

The Relationship Between Self-Harm Behavior, Personality, and Parental Separation: A Systematic Literature Review

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ABSTRACT

Children who are separate from one or both of their parents (parental separation) have a higher tendency to experience stress, mental health problems, and self-harm behavior. Self-harm behavior is the practice of deliberately injuring body tissue generally carried out by oneself without the intention of committing suicide or without the purpose of social sanctions. Personality is one of the factors that drive an individual to practice self-harm. An individual who has a dominant neuroticism personality has problems in anxiety, hostility, depression, impulsive behavior, self-consciousness, and vulnerability. Moreover, previous studies states that an individual with high levels of openness and neuroticism but low levels of agreeableness and conscientiousness has a higher tendency to practice self-harm. Self-harm behavior occurs because an individual cannot control his/her impulses when dealing with unpleasant conditions. An individual practices self-harm to reduce the negative feelings within his/herself because of the unpleasant conditions. This study reviewed 20 articles with a systematic literature review method. This study found that there was a relationship between self-harm behavior, neuroticism personality, and parental separation. It was due to that impulsivity was a one of the characteristics in neuroticism personality which an individual with a dominant neuroticism personality had a problem to control his/her impulses. Parental separation also causes self-harm behavior because it created trauma on children.

Keywords: “Self-harm”, “Personality”, “Parental separation”.

1. INTRODUCTION

Self-harm behavior is the behavior of damaging body tissue by oneself without the intention of committing suicide or without the purpose of social sanctions. Some examples of self-harm behavior are scratching, cutting, hitting, burning, and biting [1]. In developing countries, the number of suicide case is too high. Self-harm behavior can lead to suicidal behavior. In the United States and the United Kingdom, self-harm behavior is categorized into self-harm behavior which has a high risk of suicide, self-harm behavior, and self-harm behavior whose intent is still unclear [2].

Studies find that one of 25 hospitalized patients for self-harm may commit suicide five years later. The cases of self-harm and suicide do not decrease over ten years [3]. The present study found that 17,5% adolescents and 13,4% adults who are known to do self-harm behavior at least once in their lives. Adolescents and young adults in developing stage have a higher risk of self-harm behavior because they have emotional disturbance and immature development of the regulatory system in their brain so that there is a possibility of increased impulsivity that can lead to self-harm behavior [4].

Klonsky states that the prevalence of self-harm behavior in adults shows rates 4% in the general population to 35% in the clinical population. These

rates are reported at about 6 months ago. Several studies estimated that 5.6 % to 6.7% of adolescents and 0.2 to 3% young adults were included in the criteria for the self-harm sample community [5].

In Indonesia, many people practicing self-harm are people who have experience of physical, mental, and/or sexual abuse. The feeling of being neglected makes an individual more likely to practice self-harm. There is a relationship between self-harm and the desire to commit suicide of individuals in Indonesia [6].

Self-harm in adolescents can lead to long-term difficulties in adulthood, such as social problems, health problems, and career problems [7]. Depression, generalized anxiety disorder, and substance abuse are common in adults who did self-harm in their adolescence [8].

Studies find that some individuals who practice self-harm have thoughts to commit suicide, punish themselves, and calm their mind. Individuals who practice self-harm have multiple motivations and these motivations vary over time or only over a while. Nearly 30,000 adolescents in 7 countries who practice self-harm have some causes for self-harm behavior, and most of them have suicidal thoughts [9].

Many previous studies have investigated the relationship between self-harm behavior and suicidal behavior. An individual who practices self-harm possibly have suicidal ideation which then leads his/her to attempt suicide [10]. Studies explain that there are two indicators of self-harm behavior that can predict a suicide attempt that are the frequency and the severity of injuries. An individual who practices self-harm more frequently has a higher potential to commit suicide. Moreover, an individual who practice self-harm and then get fatal injuries also have a higher potential to commit suicide [11].

Self-harm behavior is an individual's way to cope with a dissociated state and to get positive feelings. This occurs mostly in individuals who have ever done a suicide attempt and had suicidal ideation. The purpose of doing self-harm is to eliminate negative feelings. This is in line with the research findings which state that poor emotional regulation is one of the factors causing self-harm behavior [10].

