RELATIONSHIP BETWEEN INTERNET ADDICTION IN ADOLESCENTS AND FAMILY RELATIONSHIPS: A SYSTEMATIC REVIEW

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Abstract

Internet usage increases and becomes problematic gradually in adolescents. The aim of this systematic review is to investigate the relationship between internet addiction in adolescents and family relationships. This systematic review was conducted according to the guide "Centre for Reviews and Dissemination" with scanning databases Pubmed, Cochrane, Medline, EBSCO, Science Direct, Google Akademik and Ulakbim (Turkish National Databases). In the research, "problematic," "internet usage," "internet addiction," "adolescence," "family relationship," "family functioning," "adolescent," and "parents" were used as key words. Scannings were completed between the dates November 2017-January 2018 with various combinations of the key words. With scanning the key words, 1017 studies were analyzed based on titles. Summaries of 309 studies saved as a title were investigated. As a result of investigations made according to titles and summaries, 7 studies got involved in the research. Studies involved in the research show that internet addiction problem exists almost in every continent of the world. Adolescents having not a healthy family relationship with their parents has an important role in developing internet addiction. Results of the research being a guide for psychiatric nursing practices and making a contribution on the literature are aimed.

Keywords: Adolescents, Internet Addiction, Family, Psychiatric Nursing.

1.Introduction

Internet has changed strongly the way we access information because it became a part of community all over the world since the last years of 20th century with the developing technology. Since 2011, approximately 25% of the world population uses internet actively. According to Turkish Statistical Institute data, approximately 83.8% of houses in Turkey has an internet access (Turkish Statistical Institute Data

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2018). Internet usage becomes widespread because it offers opportunities especially for adolescents such as getting information, doing homework, and spending free time. However, uncontrolled and excessive internet use may cause internet addiction (Shi, Wang, & Zou, 2017, 201-210). Internet usage of adolescents increases gradually and becomes problematic (Ko et al., 2015, 192-200 ; Li, Dang, Zhang, Zhang, & Guo, 2014, 1-7; Siomos et al., 2012,211-219; Wang & Qi, 2017, 211-219). For internet abuse and excessive internet use; terms in literature such as internet addiction, pathological internet use, and problematic internet use are often preferred.

In puberty, the individual is face to face with a chaos as a result of his/her personal development. One of the most important conflicts of this period is adolescent being in search for an identity (Erikson, 1968). Unique features of internet (ubiquity, instant gratification, speed etc.) prevent from this conflict and disturbance. Unlike real life experiences, internet provides a good platform to adolescents for re-establishing identities over and over again (Pednekar & Tung, 2017, 258-262).

For over 20 years, internet addiction of adolescents is a huge public health issue over the world. Physical, academic, and psychosocial negative effects of internet addiction on adolescents have a wide place in the literature. Internet addiction is defined as a problem that damages a person's performance in his/her psychiatric, social, school and/or work life with affecting his/her control of internet usage negatively (Tuncay & Horzum, 2013,46-57; Wang & Qi, 2017, 211-219; Xu et al., 2014,112 ; Zhou et al., 2017, 470-748). With the spread of internet and social network, new communication styles have changed socialization and learning styles of adolescents. Adolescents have found an important opportunity to discover their identities, social norms, and collaborative learning and to improve their digital skills. Nevertheless, diving into online world started to become at the top of the most important risks that threaten their welfare (Gómez, Harris, Barreiro, Isorna, & Rial, 2017; López de Ayala López, Sendin Gutierrez, & Garcia Jimenez, 2015,470-485 ; Pednekar & Tung, 2017,258-262).

