

Parent Attachment and Adolescent's Problematic Internet Use: A Literature Review

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Abstract: *Problematic Internet Use (PIU) is a disorder that involves Internet use and has the potential to happen to adolescents in the current digital age. As PIU predictors, parent attachment is one of the variables often studied by many researchers. However, in the development of technology where attachment between parents and children can be created through sophisticated devices, it is necessary to review whether the lack of parent attachments still has a relevant relationship with PIU. The aims of this literature review is to provide information about the relationship between parent attachment and adolescents' problematic internet use in the year of 2015 to 2019. A total of 72,275 participants from various countries were involved in the study, which was summarized in 25 articles. Literature search uses the Google Scholar database with several publishers, such as science direct and others. The method of selecting scientific articles is in accordance with the screening criteria preferred reporting items for systematic reviews and meta-analyzes (PRISMA). Results show that lack of parent attachment is still the most influential variable on PIU, even though technology has helped parents to create attachment with their children. Interventions with a persuasive approach from parents to children directly become the most effective choice to help adolescents with PIU.*

Keywords: *parent attachment, problematic Internet use, Internet gaming disorder, adolescents*

Introduction

The increasing number of Internet users globally has attracted many researchers to discuss more deeply about this phenomenon. Most of the research focuses on the excessive use of the Internet, leading to addiction. Case studies on addiction to the Internet include academic failure, mood disorders, social withdrawal, sleep disorders, and depression (Young, 2009). The excessive use of Internet is commonly known as Problematic Internet Use (PIU). Pathology PIU is often equated with the pathology of impulsive behavior in gambling, cybersex, addictive game, or the impulsive use of social media. Until now, PIU was used as temporary term before this topic was categorized by DSM-V as a disorder (Ioannidis et al., 2019). One of the disorders similar to PIU and has been included in a temporary chapter in DSM-V is Internet Gaming Disorder (IGD), which is related to the disruption of playing online game excessively (Paul, et al. 2018).

Other studies about problematic Internet use reveal that adolescents are the most sufferers of Internet addiction because they are still vulnerable to the negative influences that exist in the Internet content (Esen & Gündoğdu, 2010). Factors that cause an adolescent to experience PIU include social awkwardness, boredom, a strong motivation to fulfill self-satisfaction, and loneliness as the most dominant factor (Padilla-walker et al. 2012). In addition, parenting and family factors are also important predictors in adolescents, where adolescents who grow up with many conflicts or

dysfunction in the family (either caused by fathers or mothers) have higher risk for experiencing problematic Internet use (Cacioppo et al., 2019).

The quality of attachment to the family, especially with parents, take their respective portions in the growth and development of adolescents. Experts agree that the mother's role is greater in early childhood, especially in terms of caring for and paying attention to children both physically and emotionally. While the role of fathers in middle age to adolescence becomes important for the development of character building and needed for cognitive and emotional development in adolescence (Cacioppo et al., 2019). Meanwhile, parents must also understand that in the world of adolescents, private symbolic communication, such as communication via telephone or written messages, will be more important than the physical touch of parents like they got when they were little. If symbolic needs are not provided by parents, there is a possibility that the Internet will take its place. This need for privacy allows adolescents to look for new attachments (figure attachments) in the Internet world beside their families (Lei & Wu, 2007). Research suggests quality time with the family influences adolescent adaptation at school, coping strategies, social-emotional competition, social interaction in groups, and calmness in adolescence (King & Delfabbro, 2016). Indeed, industrial revolution 4.0 has changed the parenting style in many families, where interaction between parents and children can be done through online media. This change gives a big question mark for

researchers as to whether lack of parent attachment in this digital parenting pattern is still an important predictor of adolescents experiencing problematic Internet use.

Based on the phenomenon, this literature review was carried out with the aim of seeing the development of research in recent years with a focus on: how parent attachments affect adolescents? and what is problematic Internet Use in adolescence? This literature review also aims to find about parent attachment relationship to adolescents who experience PIU from last research evidence and how parenting patterns affect the adolescents' problematic Internet use.

Methods

The process of reviewing the literature uses a selection method that meets the criteria for Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), where in the protocol PRISMA contains guidelines for literature review. The articles were searched using keywords; *parent attachment* and *problematic Internet use*, with database from Google Scholar during 2015 to 2019. The results of this topic search resulted in a total of 53 articles from several publishers, such as Science Direct, Springer, Routledge, Sage, and others publisher. Then the results were categorized based on the PRISMA method protocol, namely the identification process according to the topic, screening based on the focus of the discussion, and studying the eligibility criteria of the article for later review.