An individual with self-harm behavior has the motivation to survive while an individual with

suicidal ideation have the motivation to end their life. An individual with self-harm behavior only does self-injurious behavior to their body tissue without any intention to make a fatal injury that causes death [12].

Self-harm behavior is influenced by personality and family environment. Depression and anxiety disorders are factors that cause an individual to practice self-harm. The more serious depression and anxiety disorders an individual has, the more frequently the one practices self-harm [13].

In the Big Five theory, personality has five dimensions that are openness, conscientiousness, agreeableness, extraversion, and neuroticism. An individual with a dominant neuroticism personality has problems in anxiety, hostility, depression, impulsivity, self-awareness, and vulnerability [14]. Previous studies states that an individual with a high level of openness and neuroticism but a low level in agreeableness and conscientiousness has potential to practice self-harm [1].

In developing countries, the number of children and adolescents who have experience of parental separation is higher than in developed countries. Parental separation has a relationship with the practice of self-harm in adolescents and young adults. Studies state that children who are separate from one or both of both parents potentially suffer from physical stress, mental health disorders, and self-harm behavior. Children who have experience of parental separation before they are 15 years old potentially practice self-harm behavior [15].

Based on the explanation above, the researchers attempt to answer three research questions. The first question is how the desire to do self-harm behavior exists? The second question is whether personality is a contributing factor of self-harm behavior? The third question is whether parental separation is also a contributing factor of self-harm behavior?

2. METHOD

The literature for this study was gathered from various resources that are Science Direct, JAMAPEDS, SAGE, BMC Psychiatry, The British Psychology Society, Springer, Wiley Online Library, Taylor & Francis. The keywords for searching the literature were 'self-injury', 'self-harm', 'self-mutilation', 'NSSI', 'parental separation', and 'neuroticism'. Keywords were used by the

researchers independently or in combination to maximize the range of the literature search.

The literature search was conducted in September 2020. The researchers performed the following steps to do the search that are (1) Reading the article titles to identify whether the articles contained two research variables or not; (2) Reading the article abstract to know the article contents and then articles with appropriate contents were collected for further screening according to inclusion and exclusion criteria.

The literature obtained was then selected based on inclusion criteria that are (1) having gone through a peer-reviewed process, (2) published during 2010-2020 (3) written in English, (4) containing information about the number of samples (n) and involved participants. The articles that did not meet these criteria were excluded. Moreover, if some articles did not contain information to answer the research questions after a full review, the articles would be also excluded.

The figure 1 presents the process of the article selection. The selected articles were then analysed to answer the three research questions about the relationship between self-harm behavior, personality, and parental separation

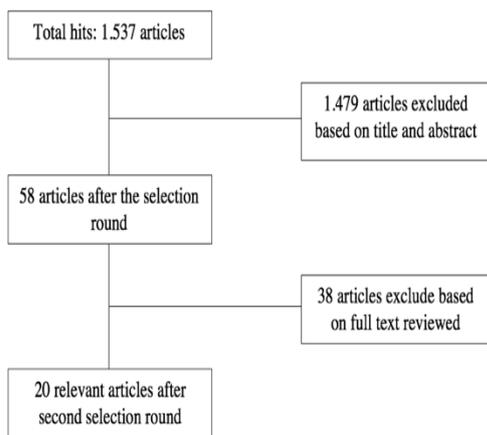


Figure 1. The process of article selection

3. RESULT

There were 20 articles that are relevant to the topic of this study and all of them were quantitative research. The settings of the 20 studies were varied.

3.1. Self-harm Behavior

Based on the literature review, self-harm behavior is caused by some factors that are family, genetic vulnerability and psychiatric, social and culture. Self-harm behavior refers to the behavior of intentional self-poisoning or self-injury without the intention to commit suicide [16]. The practice of self-harm behavior increases during pubertal age and the process continues until independent age. The case of self-harm behavior in adulthood is associated with anxiety and depression symptoms occurring during adolescence [10]. An individual who practices self-harm repeatedly has a potential to attempt suicide. Family is also a contributing factor to self-harm behavior due to the short allele of the serotonin transporter 5-HTTLPR (e.g. reduced protein and function). It means that an individual whose one of his/her family member commits suicide or practices self-harm behavior also has a potential to practice self-harm behavior [16].