Family has the most central and permanent effect on adolescent development. Studies made in the last few years indicate that family is an important factor on internet addiction development and intensification (Ding, Li, Zhou, Dong, & Luo, 2017,48-54). Unsatisfying family relationship, family communication, and high-level parent-adolescent conflict are related to intensive and problematic use of internet that enables the condition of escaping from family conflicts in adolescents. In the face of family conflicts, the adolescent might especially get hurt, the frequency and intensity of these conflicts might increase the stress and threaten his/her emotion of safety. Adolescents, who could not get enough support from their families in conflict, who have problems with their families, and who are in a critical time period about identity try to express themselves in a virtual world because of these problems they undergo (Lim, Bae, & Kim, 2004, 25; López de Ayala López et al., 2015, 470-485 ; Tuncay & Horzum, 2013,46-57).

When negative effects of excessive internet usage on kids and teenagers are considered, the necessity of families protecting their children from these negative effects is thought. Researches have revealed that quality of the relationship between parents and adolescents is an important and protective factor on adolescents exhibiting fewer adverse behaviors (Cascio, Guzzo, Pace, & Pace, 2013,135-149; Pace et al., 2014,52-63; S. K. Park, Kim, & Cho, 2008, 895).

In the report named "prevention of mental disorders, effective interventions, and policy" options, published by World Health Organization, addictions and weak social interactions are accepted to be two of determinants of mental health (Organization, 2004). Practices of psychiatric nursing focus on protecting mental health of the individual, family, and community, maintaining, improving, and preventing mental disorders (Bilge et al., 2016,1-5; Pektaş, Bilge, & Ersoy, 2006,43-48). According to the change in nursing regulations made by Ministry of Health of Turkey in 2011, duties and authorization for psychiatric nurses are defined. Based on this regulation, one of the roles of psychiatric nurses is to develop a protecting intervention about risky behaviors (addictions, suicide, violent behavior etc.) that may come up because of adolescence and to counsel the adolescent, family and community. In this regard, s/he participates in programs toward providing proper family environment (Regulations & Newspaper 2011).

In the literature, there was not any study conducted by nurses found in the articles scanned considering the aim of this study. This research is expected to fill this space in the literature.

1.1. Aim

In this systematic review, the relationship between internet addiction in adolescents and family relationship is inspected, and research results are aimed to be a guide for psychiatric nurses and make a contribution to literature. In this systematic review, an answer to the question, "How is the relationship between family relationships of adolescents and internet addiction?" is searched.

2.Methods

2.1. Design

The review was conducted according to PRISMA guidelines (Moher, Liberati, Tetzlaff, Altman, & Group, 2009).

2.2. Research Method

This systematic review was conducted according to the guide "Centre for Reviews and Dissemination" with scanning databases Pubmed, Cochrane, Medline, EBSCO, Science Direct, Google Akademik and Ulakbim (Turkish National Databases). In the research, "problematic," "internet usage," "internet addiction," "adolescence," "family relationship," "family functioning," "adolescent," and "parents" were used as key words. Scannings were completed between the dates November 2017-January 2018 with various combinations of the key words.

Inclusion criteria

- Studies that investigated problematic internet use, internet addiction, and family relationships,
- Epidemiologic studies with adolescents as participants,
- Researches with a full text access and published either in Turkish or English,
- Researches that published between 2012-2017 are included in the research.

Exclusion criteria

- Researches that were published before 2012,
- Gray literature and theses, methodological or theoretical explanations, corporate reports or texts from local or unindexed magazines or books,
- Studies that investigated internet addiction and problematic internet use but not family relationships are excluded from the research.

2.3. Results of the Research

The researched conducted with scanning the databases Pubmed (n:218), Cochrane (n:7), Medline (n:35), EBSCO (n:160), Science Direct (n:107), Google Akademik (n:397) ve Ulakbim (Turkish National Databases) (n:93) and its details given in Figure 1, 1017 studies were investigated with the scanning of key words. Summaries of 309 studies recorded as titles are examined. 203 studies examined with titles and summaries and 80 repeated studies were excluded. 26 studies that determined as in accordance with the aim of the research are examined; studies that did not fully meet the aim of the research (n:12), repeats (n:3), has a sample that did not meet the criteria of the research (n:2), has a full text which is inaccessible (n:1), has an inappropriate type (n:1) are recorded and excluded from the research with taking notes of why they are excluded. As a result of the evaluations, the research is completed with 7 studies that meet the criteria of the research.

