The Relationship between Perceived Parental Control and Internet Addiction: A Cross-sectional study among Adolescents

Levent Cetinkaya
Canakkale Onsekiz Mart University, Turkey

Abstract

This study aimed to investigate the relationship between parental psychological and behavioral control which the adolescents perceived from their parents and internet addiction. It employed relational survey model and was carried out with the participation of a total of 356 students (female=205, male=151) aged 14-18. Correlation and regression analyses were utilized to determine the level and direction of the relationship between their perceived parental psychological and behavioral control, and internet addiction. The results yielded a positive, medium-level and meaningful relation between them. It was found that parental psychological control explained nearly 18% of the total variance in internet addiction and mothers are perceived as significantly more psychologically controlling in internet addiction than fathers. Also, the relationship between parental behavioral control and the level of adolescents' internet addiction was found negative and non-significant. Consequently, it was noted that perceived parental psychological control was effective in adolescents' internet addiction tendencies, whereas behavioral control did not produce such effect.

Keywords: Internet addiction; Psychological control; Behavioral control; Parental control

Introduction

Parents often could attempt to guard or protect their children in order to raise them within the domestic rules and sociocultural norms. The commonly followed strategies (prescription, restriction) could lead to both positive (explanation, discussion) and negative (disagreement, criticism) consequences (Austin, 1990). In the related literature, there are a number of research findings towards the effects of such behaviors that contradict with each other. There are also discussions on the ambiguity in the theoretical background. However, the results of the research support the notion substantially that parental control is of two separate constructs which are behavioral and psychological and yield relatively more consistent results when examined by using these constructs (Barber, 1996; Barber, Olsen, & Shagle, 1994; Kindap, Sayil, & Kumru, 2008; Sayil & Kindap, 2010; Steinberg, 1990; Steinberg, Elmen, & Mounts, 1989). Both of the controlling parentage types could have different effects on the behavioral regulation, the rate of children's obedience to their parents and the type of behavioral problem (Soenens & Vansteenkiste, 2010). Psychological control is defined as a type of parental control which makes the child depend on his parents emotionally, inhibits child's independence and self-direction ability (Pettit, Bates, Dodge, & Meece, 2001). Opposite behavioral control is the type of control in which the parents guide their children and show them the appropriate behavior and limit it when necessary (Barber & Harmon, 2002).

Psychological control is a parental practice which aims to control a child's inner world experiences often by manipulation strategies (love withdrawal, guilt induction etc.) and are often related to negative results of behaviors (Barber, 1996; 2002; Barber & Harmon, 2002). Research studies have shown that perceived psychological control is associated with the development of insecure ties between the parent and the child (Doyle & Markiewicz, 2005; Karavasilis, Doyle, & Markiewicz, 2003; Kurt, Sayil, & Kindap Tepe, 2013) and there are findings which indicate that it could be a strong predictor of internal (worry, anxiety, depression, isolation, self-esteem, despair etc.) and external problems (aggression, anti-social behavior, getting involved in a crime) (Barber, 1996; 1999; Barber & Harmon, 2002; Barber & Olsen, 1997; Chirkov, 2009; Conger, Conger, & Scaramella, 1997; Kurt, Sayıl, & Kındap Tepe, 2013; Loukas, Paulos, & Robinson, 2005; Soenens, Vansteenkiste, Duriez, & Goossens, 2006; Soenens, Vansteenkiste, & Niemiec, 2009). Longitudinal studies provide evidence that psychological control predicts life satisfaction, subjective well-being, increase in physical aggression and these could affect their future lives (Joussemet et al., 2008; Kins, Beyers, Soenens, & Vansteenkiste, 2009; Kuppens, Grietens, Onghena, & Michiels, 2009; Saha, Huebner, Suldo, & Valois, 2010; Wang, Pomerantz, & Chen, 2007).