3.2. Self-harm Behavior and Personality

3.2.1. Impulsivity

There are seven articles that discuss the relationship between self-harm behavior and impulsivity quantitatively. Impulsivity is measured by some instrument such as the Barrat Impulsiveness Scale [16; 17; 18; 19], the UPPS-P Impulsive Behavior Scale [21], SCID-II. SCID-II is also used to measure mood disorder. The seven articles conclude that impulsivity contributes to self-harm behavior. There is also an article which explains that there is a relationship between anxiety and impulsivity [22].

3.2.2. Neuroticism

There are six articles that discuss the relationship between self-harm behavior and neuroticism quantitatively. In the articles, neuroticism is measured by NEO-PIR [19; 21; 23] and the Eysenck Personality questionnaire [17; 18; 20].

Based on NSSI (Non-suicidal Self-injury) that is measured by NEO-PIR, it is found that an individual with high NSSI has borderline personality disorder. Based on the Diagnostic and Statistical Manual of Mental Disorders IV Text Revision (DSM-IV-TR)

diagnostic criteria, borderline personality disorder is characterized by repeatedly practicing self-harm, having self-damaging impulsive behavior (e.g. substance use disorder, binge eating, eating disorders, gambling, shopping), and having unstable relationships. Individuals with high NSSI have high neuroticism and openness but low agreeableness [23].

Neuroticism is a contributing factor in self-harm behavior in an individual with unipolar and bipolar disorder. It is stated previously that an individual with mood disorders has high neuroticism and also an individual who practices self-harm is found to have high neuroticism [20].

3.3. Self-harm behavior and parental separation

Parental separation is also a contributing factor to self-harm behavior. There are several classifications of parental separation that are child-parent separation status at birth, child-parent separation status at the 15th birthday, age at first child-parent separation, duration of child-parent separation, duration of familial cohesion, the total number of changes in child-parent separation status, and an array of specific child-parent separation trajectories [15]. An individual who has experience of parental separation at the age of 15 years or in their early adolescence is likely to do self-harm than an individual who has experience of parental separation in their childhood. An individual who has experience of parental separation at the age of 0-4 years has a potential of suicidal ideation. There is an increased risk of parental separation with both parents that happens to children at the age of more than 11 years old. Children that have experience parental separation from both parents are more likely to do self-harm.

The relationship between self-harm and parental separation also occurs due to parental death. An individual whose parents have passed away are overcome with grief and it leads to depression and emotional numbness. The individual possibly practice self-harm as an expression of their grief [24].

This study aimed to develop insight into self-harm behavior and the factors that contributed to this behavior. The results show that both personality and parental separation are the contributing factors to self-harm behavior. A substantial number of the reviewed articles discuss the relationship between personality and self-harm behavior.

An individual with high neuroticism often experiences anxiety, worry, fear, anger, frustration, envy, jealousy, guilt, depressed mood, and loneliness [18]. The symptoms of anxiety and depression are associated with self-harm behavior [8]. That is why an individual with high neuroticism are more often to experience symptoms of anxiety and depressed mood. Therefore, an individual with high neuroticism has more potential to practice self-harm.

Neuroticism has a relationship with impulsivity [25]. An individual with high neuroticism has low self-control and has more difficulty controlling their impulsive behavior [26]. An individual who practices self-harm usually has high impulsivity [22]. It can be concluded that an individual with high neuroticism is likely to practice self-harm.

In an individual with high neuroticism, there are symptoms of anxiety and depressed mood. There is also a partial relationship with impulsivity. This proves that the risk of self-harm behavior will be higher in an individual with high neuroticism.