Findings from the research such as country, author of the research and year, type of research, characteristics of the sample, scales that are used, aim, and results are presented with grouping under titles (Table 1)

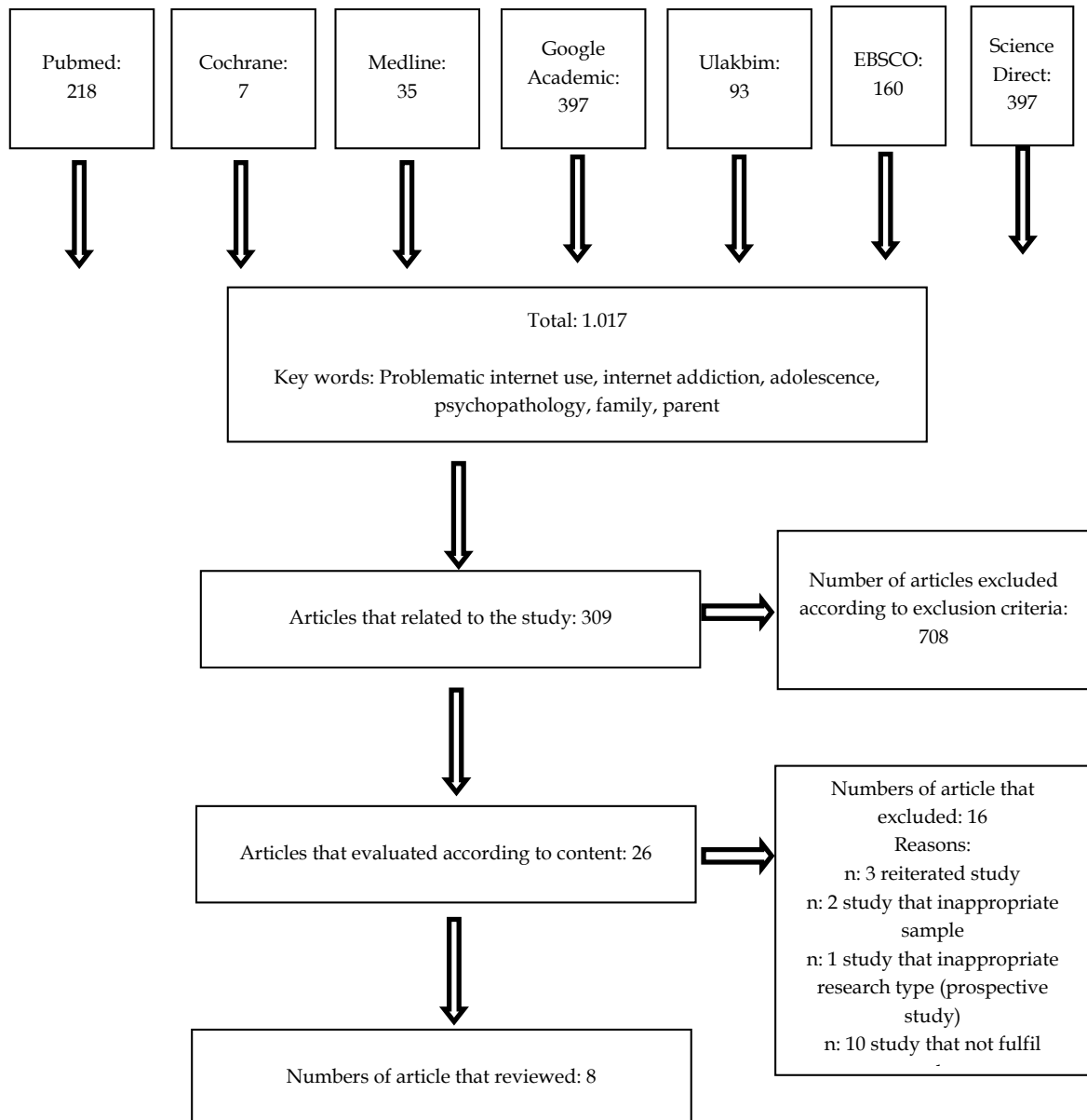| Table 1. Characteristics of researches evaluated in the study					
Country	Research	Research Type and Characteristics of the Sample	Scales Used	Aim	Conclusions
China	Shi 2017	Descriptive/cross sectional n:3289 middle school students 41 % boys M_{age}: 15.771 years old	Chinese Family Assessment Instrument (c-FAI) The Self-Esteem Scale The Loneliness in Children Scale The Internet Addiction Diagnostic Questionnaire	To examine the roles of self-esteem and loneliness between family functioning and internet addiction among Chinese adolescents in order to consolidate and widen understanding of the mechanism underlying the relationship	Family functioning, self-esteem, and low levels of loneliness were negatively linked to internet addiction. Self-esteem was parallel to and mediated family functioning, and loneliness was parallel to and mediated internet addiction. Family functioning would influence internet addiction through mediating effects of both self-esteem and loneliness.