Behavioral control, which is used in the sense that parents regulate what their children do, is generally regarded as the opposite of psychological control (Pomerantz & Wang, 2009). Psychological control is primarily related to negative outcomes, particularly internalization behavior, whereas behavioral control is often associated with positive behavioral and developmental outcomes (Barber, Olsen, & Shagle, 1994). Observational behavioral control seems to increase positive developmental outcomes on adolescents and decrease negative developmental outcomes (Barber, 1996; Barber, & Harmon, 2002; Caldwell, Beutler, Ross, & Silver, 2006; Fletcher, Steinberg, & Sellers, 1999; Kindap, Sayil, & Kumru, 2008; Maccoby & Martin, 1983; Steinberg, Elmen, & Mounts, 1989). However, it is very important that the level of behavioral control and balance shown here should be established. When this level of control is low, the adolescent tends to take more risks and can make mistakes, while he may feel under pressure and behave improperly when it is high (Barber, Olsen, & Shagle, 1994; Cui, et al., 2014; Dishion, Capaldi, Spracklen, & Li, 1995; Manzeske & Stright, 2009; Pettit, Bates, Dodge, & Meece, 1999; Stattin & Kerr, 2000; White & Kaufman, 1997). Within this context, if the parent can adjust the level of behavioral control in a balanced manner, the adolescent will develop positive behaviors, which will also have a positive impact on intra-family relationships.

It is often seen that controlling parenting practices are related to children's perceiving the environment or the outside world as threatening, unstable and insecure for their future (Gurland & Grolnick, 2005). Although researchers frequently state that behavioral control leads to positive and psychological control leads to negative behaviors, the level of the control also affects the quality and level of the behavior. Parents' excessive control on the behavior of their children could cause painful emotional experiences such as insecurity, feeling neglected or isolated in their daily lives. At this point, individuals may feel overwhelmed, lose control and face a risk of not being able to gain control again (Heatherton & Wagner, 2011). The individual may attempt to find alternatives to fill gaps, to reduce adverse effects, or to avoid adversities in such situations. Probably the most popular alternatives are internet technologies which are among the indispensable ones of today's young people who are born in the era of digital technologies and enable the real and virtual lives to be experienced at the same time and spread rapidly every day (Cetinkaya, 2017). Despite the existence of an optimism that every new technology will contribute positively to the lives of individuals, the risk that these technologies can become an isolating factor and cause the individual to be unable to keep the balance between real and virtual worlds should also be considered. In particular, it is possible to claim that internet

technologies, which become a part of our lives with the inclusion of each new facilitating application to our lives, may have an important share in the spread of this risk. While many researchers have emphasized that the excessive and misuse of these technologies could lead to psychological, behavioral, social and physical adverse effects, attention has also been drawn to the increasing dependence risks towards internet and internet-based applications (ex., Anderson, 2001; Caplan, 2002; Demirer & Bozoglan, 2015; Derbyshire et al, 2013; Douglas et al., 2008; Lopez-Fernandez et al., 2014; Niemz, Griffiths, & Banyard, 2005; Poli & Agrimi, 2012; Young, 1998). As a type of technological dependency (Griffiths, 1999), internet addiction which is defined as impulse control disorder without intoxication (Young, 1998) is increasingly taking part among the major risks of our time. The results of the studies indicate that young people are inclined to create a new and interesting world on the internet, and that they can be open to the risks involved (Cetinkaya & Sutcu, 2016).

In recent years, social networks, blogs, and similar internet-based applications have become a part of the daily routines of their users, rapidly becoming commonplace in responding to the needs that individuals cannot meet in real life (communication, show up, socialize etc.). Moreover, the attitudes of parents and how these attitudes are perceived by their children are of paramount importance. How the behaviors that the parents think they are doing correctly is perceived by their children and the fact that the internet which the children see as an alternative to avoid the control of their parents may cause different negative effects should also be taken into account.

In particular, it should not be disregarded that the use of internet technologies may become problematic and may even bring about the risks such as addiction. Furthermore, internet technologies are increasingly becoming common at school and young people need to use internet technologies effectively in their education. Therefore, the potential of parents' behaviors to effect young people's use of technologies for educational purposes should not be disregarded. Within this context, the purpose of this study is to examine the relationship between parental psychological and behavioral control perceived by the adolescents and internet addiction. The research questions of the study are as follows:

1. How do the levels of psychological and behavioral control perceived by the adolescents vary according to gender?

2. How are the internet addiction levels of adolescents according to gender?

3. Is there a relationship between internet addiction and the level of psychological control that the adolescents perceived from their parents?

