

Determinants of Adolescents' Healthy Lifestyle Behavior in Kediri, East Java

Dian Jayantari Putri K Hedo^{1✉} Katmini²

¹ National Population and Family Planning Board, Surabaya, Indonesia

² Health Promotion Department, Faculty of Public Health, Institut Ilmu Kesehatan Strada Indonesia

✉Email: putri.k.hedo@gmail.com

ABSTRACT

Background: Amidst the disruptive era that is full of changes and challenges during the COVID-19 pandemic, psychological strength is needed by adolescents to be able to focus on positivity and maintain optimal health functions. Adolescents are one of the high-risk groups in this world's recent situation. Therefore, adolescents need to stay safe and healthy to survive their future, one of which is by doing healthy lifestyle behavior. In this context, resilience, self-compassion, and hope need to be considered by adolescents in order to successfully perform healthy lifestyle behavior. **Objective:** The research objective was to analyze the relationship between resilience, self-compassion, and hope with healthy lifestyle behavior in adolescents. **Methods:** This research was a descriptive-analytic study with a cross-sectional design. The population was adolescents in Kediri; East Java aged 15-19 years old. The sample was collected by cluster random sampling. The total sample of this research was 342 respondents. The independent variable was resilience, self-compassion, and hope. The dependent variable was healthy lifestyle behavior. Data were collected by offline questionnaires filled by the respondent and analyzed using regression. **Results:** Based on regression analysis, variables that simultaneously and significantly related to healthy lifestyle behavior were resilience, self-compassion, and hope ($p < 0.001$). There was a significant relationship between each variable of resilience ($p = 0.001$), self-compassion ($p = 0.002$), and hope ($p < 0.001$) with healthy lifestyle behavior. **Conclusion:** Resilience, self-compassion, and hope, both simultaneously and individually were predictors of healthy lifestyle behavior. According to the research result, adolescents need to raise awareness and practice their psychological strengths to maintain their healthy lifestyle behavior in daily life.

Keyword: Adolescents; Healthy lifestyle behavior; Hope; Resilience; Self-compassion

INTRODUCTION

Challenges and disruptions in various sectors of life continue to be experienced by world citizens at this recent time. This condition can cause discomfort both physically and psychologically (1-3). Related to this situation, it is necessary to shift the focus of thinking and behaving on a positive side. Focusing on the positive side can be done in various sectors of life, one of which is in the health sector (4). It is needed to set the primary attention to the concept of health, not illness. Trying to be healthy or maintaining and improving health in the first place before trying to treat the diseases, is a form of positive approach emphasis in the health sector (5).

In line with the above issues, in Psychology, there is a Positive Psychology approach. It is an approach in psychology that focuses on the important role of individual psychological strengths in

achieving and improving optimal wellbeing (6,7). The positive Psychology approach can be used to understand the concept of health in terms of health promotion because both fields emphasize on achieving positive things, namely how individuals can stay healthy optimally and positively amidst the challenging times of their lives (5,7).

Most people at various phases of their age, including adolescence age, want to be healthy and function optimally (8). In Maslow's hierarchy of needs, health is one of the basic needs that every human wants to fulfil (9). In addition, the human needs to be healthy is due to the increasing cost of treatment for diseases (10). This situation is exacerbated by the COVID-19 pandemic which has caused limited and expensive care as well as treatment in health facilities (1,11). Health is an important issue in adolescent life (12) because if adolescents are able to do the effective efforts related to

health, they can improve their general health in adulthood and reduce the risk of experiencing non-communicable diseases (NCDs) (13,14). Currently, adolescents are known as digital natives who use various technologies, facilities, and digital devices to support their daily life functions. Adolescents engaged in many passive activities such as excessive use of social media, gadgets, computers, television, and various digital applications (15,16). This condition brings a negative impact on adolescents' health and underlies the development of unhealthy lifestyle behavior (17). Adolescents also have a risk of exposure to adverse environmental influences related to their health (e.g. peer pressure) which causes adolescents to imitate unhealthy lifestyle behavior performed by people in their environment (13,18,19).

During the pandemic, which is still ongoing today, there have been some fundamental changes in various aspects of adolescents' life that have had impacts on economic, educational, social, and cultural aspects. Several countries in the world, including Indonesia, also carry out various restrictions on community activities (20,21). Several studies have shown that there is an increase in unhealthy lifestyle behavior in adolescents when this condition occurs (22-24).