					between family functioning and internet addiction.
Italy	Pace 2014	Descriptive n: 320 adolescents 51.25% boys Mage: 16.06 years old	Adolescent Temperament Questionnaire Short Form (ATQSF) Family Assessment Device (FAD) The Internet Addiction Test	To examine the relationship between internet addiction, temperament, and family functioning via focusing on the unique and common contributions that temperament and family functioning made to internet addiction.	Negative effects of internet and loss of control were negatively related to all the family functioning variables (general functioning, problem solving, communication, affective responsiveness and affective involvement) and positively to internet sensibility. Among the family functioning variables, affective involvement played a moderating role in the relationship between loss of control and internet sensibility. In case of either high or low loss of control level, high affective involvement causes low internet sensibility, and low affective involvement causes gih internet sensibility.
China	Xu 2014	Descriptive n: 5122 adolescents 50.4 % girls Mage: 15.9 years old	Self-reported and anonymous Questionnaires DRM-52 Scale	To examine the relationship between family-based factors and internet addiction of adolescents using a representative sample of Shanghai adolescents.	Adolescents that have a bad relationship with their mother were more likely to develop adolescent internet addiction (AIA) compared to adolescents that have good relationships with their mothers. Adolescents whose parents strongly disapproved their internet usage had higher risks of AIA than those whose parents approved. Adolescents with separated parents had the highest total scores and the highest prevalence of AIA. The more bad relationship that an adolescent has with either parent, the riskier it is for her/him to have high sum score and prevalence of internet addiction.
Spain	López 2015	Descriptive n: 2077 adolescents 12-17 year olds	Questionnaire prepared by the researcher about demographic information and internet usage	Understand the mechanism that generates problematic internet use, creates discomfort among adolescents, and affects different areas of their daily lives negatively.	11.2% of adolescents stated that internet usage had been detrimental to their relationships with friends and family members. Preference for online communication acts as a key risk factor in the perception of discomfort due to lack of access. Family relationships based on trust and communication has a protecting effect towards the discomfort because of lacking internet access.
Turkey	Say 2016	Descriptive n:402 university students 60.4% girls Mage: 20.59 years old	Personal Information Form, Cognitive Performance Scale, The Parent-Adolescent Relationship Scale, UCLA Loneliness Scale, The Multidimensional Anger Inventory, and Problem-Solving Inventory	To investigate the relationship between problematic internet use and adolescent-parent relationship quality, loneliness, anger and problem-solving skills.	Negative, meaningful, and direct effect of mother-adolescent relationship on anger, loneliness and problem-solving skills was determined. In the relationship between negative father-adolescent relationship and problematic internet use, the direct effect of anger and problem-solving skills were determined. In the relationship between negative parent-adolescent and problematic internet use, the partial intermediary effect of the variables anger, loneliness, and problem-solving skills was determined.
Turkey	Gunuc 2013	Descriptive n: 166 adolescents 52% boys Mage: 15.5 years old	Internet Addiction Scale (IAS) Multidimensional Scale of Perceived Social Support (MSPSS) Information	To investigate the relationships between internet addiction of adolescents, their perceived social support, and activities carried	Adolescents spending time with their mothers had a higher level of perceived social support and lower level of internet addiction. Children of working mothers had a higher level of perceived social support. Low levels of perceived support increased internet addiction levels, or high level of