Method

The study was conducted to determine the possible effects of adolescents psychological and behavioral control perceptions on their internet addiction and was designed in the relational survey model.

Participants

The sample of the study was formed by using simple random sampling technique which is one of the probability sampling types. 356 students participated in the study at the level of secondary

education between the ages of 14-18. 57.6% of the students are female, 42.4% are male students and their average age is 16. The participants were informed about the purpose of the study and expectations before the data collection process.

Data Collection Tools

Psychological Control Scale: Based on the Parental Behavior Inventory (CRPBI) developed by Schaefer (1965), Barber (1996) developed an 8-item Psychological Control Scale. With the scale, calculation of the level of the behaviors of parents which inhibit their children from developing autonomy and expressing himself and interfere with his independence. The developed scale consists of constraining verbal expression, invalidating feelings, personal attack, guilt induction, love withdrawal and erratic emotional behavior (Sayil & Kindap, 2010). The original 3-point Likert scale was adapted into Turkish culture by Sayil and Kindap (2010) as; characteristics of my mother/father are not like her/him (1) and a lot like her/him (4). Cronbach's Alpha internal consistency coefficient of the main form of the scale consisting of two forms which have the same questions as mother and father changed between .83 and.88 for mother, .83 and.90 for the father (Barber, 1996), while .77 for the mother, .79 for the father in the adaptation into Turkish culture study.

Behavioral Control Scale: The original scale was developed by Brown, Mounts, Lamborn and Steinberg (1993) and was intended to calculate the degree of parental involvement in the regulation and control of their children's behaviors within the framework of family rules and social norms. There are two forms of the questionnaire for the individuals between the ages of 14-19 and they have the same questions for mother and father. The original 3-point Likert scale was adapted into Turkish culture by Kindap, Sayil and Kumru (2008) as; my mother/father never knows (1) and always knows (4). Cronbach's Alpha internal consistency coefficient of the main form of the scale is .81 (Barber, 1996), whereas the mother form was found .75 in the adaptation into Turkish culture.

Internet Addiction Scale (IAS): The Internet addiction scale developed by Young (1998) consists of 20 items, which are collected under four factors: control difficulty, nonfunctionality, social isolation and deprivation. The scale, which is rated between 0 (never) and 5 (always), was adapted by Bayraktar (2001) so that the 12-17 age group adolescents could understand. The Cronbach Alpha internal consistency coefficient of the adapted scale was .91, and Spearman-Brown value was found to be .87.

Young (1998) defined the adolescents who got a score of 80 and over as "internet addicted", 50-79 as "limited symptoms" and 49 points and lower as "No-Symptom".

Data analysis

During the study, whether the data showed normal distribution or not, the reliability coefficient and the appropriateness of the sample size were also examined. As a result of the analyses detailed in Table 1, the analysis techniques to be applied within the objective of the study were determined.

Table 1. Descriptive Statistics

Variables		N	M	SD	Skewness	Kurtosis	Cronbach Alpha	KMO
Psychological control	Mother	356	13.07	4.61	-.608	-.060	.825	.870*
	Father	356	12.46	4.75	-.344	-.632	.837	.875*
Behavioral Control	Mother	356	16.11	3.11	1.25	1.12	.810	.817*
	Father	356	14.45	4.03	1.26	1.38	.862	.862*
Internet Addiction		356	33.53	18.76	.569	-.408	.924	.929*

*p<.01

As a result of the analyses, it was determined that the internal consistency coefficient of Cronbach Alpha, which indicates the reliability of both measurement tools that measure parental control behaviors, is higher than the original and adaptation studies. These values were calculated as .825 in the mother form of the psychological control scale, .837 in the father form, .810 in the mother form of the behavioral control scale, and .862 in the father form. According to these results, it can be said that psychological control and behavioral control scales have high reliability in both forms for mother and father.

When the Kaiser-Mayer-Olkin (KMO) value, which is used to test the appropriateness of the sample size of the scales, is examined, it is seen that both scales are in the range of .817-.875 and are at a good level. Again, the Cronbach Alpha internal consistency coefficient of the measurement tool developed to measure internet addiction was determined to be .924, and the appropriateness of the sample size (KMO: .929) was found to be almost perfect.