Globally, research in some countries reveals that currently there is an increase in unhealthy lifestyle behavior in adolescents, namely 36% of adolescents choose unhealthy foods, 60% of adolescents have uncontrolled eating patterns, 48% of adolescents gain weight, and 43 % of adolescents not exercising regularly (25). In Indonesia, there are 95.5% of adolescents consume vegetables and fruit less frequently, 33.5% of adolescents do less physical activity, 29.3% of adolescents smoke, and 31% of adolescents experience dietary problems (26). In East Java Province there is an increase in the number of NCDs patients by 75.1 percent. This is influenced by the lack of healthy lifestyle behavior performed by the community, which is only 20 percent (27,28). Kediri City, which is one of the cities in East Java Province, has a number of NCDs patients (due to the lack of healthy lifestyle behavior) of 34 percent, 81,814 people with hypertension, 7,663 people with

diabetes, and 5,048 people with obesity (29). These high numbers of NCDs patients in Kediri City are caused by the lack of healthy lifestyle behavior, which in this case can be performed since adolescents.

In order to avoid illness and gain optimal health, adolescents need to perform healthy lifestyle behavior (30). Adolescents tend to perform healthy lifestyle behavior when they have certain conditions. Several things that facilitate adolescents in performing healthy lifestyle behavior in this research are assumed to be resilience (31,32), self-compassion (33,34), dan hope (35,36). Resilience, self-compassion, and hope elicit certain psychological states and bring positive psychological effects on adolescents to help them perform healthy lifestyle behavior (7,37).

Resilience, self-compassion, and hope have important roles for adolescents to perform healthy lifestyle behavior. Based on previous studies regarding healthy lifestyle behavior, it is known that there have not been many studies that examined and combined constructs such as resilience, self-compassion, and hope with healthy lifestyle behavior. So, it is necessary to do further research to find out the relationship between these variables. Thus, in this research, we will examine the relationship between resilience, self-compassion, and hope with healthy lifestyle behavior and the contribution of these variables both simultaneously and individually to healthy lifestyle behavior.

METHODS

This research has been ethically approved by the ethics committee of the Public Health Faculty of Institut Ilmu Kesehatan Strada Indonesia with the number 2485/KEPK/VIII/2021. The research was conducted from September to December 2021. This descriptive-analytic research was conducted with a cross-sectional design. The population in this research was all adolescents in Kediri City aged 15-19 years old as many as 20,000 adolescents. During this adolescent phase, individuals have several conditions that are in accordance with the research context. Adolescents belong to a group of individuals who are vulnerable to various risk exposures in their lives due to changes in global dynamics and trends, limitations

and conditions of the Covid-19 pandemic (Park et al., 2020), adverse environmental influences in the health context (e.g. peer pressure) (Sunarti et al., 2017), and the existence of various problems related to adolescents' social life (Taylor, 2018). Some of these conditions underlie the emergence of adolescents' issues related to healthy lifestyle behavior (Hosseini et al., 2017). This adolescent phase is also the right phase for adolescents to understand, prevent, or overcome the possibility of future disease development by doing efforts related to their health condition (McGovern et al., 2018). Healthy lifestyle behavior performed at a young age is effective to do because it helps reduce the risk of adolescents experiencing non-communicable diseases that can cause death at later ages (World Health Organization, 2020). The sampling technique used in this research was cluster sampling. The research sample was 342 respondents who were determined using the guideline for determining sample size by Isaac and Michael (Mulyatiningsih, 2011). The sampling of 342 respondents was carried out by the process of double-stage cluster random sampling (Silalahi, 2015), which was conducted by dividing the research area, namely Kediri City into 3 districts and randomly selecting several districts. Those selected districts were divided based on their sub-district and several sub-districts were randomly selected from the selected districts. Respondents were selected from each selected sub-district according to the research sample size, which amounted to 342 respondents.