Results

There were 25 scientific articles that fit the focus of the discussion, 23 articles use English and 2 articles were in Indonesian. This literature review focuses on parent attachment and problematic Internet use, twenty-five studies were evaluated based on the sample characteristics, research objectives, research instruments and results. Diagram of the literature selection method is shown in the PRISMA flow diagram (Figure 1).

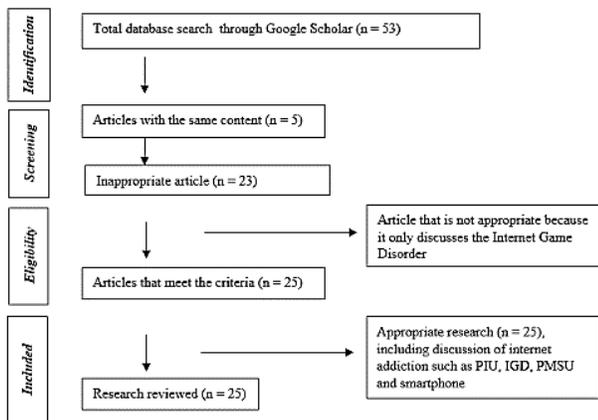


Figure 1. PRISMA Diagram Flow Chart

Discussion

Based on the review of 25 scientific articles on parent attachment and PIU, which involved quite a lot of participants (72 thousand adolescents who aged between 8 and 21 years old), the following results are obtained:

How Parent attachments affect adolescents.

Theory of Parental attachment is defined as the emotional attachment between an individual and other people for a long time. Most children may have secure attachment with one parent and insecure attachment with another parent. The evidence shows that children have the same possibility to form attachment to father and mother. Theory of attachment can be seen in the relationship of infants / toddlers with caregivers (parents), but this pattern of attachment will affect the relationship and the way a person responds at a later age. A good attachment will create a model for someone to interact in adulthood, and a comfortable attachment will create a warm character and easy to share with others. Strong attachments between parents and children will foster a positive and stable self-concept for adolescents, this condition will help them avoid addiction (Estevez & Jauregui, 2019; Marino et al., 2019).

In addition, the family's response to other family members is important to build a child's behavior patterns. The ability of family members to provide an appropriate response will determine the quality of emotions, especially in adolescents. Families that provide support, foster personal development, have rules for controlling behavior, are examples of families that can help adolescent have stable emotions. Meanwhile, poor attachment between parents and children has been proven to pose an Internet addiction risk among children. Research shows that the quality of a father's trust in his child can reduce the risk of Internet abuse, while the pattern of parenting that often ignores his child can increase adolescents' problematic Internet use (Cacioppo et al., 2019; Yang et al., 2016).

Problematic Internet use in adolescence

For adolescents, addicted behavior is a way to escape from problems that generally make them feel unnoticed, or lack of emotional fulfillment at an earlier age. Adolescents who experience substance addiction (drugs and alcohol) and non-substance addiction (video games, internet and social media) are related to each other. If one addiction behavior increases, the behavior of another addiction will increase too. Adolescents who have a negative life event will try to avoid problems through the Internet because it provides many interesting things for them (Estévez et al., 2017; Kusumawati et al., 2014; Musetti et al., 2018; Paulus et al., 2018).

The use of the Internet for a long time can reduce the ability to interact socially and will increase loneliness, so that it has the potential to cause PIU. Research literature

reveals that the most Internet usage is male due to entertainment and games content. Research also shows that adolescents who are impulsive, have low empathy, have low enthusiasm and social competence, and do not have the ability to regulate their emotions, are at risk of getting PIU. The ability to regulate emotions properly is an important factor for adolescents to avoid PIU. Emotional regulation is related to impulse control, where adolescents who experience addicted behaviors show bad impulse control. Difficulties in regulating emotions for adolescents are characterized by low ability to control impulsive or excessive behavior, thus bringing negative feelings to adolescents, then lead to addictive behavior (Amendola, 2019; Esen & Gündoğdu, 2010; Han et al., 2017; King & Delfabbro, 2016; Pomerantz & Wang, 2009).

PIU is a disorder that has been listed in DSM-IV and its pathology is almost the same as the Internet gaming disorder or IGD in DSM V. PIU affects the work of cognitive functions in motor control, inhibits the working of brain memory, confiscates concentration and disrupts the part of the brain that is responsible for decision making. But more research is needed because both PIU and IGD still measure addiction dominant in game users, while research shows that non-game internet users also experience the same pathology (Ioannidis et al., 2019; Schimmenti et al., 2019; Throuvala et al., 2019).

Relationship between parent attachment and adolescents who experience PIU.