As a result of the analysis processes to test whether the measurement tools used in the study showed normal distribution, it was observed that the arithmetic average, mode and median values were close to each other and kurtosis-skewness coefficients were within the range of ($\pm$ 2.0). In addition to these values, the Q-Q graph was also examined and it was observed that the points on the graph were located on the 45-degree line or within the limits close to this line. Besides the fact that the kurtosis-skewness values are within $\pm$ 2.0 is an acceptable criterion for the normal distribution (George & Mallery, 2003), it is also supported by Q-Q graph data that the instruments used in the study show normal distribution.

The relationship between the psychological and behavioral control of the adolescents which they perceived from their parents, and the internet addiction was analyzed by correlation and regression analysis. Together with the parental control levels, descriptive statistics related to internet addiction were also included in the study.

Findings

The analysis results in relation to the distribution of the psychological and behavioral control levels of the adolescents which they perceived from their parents according to their genders are presented in Table 2.

Table 2. Psychological and Behavioral Control Levels of Adolescents Which They Perceived from Their Parents by Gender.

				Mother		Father	
Variable	Gender		N	M	SD	M	SD
Psychological control	Female		205	12.86	4.58	12.16	4.47
	Male		151	13.34	4.68	12.85	5.09
		Total	356	13.07	4.61	12.46	4.75
Behavioral control	Female		205	16.86	2.71	14.53	4.06
	Male		151	15.09	3.33	14.34	3.99
		Total	356	16.10	3.11	14.45	4.03

Findings show that the level of psychological control perceived by adolescents from their mothers (13.07%) is higher than that of their fathers (12.46%). The distribution of psychological control from their parents according to gender of the children has shown that males perceive more psychological control from their parents compared to females. The behavioral control level perceived by the adolescents showed that the behavioral control level they perceived from their mothers (16.10%) is higher than that of their fathers (14.45%). Also, when the distribution of behavioral control is examined in terms of gender of the children, it is seen that females perceive more behavioral control of their mother and father compared to males. When the psychological and behavioral control levels perceived by adolescents were evaluated together, it was determined that both control types of mothers were perceived higher by their children than that of fathers. Moreover, while the males perceive more psychological control from their parents than females, females perceive more behavioral control from their parents compared to males. When the data presented in Table 3 regarding the internet addiction levels of the adolescents are examined, it is seen that the total score of the scale is lower than its average (M= 33.49).

Table 3. Internet Addiction Levels of Adolescents in Terms of Gender

	Gender	N	M	SD	t	sd	P*
Internet addiction	Female	205	32.61	18.43			
	Male	151	34.70	19.12	-1.04	354	.298
	Total	356	33.49	18.72			

*p<.01; Levene's F=.677, p>.01

Findings show that males (M= 34.70) have higher internet addiction mean scores than females (M= 32.61). However, there was no significant relationship between gender variable and Internet addiction (t= -1.04, p>.01). On the other hand, it was determined that 20.2% of the students were above the scale total average of 50 and 2% of the students had a score of 80 or more as Young (1998) defined as "internet addict". The relationship between the psychological and behavioral control perceived by adolescents and internet addiction was examined by Pearson Product Moment Correlation Analysis (r). The results are presented in Table 4.

Table 4. Relationship between internet addiction and parental control perceived by adolescents

	N	Psychological Control				Behavioral Control			
		Mother		Father		Mother		Father	
Internet addiction		r	p	r	p	r	p	r	p
	356	.412**	.000	.310**	.000	-.075	.155	-.090	.089

**p<.01

As can be seen In Table 4, there is a statistically significant and positive relationship between internet addiction and psychological control perceived from parents of adolescents, whereas there is a statistically insignificant and negative relationship with perceived behavioral control. In addition, while there was a positive and moderate (r= .412, p<.01) relationship between adolescents' Internet addiction and level of psychological control which children perceived from their mothers, this relationship was found to be positive but weak for fathers (r=.310, p<.01). The regression analysis results of the parents' psychological control levels which predict internet addiction are given in table 5.

Table 5. Multiple Linear Regression Results Regarding the Adolescents' Perceived Psychological Control's Prediction of Internet Addiction.