The independent variables in this research were resilience, self-compassion, and hope. The dependent variable was healthy lifestyle behavior. Data were collected using printed questionnaires filled out by respondents and analyzed using regression at a significance level of $\alpha=0.05$. In this research, resilience was measured using a questionnaire adapted from the questionnaire in Hedo and Simarmata's research (Hedo & Simarmata, 2021). Self-compassion was measured using a questionnaire adapted from the questionnaire in Sugianto, Suwartono, and Sutanto's research. (Sugianto et al., 2020). Hope was measured using a questionnaire adapted from the questionnaire in Reza's research (Reza, 2017). Healthy lifestyle behavior was measured using a

questionnaire adapted from the questionnaire in Damayanti, Dino, and Donnelly's research (Damayanti et al., 2020).

RESULTS AND DISCUSSION

Healthy lifestyle behavior can maintain and improve the general health of adolescents and adults, as well as prevent the possibility of individuals suffering from non-communicable diseases (Mollborn & Lawrence, 2018). Healthy lifestyle behavior is related to several conditions in adolescents. Individuals' personal psychological state is one of the conditions related to healthy lifestyle behavior (Ciupinska & Cyprysiak, 2020; Krause & Halkitis, 2020; Pender et al., 2015; Rahayu et al., 2019; Taylor, 2018). Adolescents who are resilient, have self-compassion and have high hope tend to be able to perform healthy lifestyle behavior in their daily life (Bottolfs et al., 2020; Taylor, 2018).

Table 1. Subjects Characteristics

Characteristics	Frequency	%
Age		
15	197	57.6
16	34	9.9
17	39	11.4
18	37	10.8
19	35	10.2
Gender		
Male	167	48.8
Female	175	51.2
Education		
Junior High S	197	57.6
Senior High S	109	31.9
Graduate	36	10.5
Resilience		
Low	32	9.4
Moderate	242	70.8
High	68	19.9
Self-compassion		
Low	54	15.8
Moderate	210	61.4
High	78	22.8
Hope		
Low	32	9.4
Moderate	242	70.8
High	68	19.9
Healthy Lifestyle Behavior		
Low	50	14.6
Moderate	245	71.6
High	47	13.7
Total	342	100

Table 1 presents the demographic and psychological conditions of

respondents. The data showed that most respondents were junior high school students (57.6%), 15 years old (57.6%), and females (51.2%). Table 1 also showed that most subjects had resilience, self-compassion, and hope in moderate level. While the subjects who performed healthy lifestyle behaviors at a high level were 13.7%.

Table 2. Crosstab, Bivariate Analysis Result

Variables	Healthy Lifestyle Behavior						Statistic Test
	Low		Moderate		High		
	n	%	n	%	n	%	
Resilience							P-Value:
Low	15	5	4	1	3	6	<0.001
Moderate	3	1	18	7	3	1	R ² :0.15
High	4	5	49	7	1	2	
				2	5	3	
Self-c							P-Value:
Low	2	4	32	6	0	0	<0.001
Moderate	2	1	16	7	2	1	R ² :0.19
High	6	8	53	6	1	2	
				8	9	4	
Hope							P-Value:
Low	1	4	19	5	0	0	<0.001
Moderate	3	1	19	7	1	8	R ² :0.23
High	5	7	34	5	2	4	
				0	9	3	

According to Table 2, it was known that most subjects had moderate resilience and performed healthy lifestyle behavior which was also at the moderate level (74%). Most subjects who had a low level of resilience performed healthy lifestyle behavior which was also at a low level (51%). Meanwhile, most subjects who had a high level of resilience performed healthy lifestyle behavior at a moderate level (72%). Based on the results of the analysis, it was also known that resilience had a significant relationship with healthy lifestyle behavior ($p < 0.001$). There was a strong relationship between resilience and healthy lifestyle behavior, which was 40%. Meanwhile, the contribution of resilience to healthy lifestyle behavior was 15% and the remaining 85% was influenced by other variables not examined in this research.

There was previous research that revealed similar results to this research. Research with a cross-sectional approach conducted on adolescents in Bogor stated

that adolescents who had low resilience tended to perform unhealthy lifestyle behavior (Wardhani et al., 2017).

Table 2 also states that most subjects had a moderate level of self-compassion and performed healthy lifestyle behavior which was also at a moderate level (76%). It was also known that there were no subjects with a low level of self-compassion who had high levels of healthy lifestyle behavior (0%). Meanwhile, most subjects who had a high level of self-compassion performed healthy lifestyle behavior at a moderate level (68%). From the analysis, it was stated that self-compassion had a significant relationship with healthy lifestyle behavior ($p < 0.001$).