			form	out with the mother, father, and family.	internet addiction was related to low levels of perceived social support. As the number of siblings increased, level of perceived social support of adolescents decreased and their level of internet addiction increased.
USA	Bleakley 2016	Cross-sectional Survey n: 629 adolescents and parents 49.3% girls M_{age}: 14.8 years old	Anonymous Questionnaires (asked parents' estimates of their adolescent's computer time, perceived parental monitoring/knowledge/mediation etc.)	To investigate the relationship between problematic internet use and parental monitoring, parental mediation of internet use, and estimated time their children spent using computer by parents.	Adolescents having better relationship quality with their parents were associated to less problematic internet use symptoms. Adolescents, with parents that engage in less monitoring and less mediation at home have a strained relationship with their child or are unaware of excessive computer use of their child, exhibit more problematic internet use.

Figure 1. Studies detailes

Pubmed: 218

Cochrane: 7

Medline: 35

Google Academic: 397

Ulakbim: 93

EBSCO: 160

Science Direct: 397

Total: 1.017

Key words: Problematic internet use, internet addiction, adolescence, psychopathology, family, parent

Articles that related to the study: 309

Number of articles excluded according to exclusion criteria: 708

Articles that evaluated according to content: 26

Numbers of article that excluded: 16
Reasons:
n: 3 reiterated study
n: 2 study that inappropriate sample
n: 1 study that inappropriate research type (prospective study)
n: 10 study that not fulfil

Numbers of article that reviewed: 8

Conclusion

2.4. Characteristics of the sample

Studies that are included in the review are held between 2013-2017. The sample of the study consists of adolescents with the lowest 14.8 and highest 20.59 average ages. Studies indicate that samples consist at most 5122 (Xu et al., 2014,112) and at least 166 people (Gunuc & Dogan, 2013, 2197-2207). All studies are planned to be cross sectional and descriptive. Researches are conducted in China (Shi et al., 2017,201-210; Xu et al., 2014,112), Italy (Pace et al., 2014,52-63), Spain (López de Ayala López et al., 2015,470-485), Turkey (Gunuc & Dogan, 2013, 2197-2207; Say & Batigün, 2016,324), and USA (Bleakley, Ellithorpe, & Romer, 2016).

2.5. Scales that are used

In the analyzed researches, the relationship between internet addiction in adolescents with problematic internet use and family relationships have been evaluated with various scales. In the research Shi et al. (2017,201-210) have investigated family functioning in adolescents and internet addiction with 4 scales. These scales were Chinese Family Assessment Instrument, The Self-Esteem Scale, The Loneliness in Children Scale, and The Internet Addiction Diagnostic Questionnaire.

Pace et al. (2014,52-63) have used the scales Adolescent Temperament Questionnaire Short Form (ATQSF), Family Assessment Device (FAD), and The Internet Addiction Test. Xu et al. (2014,112) have used the scales Self-Reported and Anonymous Questionnaires and DRM-52 Scale. López et al. (2015,470-485) have used a questionnaire that prepared by researchers and has demographic information and information about internet usage of the participants. Say et al. (2016,324) have used Personal Information Form, Cognitive Performance Scale, The Parent-Adolescent Relationship Scale, UCLA Loneliness Scale, The Multidimensional Anger Inventory, and Problem-Solving Inventory. Gunuc et al. (2013, 2197-2207) have used the scales Information Form, Internet Addiction Scale, and Multidimensional Scale of Perceived Social Support.