Variable		B	Std. Error	β	t	p	Dual r	Partial r
Constant		9.763	2.919		3.345	.001		
Psychological Control	Mother	1.427	.242	.352	5.900	.000	.412	.300
	Father	.408	.235	.103	1.736	.083	.310	.092
R=421, R^2=.177, F$_{(2,53)}$=37.983, P=.000								

p<.01

When psychological control levels perceived from both parents were evaluated together, it was determined that adolescents' internet addiction had a positive, moderate and significant relationship (R= .421, R2= .177, p <.01). Furthermore, the analysis results explain about 18% of the total variance in internet addiction when the psychological controls of the parents are evaluated together. Again, according to the standardized regression coefficient (β), it is seen that the psychological control perceived from mother predicts internet addiction at a higher level than that of father. In the light of all the results, it can be said that psychological control perceived from the parents is a significant and positive predictor of the internet addiction level of the adolescents and that psychological control perceived from the mother is more effective in the internet addiction than the psychological control perceived from the father.

The analysis of the relationship between internet addiction and behavioral control perceived from parents yielded that there was a negative and non-significant relationship between adolescents' internet addiction total scores and the behavioral control levels that they perceived from their mothers (r = -.075, p>.01) and fathers (r = -.090, p>.01). In this context, it is observed that the relationship between parental perceived behavioral control and adolescents' internet addiction level is negative but not statistically significant.

Results and Discussion

This study, which was designed in relational survey model to determine the effects of parental psychological and behavioral control perceived by the adolescents on internet addiction, was conducted with the participation of 356 students aged 14-18. Internet addiction scale was utilized together with the mother and father forms of the measurement instruments which measure the level of psychological and behavioral control perceived by adolescents from their parents. In the study, which employed correlation and regression analysis to determine the effects and direction of the relationship of parental psychological and behavioral control

perceived by adolescents on internet addiction, descriptive statistics were used. The evaluations of the findings attained from perceived psychological control demonstrated that the levels of psychological control perceived by adolescents from their parents were below the average level.

The results show that adolescents perceive more psychological control from their mothers compared to their fathers. These results show that the level of psychological control that the adolescents receive from their parents is below average and the psychological control perceived from mothers is higher than that of father. Findings of the study are in line with the studies in the literature which suggest that the psychological control perceived from mothers is higher in all adolescents compared to fathers (Barber, Bean, & Erickson, 2002; Rogers, Buchanan, & Winchell, 2003; Sayil & Kindap, 2010;) and males perceive more psychological control than females (Harma, 2008; Kindap, 2011; Kindap & Sayil, 2012; Shek, 2005; 2007). The analysis of the findings from the perceived behavioral control levels shows that they are above the average. The level of behavioral control that the adolescents perceived from mothers is higher than that of father. Furthermore, it was also found that females perceived higher behavioral control from both their parents compared to males. These results show that adolescents perceive behavioral control above average level from their parents, and the level of behavioral control perceived from mothers is higher than fathers. Moreover, females perceive more behavioral control compared to males. The results are consistent with the findings in the literature which state that behavioral control perceived from fathers are higher than mothers for all adolescents and females more behavioral control than males (Aksoy, Kahraman, & Kilic, 2008; Kerr & Stattin, 2000; Kindap, Sayil, & Kumru, 2008; Smetana & Daddis, 2002; Soenens, Vansteenkiste, Duriez, & Goossens, 2006; Sonmez, 2011).

When the findings for Internet addiction were evaluated, it was determined that males had a higher average internet addiction score than females, but there was no significant relationship between gender variable and internet addiction. The results of the analyses show that 20% of the students were above the scale total value average of 50 and 2% of the students got the score of 80 or more which Young (1998) defined as "internet addict". Although internet addiction is defined differently in many studies, almost in all of them it is seen as a risk spreading rapidly among internet users, particularly today's youth. It has been reported in the studies that Internet addiction is observed within the rates of 0.7% and 28% (Anderson, 2001; Bakken et al., 2009; Cao & Su, 2007; Dalbudak et al., 2013; Ghassemzadeh, Mehrnaz, & Alireza, 2008; Kaltiala-Heino, Lintonen, & Rimpela, 2004; Ko et.al., 2007; Ni, Yan, Chen, & Liu, 2009; Pallanti, Bernardi, & Quercioli, 2006; Park, Kim, & Cho, 2008; Peterson et.al., 2009; Rumpf et.al., 2014; Siomos et al., 2008; Tsai et.al., 2009; Whang, Lee, & Chang, 2003; Villella et.al., 2011). This could be due to the variations in the criterion used to define addiction and the measurement instruments together with the method used in the studies (Yellowless & Marks, 2007).