There was a strong relationship between self-compassion and healthy lifestyle behavior, which was 43%. While the contribution of self-compassion to healthy lifestyle behavior was 19% and the remaining 81% was influenced by other variables not examined in this research.

There was previous research that revealed similar results to this research. Systematic review research about the effect of self-compassion on healthy lifestyle behavior conducted by Biber and Elis stated that individuals who had a low level of self-compassion tended to apply unhealthy lifestyle behaviors, and vice versa (Biber & Ellis, 2017).

From Table 2 it was known that most subjects had a moderate level of hope and performed healthy lifestyle behavior which was also at a moderate level (79%). There were no subjects with a low level of hope who performed a high level of healthy lifestyle behavior (0%). Meanwhile, most subjects who had a high level of hope tended to perform healthy lifestyle behavior at a moderate level (50%). Based on the analysis result, it was also known that hope had a significant relationship with healthy lifestyle behavior ($p < 0.001$). There was a strong relationship between hope and healthy lifestyle behavior, which was 50%. Meanwhile, the contribution of hope to healthy lifestyle behavior was 23% and the remaining 77% was influenced by other variables not examined in this research. There was previous research that revealed similar results to this research. A cross-sectional study conducted by Griggs and Crawford on adolescents at University stated that adolescents who had a low level of hope tended to adopt unhealthy

lifestyle behavior. Meanwhile, adolescents who had a high level of hope tended to have the initiative to perform healthy lifestyle behavior (Griggs & Crawford, 2019).

Table 3. Multivariate Analysis Result

IV	P Value	B	Sig	R	R ²
Resilience	0.001	0.345			
Self-compassion	0.002	0.184	<0.001	0.56	0.31
Hope	<0.001	1.149			
B constant:					
60.526					

The data analysis results in Table 3 states that simultaneously there was a significant relationship between resilience, self-compassion, and hope with healthy lifestyle behavior ($p < 0.001$). There was a strong relationship between resilience, self-compassion, and hope simultaneously with healthy lifestyle behaviors by 56%. Meanwhile, the contribution of resilience, self-compassion, and hope simultaneously to healthy lifestyle behavior was 31% and the remaining 69% was influenced by variables that were not examined in this research. According to the results of data analysis, predictions of healthy lifestyle behavior in adolescents could be made based on resilience, self-compassion, and hope that existed in adolescents. Prediction through regression equation was $Y = 60.526 + 0.345 (X1 \text{ resilience}) + 0.184 (X2 \text{ self-compassion}) + 1.149 (X3 \text{ hope})$. This meant that if variables of resilience, self-compassion, and hope were considered constant, the amount of healthy lifestyle behavior in adolescents would be 60,526.

Table 3 also shows that each variable of resilience, self-compassion, and hope had a significant relationship with healthy lifestyle behavior ($p < 0.05$). By the regression equation, the prediction of healthy lifestyle behavior that could be made based on resilience was every increase in the resilience variable by 1 unit would increase healthy lifestyle behavior in adolescents by 0.345. Meanwhile, the prediction of healthy lifestyle behavior that could be made based on self-compassion was every increase in self-compassion variable by 1 unit would increase healthy lifestyle behavior in adolescents by 0.184. The prediction that can be made on healthy lifestyle behavior based on hope was every increase in the hope variable by 1 unit

would increase healthy lifestyle behavior in adolescents by 1,149.

The Relationship between Resilience, Self-compassion, and Hope with Healthy Lifestyle Behavior

Results of this research showed that resilience, self-compassion, and hope simultaneously had a significant relationship with healthy lifestyle behavior ($p < 0.001$), which was in accordance with previous research that stated similar results. Resilience, self-compassion, and hope bring impact to adolescents when they face difficult situations, experience problems, and failures, as well as when adolescents face a normal or neutral situation in their daily life (Holden et al., 2020). Resilience, self-compassion, and hope together have a relationship with healthy lifestyle behavior in adolescents by serving roles as protective and buffer functions for adolescents related to healthy lifestyle behavior (Ellis et al., 2017; Hu et al., 2018; Y. K. Kim et al., 2019). When adolescents with a high level of resilience, self-compassion, and hope face problems or challenges, they will experience a certain process of accepting the situation in a calm, balanced, and meaningful way. Adolescents also experience positive emotions, a sense of security and comfort, and a soothing effect, as well as improvement in negative feelings related to problems in performing healthy lifestyle behavior (Butz & Stahlberg, 2020; Li et al., 2019; Nery-Hurwit et al., 2018).