Lastly, Bleakley et al. (2016) have used anonymous questionnaires that question the relationship between problematic internet use and parental monitoring, parental mediation of internet use, and estimated time their children spent using computer by parents.

2.6. Obtained Results

The obtained results from collected studies were evaluated under two titles. These titles are: "the relationship between family functioning and internet addiction in adolescents" and "the relationship between parent-adolescent relationship and internet addiction."

The Relationship Between Family Functioning and Internet Addiction in Adolescents

Family functioning is assessed in 2 studies. The first one is the research of Shi et al., The Chinese Family Assessment Instrument is evaluated with self-esteem, loneliness, and internet addiction scales. According to the result of the study, there is a inverse relationship between family functioning, self-esteem, and low loneliness level and internet addiction. Self-esteem was parallel to and mediated family functioning, and loneliness was parallel to and mediated internet addiction.

The second one is the research of Pace et al., which they investigated internet addiction with using Family Assessment Device. The study has investigated family functioning in 7 subdimensions: problem solving, communication, roles, affective responsiveness, affective involvement, behavioral control, and general functioning. According to the result of the research, negative emotions and loss of control that cause internet addiction have a inverse relationship with all the subdimensions of the family assessment scale. Affective involvement subdimension has a moderating role between loss of control and internet addiction. The research showed in both cases of high and low level of loss of control, if affective involvement is high, there is a low internet sensibility; if affective involvement is low, there is a high internet sensibility.

The Relationship Between Parent-Adolescent Relationship and Internet Addiction

The effect of parent-adolescent relationship on problematic internet use is investigated in 5 researches. The first one is the study of Xu et al. According to the result of the study, adolescents that have a bad relationship with their mothers are more prone to develop internet addiction than adolescents that have a good relationship. Adolescents with a parent who does not approve internet usage with strict attitudes are riskier to develop internet addiction than adolescents with a parent who approves. Adolescents with separated parents (parents that married but then got divorced) have the highest sum score and prevalence of internet addiction. The more bad relationship that an adolescent has with either parent, the riskier it is for her/him to have high sum score and prevalence of internet addiction.

The second study López et al. conducted with 2077 adolescents, 11.2% of adolescents have confirmed that their internet usage damages their relationships with families and friends. In the study, it is determined that adolescents having safe and communication-based relationships with their families creates a protective effect against disturbing feeling because of lacking internet access. Besides, adolescents using online communication as a communication method is an important risk factor in feeling disturbed due to lack of internet access.

In the study Say et al. made, the relationship between problematic internet use and adolescent-parent relationship quality, loneliness, anger and problem-solving skills are investigated. According to the result of the research, negative, meaningful, and direct effect of mother-adolescent relationship on anger, loneliness and problem-solving skills was determined. In the relationship between negative father-adolescent relationship and problematic internet use, the direct effect of anger and problem-solving skills were determined. In the relationship between negative parent-adolescent and problematic internet use, the partial intermediary effect of the variables anger, loneliness, and problem-solving skills was determined.

According to the result of the study Gunuc et al. made, adolescents who spent more time with their mothers determined to perceive higher level of social support and to develop less internet addiction. In the study, perceived social support of adolescents being low increased internet addiction level, or high-level internet addictions were related to perceived social support being low. Besides, having many siblings determined to decrease perceived social support of adolescents and increase the level of internet addiction.

In the study made by Bleakley et al., adolescents having better relationship quality with their parents were associated to less problematic internet use symptoms. In the conclusion of the study, problematic internet use of adolescents has found to be in relations with parental monitoring and parental mediation being less and with weak relationship with parents. Children of the parents who do not aware of excessive internet use of their adolescents show more problematic internet use behavior.

3. Discussion

In this systematic review, answer to the question "How is the relationship between family relationships and internet addiction of adolescents?" is searched for. 7 studies were involved in the scope of the research. As it is seen in this systematic review, number of studies that investigate the relationship between family relationships and internet addiction are very limited and low.