While there was a positive and statistically significant relationship between Internet addiction and psychological control perceived by adolescents, a statistically insignificant and negative relationship was found with the perceived behavioral control. As a result of the analyses, while it was determined that adolescents' internet addiction total scores correlated positively with the psychological control perceived from mothers and there was a medium level relationship, this relationship was found to be positive but at a lower level with fathers compared to mothers. The findings show that the psychological control perceived from parents is a significant predictor of the internet addiction level statistically in the positive direction and that the psychological control perceived from mother is more effective in the internet addiction than the control perceived from father. Strong evidence is found in the relevant literature that there is a negative relationship between psychological control and the level of adolescents' positive behavior

development (Barber, 1999; 2001; Barber, Stolz, & Olsen, 2005; Bronstein, 1994; Dwairy & Achoui, 2010; Rogers, Buchanan, & Winchell, 2003; Rudy, Awong, & Lambert, 2008; Shek, 2007; Shek, Zhu, & Ma, 2018; Shulman, Collins, & Dital, 1993; Soenens et al., 2008). Similar results have been obtained in comparative studies with different cultures. In their studies with adolescents from ten different nations, Barber, Stolz and Olsen (2005) found that psychological control predicted both internalization and externalization behavior problems positively and has negative consequences for adolescent functionality. Though the internalization behavior problems have frequently been emphasized in the studies, as Dwairy and Achoui (2010) stated in their study, there is strong evidence that high level of perceived psychological control affects personal adequacy negatively and lead to anxiety and depression. These studies show that perceived psychological control does not affect the outcome behavior of adolescents positively. In this respect, the finding that the level of psychological control perceived by the adolescent increases the risk of internet addiction coincides greatly with the studies in the literature which suggest that the psychological control does not positively affect behavior of the adolescents. When the relationship between internet addiction and behavioral control perceived from parents was examined, it was found that there was a negative and non-significant relationship between adolescent's internet addiction total scores and behavioral control levels perceived from their parents.

While the relationship between the internet addiction levels of the adolescents and the perceived behavioral control is inversely related to the perceived psychological control with no significant relationship, it is found that fathers are more effective than mothers. Findings show that behavioral control perceived from parents effected adolescents' behavior statistically negative without being significant, which also shows that the behavioral control perceived from parents by the individuals has a decreasing effect on the risk of internet addiction. The literature shows that contrary to the psychological control, there is a strong evidence supporting the positive relationship between behavioral control and the level of positive behavior development (Barber, Olsen, & Shagle, 1994). Behavioral control focused on monitoring, modifying, and controlling the behaviors of adolescents (Nelson & Crick, 2002) is generally associated with positive emotional-social outcomes (Maccoby & Martin, 1983). In this respect, the finding that the level of behavioral control perceived by the adolescent influences the internet addiction risk negatively is highly consistent with the results of the studies which suggest that behavioral control affects the adolescents' behaviors positively. However, as pointed out in the study by Stattin and Kerr, (2000), the risk of creating stress in adolescents should not be ignored in cases when behavioral control is highly perceived. At this point, the perception that behavioral control is applied at a high level creates a sense of being over controlled and may lead the behavioral control to gain the qualities of psychological control (Kakihara & Tilton Weaver, 2009; Kerr, & Stattin, 2000; Smetana & Daddis, 2002).