Resilience, self-compassion, and hope bring benefits to adolescents in neutralizing the negative impacts caused by biopsychosocial problems experienced by adolescents when they perform healthy lifestyle behavior (Y. K. Kim et al., 2019; Konaszewski et al., 2021). With these three internal psychological strengths in adolescents, they tend to proactively perform healthy lifestyle behavior even when they have not experienced illness (Griggs & Crawford, 2019). Adolescents will try to gain the optimal health condition by maintaining, enhancing, and improving health by implementing healthy lifestyle behavior as a form of loving, caring, and responding well to themselves (Dunne et al., 2018).

Adolescents who have resilience, self-compassion, and hope tend to experience mental energy that facilitates them to continuously strive and move to

find ways in performing healthy lifestyle behavior, both in normal and difficult conditions (Horan & Taylor, 2018; Mcgarity-palmer, 2019). Adolescents also tend to respond effectively and positively toward a painful or difficult situation, so that it can produce a positive result as well, which in this case is positive healthy lifestyle behavior (Holden et al., 2020; Li et al., 2019).

Previous research stated that when adolescents perform healthy lifestyle behavior and experience negative feelings, problems, difficult situations, or failures, they tended to remain able to perform healthy lifestyle behavior if they had resilience, self-compassion, and hope at a moderate or high level. Despite experiencing problems or difficult situations in performing healthy lifestyle behavior, adolescents would be able to bounce back to a balanced condition. This was related to resilience, self-compassion, and hope that carried out the process of protecting and buffering adolescents from difficult situations (Horan & Taylor, 2018; Hu et al., 2018; Konaszewski et al., 2021).

Theories about resilience, self-compassion, and hope state that the existence of resilience, self-compassion, and hope will produce certain repairing effects on negative situations experienced by adolescents. In addition to neutralizing and repairing negative conditions in adolescents, resilience, self-compassion, and hope also carry out a therapeutic process in adolescents (Fukuhara et al., 2019; Hu et al., 2018; Schiavon et al., 2017). In such circumstances, adolescents do not continuously focus on negative situations and do not give in to difficulties or problems that arise when they perform healthy lifestyle behavior (Dunne et al., 2018; Gedik, 2019).

The Relationship between Resilience and Healthy Lifestyle Behavior

Results of this research indicated that there was a significant relationship between resilience and healthy lifestyle behavior of adolescents in Kediri, East Java.

The theory of resilience states that resilience is an individual's ability to survive and struggle by mobilizing the assets and resources as well as maintaining a balanced life during and after experiencing stress and difficult times. These pressures and difficulties are considered as means and opportunities for self-development so that individuals can rise or recover to normal

development functions or even better than the previous state and function (Garnezy, 1991; Hölting et al., 2021; Sagone et al., 2020; Wagnild & Young, 1993; Zimmerman, 2013).

Adolescents who have resilience tend to experience an inner peace that helps them minimize excessive negative responses to a certain problem, tend to continue to bounce back when facing problems or difficult conditions, tend to have confidence and ability to depend on themselves, tend to be able to realize meaning and purpose in their life, and tend to realize about existential solitude (Wagnild & Young, 1993). Resilience facilitates adolescents to be able to survive when they face difficult conditions and are exposed to negative impacts or influences that may occur in the performance of healthy lifestyle behavior as the result of changes in adolescents' life related to their transition from childhood to adulthood, and as result of global change (Hendriani, 2019; Wardhani et al., 2017). The theory of development in adolescents states that adolescents are vulnerable to exposure to bad influences from their environment where peer pressure becomes an important issue in adolescents' life (Taylor, 2018). The environment can bring a bad influence on adolescents related to unhealthy lifestyle behavior and increase adolescents' risk to experience problems in performing healthy lifestyle behavior (Havigerová et al., 2019; Pender et al., 2015).