Research in this review literature mentions that attachment with parents is negatively related to PIU and conflict in the family positively predicts PIU (Estevez & Jauregui, 2019). Meanwhile, abusive parenting is also a predictor for adolescents who experience PIU (Huang et al., 2019). On the other, the literature shows that attachments are not significantly related to game addiction. However, the measurement scale used does not provide detailed questions about the quality of the relationship between parents and children. Children addicted in online games will experience obstacles in developing their abilities in the real world because games provide real world needs such as socializing or problem solving, but games do not have a real response like the real world (Zhen et al., 2019).

In a study of adolescent in Asia, a strong predictor for PIU is the parenting style, where mothers often worry about their sons and fathers like to worry about their daughters, which will create an uncomfortable relationship for children. These conditions open up opportunities for children to seek comfort through the Internet (Lei & Wu, 2007; Zhou et al., 2019). In the case of overprotective parents who show excessive concern with children carrying out activities outside of their control, usually the child will be conditioned to always be close to parents, but this pattern also has the potential to

be affected by PIU. Over protective parents will create immature children and cause discomfort in children, so that the children try to seek other activities like the Internet (Moreau et al., 2015; Zhen et al., 2019).

Adolescents, who appear to be close to the family but have weak bonding with other family members or do not have clear family rules will potentially increase their addiction (Cacioppo et al., 2019). Other research on conflict in the family is also positively related to adolescents who experience PIU (Strittmatter et al., 2015). Adolescents who are raised with a pattern of comparing siblings will grow up with the characters of hostility, anxiety, and depression. These characters are proven to be positively related to PIU (Hefner et al., 2018). Adolescents who have high scores in anxiety and are not close to their parents are found to have addiction to social media, because they need other people's support in the form of likes or comments (Marino et al., 2019). However, a result of another study showed that adolescents who have the character to avoid attachments are found to have no addiction to social media, because they think social media will interfere with their comfort, but they can be addicted to other Internet activities (Estevez & Jauregui, 2019).

How do parenting patterns affect the adolescents' problematic Internet use

Parents are adults who have an important role in providing a good environment for teenagers. A good environment is a warm environment and communication that gives comfort. These conditions will provide protection for adolescents in dealing with problems in the real world, thus preventing them from running away from problems. Warm communication will also make adolescents brave to face the real world, thereby reducing their dependence on the virtual world. However, a common problem faced by parents in the digital age is the increased activity of Internet use. It also affects parenting patterns of children. Parents who are busy with their work but do not want to spend quality time with children try to use the Internet as a medium to interact with children. Changes in parenting certainly have advantages and disadvantages (Jahng, 2019; Padilla-walker et al., 2012).

Based on previous studies, addicted behavior in adolescents are closely related to parenting patterns or insecure parent attachments. This is consistent with the statement on the theory of attachment previously explained, which mentions that the role of family is more influential in adolescence. A good role model from parent suitable with the age of the children in using the Internet will produce good interaction between parents and children, and help protect the child from PIU (Estevez & Jauregui, 2019; Kim et al., 2015; Rahmania, 2018).

Interventions for adolescents who experience PIU can be done through attachment that makes them feel

comfortable, for example by helping adolescents modify their thoughts about positive and negative behaviors in using the Internet or through an emotional approach. Parents must be sensitive to the emotional needs of adolescents and help them deal with everyday problems. The key to making adolescents stable is to strengthen their self-concepts. Support from schools and peers in the form of agreements in the same pattern of attachment can be mediation for the relationship between parents and adolescents who experience PIU. Interventions against PIU can be targeted at families and schools. Schools should systematically train teachers to know the symptoms of disorders caused by PIU, then work together with parents' and rehabilitation centers so that findings on adolescents can be addressed immediately. It is important to implement a family-focused program intervention for adolescents who experience PIU symptoms to avoid more severe addiction. So far, family therapy is the most effective solution for adolescents with PIU (Bonnaire, et al., 2019; Cacioppo et al., 2019; Jahng, 2019; Marino et al., 2019; Marrero et al., 2018; Young, 2009; Zhu et al., 2015).

Conclusion

The literature review illustrates that lack of parent attachment is still the dominant predictor in adolescents who experience problems with Internet use, even though parents can use technology to increase attachments with their children. The influence of parental attachments such as parenting style, role models, and the quality of relationships with adolescents determine the level of adolescent addiction to the Internet. Although the digital age has facilitated interaction between busy parents and adolescents who need attention, communication and expected interactions remain straight forward without intermediaries to prevent adolescents from emotional instability and personality problems that will potentially make adolescents experience problematic Internet use.

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