (2011) study investigating parental mediation strategies with a theoretical assessment.

Another limitation of the study was the Europe sample's potential to represent Turkish children and adolescent minority. Even with this limitation, hypothesized model's good fit to the data shows that in future studies, similar variables can be studied with larger samples. Last, it should be stressed that experiencing online risks don't necessarily mean that it will conclude an absolute harm but rather, the hypothesized model should be interpreted as merely taking risks. However, it should be kept in mind that repeating risks increase the chances of harm. Despite the limitations, study contributes to both relevant literature and to the applied fields that focus on internet interactions of parents and children.

# **Implications**

In a theoretical sense, an effective mediation strategy is defined as increasing the opportunities on the internet while decreasing the risks and harms. From this point, it is hard to say that a parental mediation strategy that is in a negative direction with risks could be effective in all conditions. In other words, relationship between restrictive mediation and online risks in Europe sample doesn't mean that this specific mediation strategy is effective. Limiting children's and adolescents' internet use may mean reducing risks but also prevents the opportunities internet provides. What is more is that in order for children and adolescents to develop coping strategies when they face problems on the internet, they need to experience it personally and they also need guidance of their parents, peers and teachers. As for restrictive mediation strategy, it doesn't involve any guidance but rather it pursues to control time spent and the content. Parents who witness their childrens' reduced online risks by applying restrictive strategies may be unwilling to develop internet literacy for an active mediation. Therefore, application only of a restrictive mediation strategy doesn't appear to be a functional method to reduce online risks.

On the other hand, active mediation strategy doesn't necessarily need to be an effective method to decrease the risks. As a matter of fact, in such cases discussed above, active mediation strategy may also simultaneously increase as online risks increase. This appears to be associated with both children/adolescent's and parents' increasing internet literacy. At this point, it should be stressed that risks don't always mean harm. In fact, it is known that for adolescents, experiencing certain risks is required for their social-emotional development. Hence, even though it appears that active mediation strategies don't reduce risks, and even increase the risks, it can be an effective strategy in the long run.

However, using a particular mediation strategy doesn't mean that not to use another strategy at all. Restrictive mediation can be effective, especially in cases where experiencing risks turn into harm. What is important is not to turn this behavior into an overall attitude. Further, parents can be recommended to adopt a combined mediation strategy (including both restrictive and active mediation strategies).

Although adolescents tend to consult to their peers when they experience risks on the internet, parents are still seen as authorities for guidance. This can be provided if children and adolescents perceive their parents as literate on the internet. Hence, it appears that developing programs to increase parents' internet literacy is very important.

Findings of this study show that parental mediation strategies may differ depending on the context. Therefore, programs that aim to increase parents' internet literacy should focus on the context as well. The largest advantage of such programs that are to be designed in this manner will be to create a safe parent/child relation that will ensure children's and adolescents' conscious use of the internet.

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