There are parental factors as well in self-harm behavior. Based on a report from the NDCS (National Child Development Study), it was found that children who experienced parental separation at the age of 11-16 years had an impact on their mental health in young adults. There is also a factor in the duration of parental separation on self-harm behavior. Individuals who lived with their parents for 15 years had a lower risk of self-injurious behavior than individuals who lived with their parents for only 1-12 years.

Parental separation can lead to self-harm behavior due to the trauma created in children [15]. The loss of parents can cause depression and emotional numbness that leads to self-harm [24]. Therefore, it is found that there is a relationship between parental separation and self-harm behavior.

Self-harm behavior can also lead to suicide. Parental separation is one of the contributing factors of suicidal behavior [16]. Self-harm is a contributing factor for suicide in young people. Women are known to use less violent methods than men. Self-poisoning is one of violent methods. Violent methods also indicate greater suicide risk. High medical severity due to self-harm behavior causes a risk of suicide [7].

Self-cutting is a self-harm method that has a greater risk of suicide compared to self-poisoning. The suicide method used is much different from the self-harm method. The risk factors that lead to suicide are male, self-cutting as a self-harm method, the total number of self-harm behavior, and older age [27].

The findings of this literature review are supported by research on the perspectives of self-harm behavior that is experienced by people with high neuroticism and have parental separation. An individual who practices self-harm has the potential to commit suicide attempt, have suicidal ideation, and also commit suicide [28].

Curing self-harm behavior in an individual with high neuroticism and having experience of parental separation is not easy. It is a complex matter that may be successfully resolved with a multifaceted approach that provides immediate treatment so that the individual with self-harm behavior do not commit suicide. This literature review indicates that this approach needs to focus on the main areas: self-harm behavior, personality, and parental separation.

3.4. Conclusion and limitation

Neuroticism personality and parental separation are two contributing factors to self-harm behavior. An individual who has a dominant neuroticism personality is likely to practice self-harm because the individual is an impulsive person. An individual who has experience of parental separation is also likely to practice self-harm because parental separation creates trauma on children

The occurrence of self-harm behavior is influenced by many factors of both psychology and biology. The result of this literature review indicates that this approach needs to focus on three main areas: self-harm behavior, personality and parental separation.

This literature review concludes that there is a relationship between self-harm behavior, neuroticism personality, and parental separation. Knowing this relationship, it is very useful to prevent the occurrence of self-harm behavior for children, adolescence, and young adults that have the experience of parental separation and have neuroticism personality.

This literature review also concludes that an individual who practices self-harm and an individual

who has neuroticism personality have similarity that is both of them are highly impulsive person so that it needs a further study.

The current literature review has several limitations. Because of the small number of studies included and the research method, the findings of this study should be treated with caution. This applies especially to the findings on the second and third questions. The second and third question are focusing on the factors of personality, parental separation, and self-harm behavior towards suicidal behavior. Therefore, all of the statements about this are preliminary and need a further investigation.

This literature review suggests that future research on self-harm behavior and the contributing factors towards suicidal attempt is needed. The number of studies on this topic is too small. Meanwhile, it is very important to conduct more research on this topic because the death rate in adolescents and young people due to suicide is increasing.

There is a need for randomized control trials and experimental trials that focus on the effect of self-harm. More empirical research using reliable and valid instruments on suicidal attempt and self-harm is required. Furthermore, the limited ability of self-report questionnaires to self-harm behavior accurately indicates an urgent need for observational and research on this topic.

More research on the underlying factors of the relationship between self-harm behavior, personality, and parental separation is needed. Examining these factors can make interventions that aim to improve attitudes more effective.

Finally, the reviewed articles are predominantly empirical in nature and do not address theory development on the topic of the relationship between self-harm behavior, personality, and parental separation. Theory development can improve insight into this topic and provides a framework for future research.

AUTHORS' CONTRIBUTIONS

JV created the idea for the study, drafted and edited the manuscript, interpreted the results, analysed the data, compiled the data and tables in the manuscript. FCS oversaw the study, created the idea for the study, and guided the writing of the manuscript. All authors have read and approved of the manuscript.

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