In 2 studies that approached in the research showed that low self-esteem, loneliness, anger, and problem-solving skills of adolescents have affected their relationship quality with parents and have made a great difference in internet addiction (Say & Batigün, 2016,324; Shi et al., 2017,201-210). Problematic internet use is seemed to increase behavior of anger in the literature (Horzum, 2011,56; Hwang et al., 2014,6; Şenormancı, Konkan, Güçlü, & Şenormancı, 2014,0-45). Insufficient family functioning, parent apathy on adolescents, and increased anger expressions of the parent increases behavior of anger of the adolescent (Avci & Gucray, 2010,65-76). The analyzed study of Shi et al., 2017,201-210 positive relationship between internet addiction and self-esteem and inverse relationship between internet addiction and loneliness are determined, and results show parallelism (Kim & Davis, 2009,490-500; Yang & Tung, 2007, 79-96,; Zarbakhsh Bahri, Rashedi, & Khademi, 2013, 32-38). Besides, in the study of Park et al. low self-esteem and negative thoughts are determined to have mediating roles in the relationship of trauma and internet addiction in adolescents (S. Park, Lee, & Jun, 2017,381-385). Studies made showed that a good family relationship is important in self positive perception, self-esteem, starting and maintaining sincere relationships that decrease perception of loneliness, and decreasing internet addiction (Lian & Yusooff, 2009, 643-650; Sharabi, Levi, & Margalit, 2012, 61-83; Yan, Li, & Sui, 2014, 3-11).

According to results of two studies that investigated in this review, while adolescents who are safe and have a family that cares about family communication are less risky in internet addiction, adolescents who have a bad relationship with either parent are more quite risky about internet addiction total score and prevalence (López de Ayala López et al., 2015, 470-485; Xu et al., 2014,112). Again, the study of Bleakley et al. that investigated in the research, adolescents that have a better relationship quality with parents have a less problematic internet use symptoms. According to the interpersonal theory of Sullivan, weakness of parent-child relationship has an effect of preventing interpersonal relationships thorough identification, internalization, and introjection (Sullivan, 2013). It is possible to intrepret this condition as with increasing social anxiety level, it also increases the risk of internet addiction (Ko et al., 2015, 192-200). According to the result of the study of Terres et al. which they compared adolescents that are internet addict and adolescents that are not, adolescents that are internet addict are determined to experience more family conflicts (Terres-Trindade & Mosmann, 2015,353-361). Also, in the study of Ko et al., family conflicts are determined to be a

strong predictor of developing internet addiction in adolescent a year later (Ko et al., 2015, 192-200). According to the result of the study Ahmadi et al. made with 4342 adolescents, quality of family relationship is a predictor of developing less internet addiction (Ahmadi, 2014,6).

According to the result of the study of Gunuc et al. that was investigated in the research, it is determined that adolescents that spend more time with their mothers perceive higher levels of social support, and because of this they develop lower levels of internet addiction (Gunuc & Dogan, 2013, 2197-2207). In addition, the study of Xu et al. that was investigated in the research, bad mother-adolescent relationship is more related to internet addiction that bad father-adolescent relationship (Xu et al., 2014,112). When literature is examined, it is determined that mothers are primary support providers for their children, and they use their parent role more active; they spend quality time with their children and are more responsible about doing activities (Hombrados-Mendieta, Gomez-Jacinto, Dominguez-Fuentes, Garcia-Leiva, & Castro-Travé, 2012, 645-664; Snyder, 2007,32-340). In the literature, adolescents living only with their mothers is determined to have more protective effect against internet addiction than living with their fathers (Ko et al., 2015,192-200). According to the result of a study, internet addiction is found more statistically meaningful in adolescents with working mothers than adolescents with mother who are housewives (Ahmadi, 2014,6). All these study results support the research findings.