The Covid-19 pandemic exacerbated the difficult situation of adolescents because they are exposed to biopsychosocial stressful situations due to disturbances and changes to the daily routine of adolescents' lives caused by isolation and restrictions in most areas of life in order to break the chain of spread on Covid-19. There are also changes in adolescents' socioeconomic conditions as an effect of the pandemic situation (Huber et al., 2020). All these conditions trigger adolescents to experience decreased physical activity, increased passive activity (sedentary behavior), experience changes and disturbances in sleep and eating patterns, increased consumption of alcoholic beverages and cigarettes, increased anxiety, stress, boredom, and loneliness (Ashadi et al., 2020; Huber et al., 2020; Larson, 2021; Pecanha et al., 2020; Phillipou et al., 2020; Reyes-

Olavarria et al., 2020; Romero-Blanco et al., 2020; Zenic et al., 2020; Zheng et al., 2020).

According to the theory of the resilience process, resilient adolescents will carry out a process that involves dynamic interactions between assets and resources when they face problems and obstacles in performing healthy lifestyle behavior. Assets are positive internal factors that exist in adolescents, such as competence, coping abilities, and self-confidence. Meanwhile, resources are positive factors outside the adolescents and rooted in adolescents' family support, environment, and social communities (Garmezy, 1991; Utami & Helmi, 2017).

Assets and resources that interact with each other within adolescents will neutralize the negative impact caused by biopsychosocial problems experienced by adolescents due to negative influences and risk factors, such as exposure to peer pressure, economic difficulties, and restrictions due to the Covid-19 pandemic, which make them prone to perform unhealthy lifestyle behavior. The resilience process also involves assets and resources as protectors that will fight or work in directly opposite ways from the risk factors experienced by adolescents related to their performance of healthy lifestyle behavior (Zimmerman, 2013).

The results of this research were in accordance with the results of longitudinal research on adolescents under 18 years old which stated that there was a relationship between resilience and healthy lifestyle behavior. The research revealed that resilience in adolescents can interfere with or counter the negative impact of negative experiences or problems experienced by adolescents related to healthy lifestyle behavior (Nishimi et al., 2021).

The Relationship between Self-compassion and Healthy Lifestyle Behavior

Results of this research indicated that there was a significant relationship between self-compassion and healthy lifestyle behavior of adolescents in Kediri City, East Java.

Self-compassion is an individual's ability to love oneself or respond to oneself with compassion or kindness when faced with difficulties or failures, which is manifested in form of treating oneself with kindness, realizing one's own shortcomings which are natural for every human being,

and dealing with emotions and life experiences in meaningful ways (Biber & Ellis, 2017; Bluth et al., 2018; K. Neff et al., 2021).

In relation to healthy lifestyle behavior, self-compassion helps adolescents to be able to perform healthy lifestyle behavior in daily life (Gedik, 2019; Homan & Sirois, 2017; Rahimi-Ardabili et al., 2018; Sirois, 2020). Self-compassion produces a positive influence on adolescents to perform healthy lifestyle behavior (Biber & Ellis, 2017; Cleare et al., 2018; Dunne et al., 2018; Homan & Sirois, 2017; Rahimi-Ardabili et al., 2018). Adolescents who love themselves will treat themselves well, including caring for, maintaining, and improving their health by performing healthy lifestyle behavior.

Self-compassion will enable adolescents to do a proactive effort to achieve an optimal health state by performing healthy lifestyle behavior. Adolescents are said to be proactive about their health when they are willing to perform healthy lifestyle behavior in order to maintain, enhance, and improve their health even before they experience illness. Adolescents who treat themselves with compassion tend to apply good things to themselves, in this case, by performing healthy life behavior so that they can obtain optimal health status (Dunne et al., 2018). During the process of performing healthy lifestyle behavior, adolescents can experience difficult conditions, problems, and failures triggered by the influence of environment and lifespan developmental change, as well as restrictions due to the Covid-19 pandemic (Taylor, 2018). Adolescents also become negligent in performing healthy lifestyle behavior when they feel unstable, have a negative evaluation of themselves, and experience confusion in finding their identity as part of their developmental tasks and puberty phase (Bluth & Eisenlohr-Moul, 2017).