It is often stated in the literature that young people prefer internet environment to escape from the problems of daily life. In the studies, often psychological, social and physical problems which may arise because of the overuse of internet are emphasized adding that either these problems are stimulated or faced with different problems (loss of control, conflict, addiction, isolation, narcissism etc.) while avoiding the problems (loneliness, depression, stress etc.) of the everyday life (Bozoglan, Demirer, & Sahin, 2014; Caplan, 2002, 2003; Cao et al. 2011; Ceyhan & Ceyhan, 2008; Derbyshire et al., 2013; Hamburger & Ben-Artzi, 2003; Kim, LaRose, & Peng, 2009; Li, Deng, Ren, Guo & He, 2014; Lopez-Fernandez et al., 2014; Moody, 2001; Ryan & Xenos, 2011; Spada, 2014; Yeh, Ko, Wu, & Cheng, 2008; Young, 2004; Young & Rodgers, 1998). It is often underlined in the literature that the over use of internet to substitute loneliness could lead to depression (Griffiths, 2000; Leung, 2003) or it could lead to increased loneliness and depression (Bessière,

Kiesler, Kraut, & Boneva, 2008; Bessière, Pressman, Kiesler, & Kraut, 2010) and increase the current problems or create new problems. There is also a lot of evidence provided by researchers that parental behavior influences children's internet use habits. (Alvarez et al., 2013; Ang, Chong, Chye, & Huan, 2012; Ayas & Horzum, 2013; Chou, & Lee, 2017; Cevik & Celikkaleli, 2010; Gunuc & Dogan, 2013; Khurana, Bleakly, Jordan, & Romer, 2015; Lam & Wong, 2015; Lee, & Chae, 2007; Li, Li, & Newman, 2013; Valcke, Bonte, De Wever, & Rots, 2010; Wu et al., 2016; Xiuqin et al., 2010; Young, 2004). At this point since the psychological control involves some methods that can be effective on a child's development via attitudes and acts, and has a multiple and complex structure (Barber et al., 2012), it seems possible for internet addiction to come out. On the other hand, although there are more findings about the positive effects of behavioral control in studies, there are also remarks that it changes to a great extent. In the studies together with the family attitudes, the level of the attitudes was also emphasized. Just as the extreme controller family attitudes could cause risks, families negligent attitudes cause risks too (Cevik, & Celikkaleli, 2010; Valcke et al., 2010; Young, 1997). Manzesske and Stright (2009) drew attention to this risk and stated that high levels of behavioral and psychological control of parents is associated with inadequate emotional regulation.

All these results show that today's young people may face internet addiction risk and the family could play a role in the occurrence of this risk. One of the most important tasks of parents is to teach their children regulate their emotions, thoughts and behaviors so that they can gain the ability to control themselves (Finkenauer, Engels, & Baumeister, 2005). In particular, both positive and negative relationships between parents and children are becoming complicated during adolescence (Hafen & Laursen, 2009) and it should not be overlooked that poor management of family relationships during the period of rapid changes in the family system can negatively affect the future of the child. At this point, the family's efforts to protect their children or their efforts to keep them under control unrestrainedly for any reason, may lead to less information sharing with their parents and cause them to face greater risks (Christakis et al., 2011; Hawk, Keijsers, Hale, & Meeus, 2009; Cetinkaya & Sutcu, 2016). As Internet technologies evolve, the individual activities of parents, to protect the individuals from their possible harms, are becoming more important. Hence, parents need to have a balanced behavior towards their children and not lead them to situations which leave them out of their control. In addition, ensuring such a balance could also affect positively young people's use of technology for educational purposes. Furthermore, parents need to have enough knowledge and skill to guide their children, who are born in a world of internet technologies, against the problems of this environment and show them how to act.

Limitations and Implications

This study presents a theoretical framework and empirical evaluation to explore the effects of behavioral control perceived by adolescents on internet addiction. This study has limitations by default since it offers something new over the existing ones. The first of these limitations is that the study is carried out on adolescents in a Turkish sample, which may limit the generalizability of the results of the study. Future studies may be carried out in different cultures and on a wider sample. The second limitation is that the study examined the relationship between parental control that the students perceived from their parents and internet addiction and evaluations were made by using only the data obtained from adolescents. Parents can also be included in future studies.

Although there are a lot of studies on the factors that affect the behavior of the individuals in virtual environments, there are quite a lot of unknowns about these environments which offer a different life context. Therefore, the effects of parental control on cyberbullying, victimization, problematic internet use could also be investigated. This study will shed light on future studies on the impact of parental control.

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Correspondence: Levent Cetinkaya, Assistant Professor, Department of Computer Education and Instructional Technology, Faculty of Education, Canakkale Onsekiz Mart University, Canakkale, Turkey