According to the study results of Beakley et al., problematic internet use of adolescents are found to be related to parental monitoring and low parental compliance. Children of parents who are not aware of the excessive use of their adolescents show more problematic internet use behavior (Bleakley et al., 2016). In the literature and in the study of Yen et al., low family monitoring is determined to be the distinctive factor for all age groups and sexes for internet addiction (Yen, Ko, Yen, Chang, & Cheng, 2009, 357-364). The study of Gomez et al. that was conducted with 255 adolescents, it is determined that in the situations in which parental controls were less, there is a more problematic internet use (Gómez et al., 2017,826-833). According to Lin et al., parental monitoring is the greatest inhibitor of internet addiction (Lin, Lin, & Wu, 2009,993). Wartberg et al. determined in their study that along with good family functioning, a good communication between parents and adolescents, positive parent-child relationship, and supportive parental monitoring help to prevent pathological internet use of adolescents (Wartberg, Aden, Thomsen, & Thomasius, 2015,9-17).

In the literature analysis, the answer to the questions "which part do the nurses play in preventing internet addiction and which practices based on evidence should be benefited from?" are searched, and very few studies were reached. According to the investigation, in the study Mun et al. made, an integrated internet addiction prevention program against internet addiction in adolescents was developed, and elementary school students who carry the risk of internet addiction were tested about self-control and internet addiction. According to the result of this study which was planned as semi experimentally, self-control of the experimental group after the program was found meaningfully higher than the control group. Internet addiction, self-diagnosis, and duration of internet use were determined to be meaningfully lower than the control group (Mun & Lee, 2015,251-261).

According to the result of the experimental design study that Uysal et al. made to determine the impact of the healthy internet usage program on adolescents who are internet addicts, the healthy internet usage programs were found to decrease/prevent internet addiction in adolescents, besides after the intervention, academic successes of adolescents in the experimental group were determined to increase and weekly internet usage frequencies were determined to decrease (Uysal, 2013). In accordance with these information, psychiatric nurses were seemed to generate counselling roles about healthy internet usage with making protective intervention about internet addiction to adolescents.

4. Difficulties and Limitations

This systematic review was conducted with using 7 different databases. Thus, most studies of this area were examined; some were involved in the research scope. Also, to minimize the risk of bias, the work selection process was completed through independent full text reviews. To remove the risk of bias, inclusion and exclusion criteria lists for a standard research were made, and selection was made with this way. Studies that were taken into the research were picked from the studies of the last 5 years, and results were made up of current data.

Excluding the studies which are not either in English or in Turkish, excluding the studies that full texts were not reachable, and the fact that there were not any randomized controlled trials were the limitations of the research.

5. Conclusion and Suggestions

In the conclusion the research that aimed to investigate family relationships and internet addiction of adolescents, it can be claimed that studies in this topic are limited in number. Studies that were taken into the scope of the research show that problem of internet addiction is present in every continent of the world. That is why it is suggested to make new epidemiologic studies to reveal the current situation better and to increase the awareness of adolescents and families about this topic.

The main goal of a health professional is to reduce the health risk of an individual and to make him/her gain healthy lifestyle behaviors. Family is very important in health development of children. Healthy internet usage is an achievable goal with raising awareness towards a satisfying family life and with bringing internet access under family control instead of adolescents' search for identity via internet.

Mental health nurses who serve for adolescents should first evaluate the needs of adolescents and families in the guide of principles of family centered care model. It is inevitable for a mental health nurse to know about cognitive development period of an adolescent and to develop response styles according to these developmental qualities. Nurses being aware of negative effects of internet and especially physiological and psychological problems about excessive and abusive use of internet and performing practices towards these are the main principles that can be applied to get rid of any effects of addiction. Nurses that interact with mothers, fathers, and educators in different roles and environments knowing problematic internet use and effects of this on health of adolescents, counselling, causing family relationships to improve and thus making a contribution with reducing negative effects of problematic internet use would increase health and welfare of the society.

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