Despite facing various problems and difficulties, adolescents who have self-compassion will treat themselves well and in a compassionate manner so that they will continue to perform healthy lifestyle behavior in daily life. In addition, adolescents who experience failure in implementing healthy lifestyle behavior will not judge themselves harshly, will not feel alone and isolated, and will not be protracted in sadness and guilt due to failure in performing healthy lifestyle

behavior. They tend to maintain the balance by accepting and understanding that every human being has flaws and experiences failure as a life lesson (Elices et al., 2017; Khumas et al., 2019).

Self-compassion in adolescents acts as a buffer and gives them a repairing effect from the negative condition that may arise when adolescents perform healthy lifestyle behavior or when adolescents experience difficult situations or when adolescents fail to perform healthy lifestyle behavior. In addition, self-compassion also raises healthy and positive emotions in adolescents when performing healthy lifestyle behavior (Gill et al., 2018; Marsh et al., 2018; K. Neff et al., 2021).

The results of this research were in accordance with previous research on adolescents at University which stated that there was a relationship between self-compassion and healthy lifestyle behavior. The research revealed that self-compassion had a positive relationship with healthy lifestyle behavior in adolescents. Adolescents who had self-kindness and acted in a mindful manner tended to perform healthy lifestyle behavior (Gedik, 2019).

The Relationship between Hope and Healthy Lifestyle Behavior

Results of this research indicated that there was a significant relationship between hope and healthy lifestyle behavior of adolescents in Kediri City, East Java. Hope is an individual's attribute of personal strength which manifested in form of expectations, strong mental determination, and future-oriented belief about the ability to create roads, directions, and routes (pathways) to achieve a certain goal in the future. Hope is driven by the component of motivation (agency) to use the pathways in order to achieve determined goals, even though there are problems and difficulties that must be faced in achieving these goals (Espinoza et al., 2017; Snyder, 2002). High hope adolescents tend to have mental energy that can move and encourage them to survive and live the way to achieve their goals (Snyder, 2002). Both in neutral conditions and difficult conditions, hope is a personal strength possessed by adolescents that have an important role in achieving their goals (Ghielen et al., 2018).

In relation to healthy lifestyle behavior, hope enables adolescents to find and execute all the possible ways with the

encouragement of mental energy to perform healthy lifestyle behavior in daily life. Hope helps adolescents experience positive expectations about positive results in the future, which in this case are their expectations to successfully perform healthy lifestyle behavior (Forbes, 2017; Ghielen et al., 2018). Hope also inspires adolescents to take care of themselves and be proactive and focus on finding ways to implement their goals related to healthy lifestyle behavior (Mcgarity-palmer, 2019).

Within the health context, hope acts as a protector for adolescents when they implement healthy lifestyle behavior (Rustoen, 2021). Hope will elicit a therapeutic process in protecting and improving adolescents' health (Fukuhara et al., 2019; Schiavon et al., 2017). High hope adolescents will consider the problem and difficult condition when implementing healthy lifestyle behavior as a challenge that will be successfully overcome by finding alternative ways and using various resources in their life (Hauck, 2020).

The results of this research were in accordance with quantitative research about adolescents which stated that there was a relationship between hope and healthy lifestyle behavior. The study stated that hope was a predictor of adolescents' healthy lifestyle behavior (Popoola, 2017).

CONCLUSION

Most of the adolescents in Kediri City, East Java had psychological strengths such as resilience, self-compassion, and hope at a moderate level. Meanwhile, most of the adolescents who had resilience, self-compassion, and hope at a low level tended not to perform healthy lifestyle behavior in their daily lives.

There was a significant relationship between resilience, self-compassion, and hope simultaneously with the healthy lifestyle behavior of adolescents in Kediri City, East Java. In addition, it was also known that the three attributes of psychological strengths in the form of resilience, self-compassion, and hope, partially had a significant relationship with healthy lifestyle behavior in adolescents.

Based on the results of this research, it can be suggested that further study on healthy lifestyle behavior, resilience, self-compassion, and hope in various contexts and approaches is necessary to be carried out.

According to the results of this research, it is necessary to design intervention and health promotion programs to improve healthy lifestyle behavior among adolescents in sustainable and practical ways, especially by integrating Positive Psychology constructs (resilience, self-compassion, and hope) into intervention and health promotion programs for adolescents in Kediri City, East Java.

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