

Adolescent coping strategies in dealing with psychosocial impacts during the COVID-19 pandemic: A systematic review

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You Have to Know!

1. Youth coping strategies during the COVID-19 pandemic
2. Positive coping improves mental health
3. Negative coping risks triggering psychosocial problems

Abstract

Introduction: The COVID-19 pandemic impacts the mental health of adolescents who are classified as vulnerable groups. Adolescents face various stressors, so they need coping strategies. Previous research has discussed psychosocial problems in adolescents due to the pandemic but is still limited to discussing how adolescents deal with stress during the pandemic. This systematic review aims to identify the psychosocial impacts and coping strategies of adolescents during the pandemic.

Methods: This systematic review research uses various sources of information from journal articles. The databases used are ScienceDirect, ProQuest, and Ebsco. The instrument used is the PRISMA checklist. **Results:** Based on results of literature research from 3 databases, according to predetermined keywords, 370 scientific articles were obtained. According to the inclusion criteria, further analysis was carried out, and 15 full texts were obtained for review. The psychosocial impacts experienced by adolescents during the pandemic are classified into two: psychological impacts and social impacts. Psychological impacts include depression, anxiety, stress, worry, sadness, PTSD, anxiety, helplessness, fear, and psychological stress. Social impacts consist of loneliness, feelings of isolation, social withdrawal or restriction, and lack of family support. Adolescent coping abilities during the COVID-19 pandemic are classified into positive and negative coping. **Conclusion:** Adolescents use coping to deal with psychosocial problems during the pandemic, classified into positive (active) and negative (passive) coping. Positive coping can improve adolescent mental health, while negative coping is at risk for psychosocial problems in adolescents.

Keyword: Adolescent, coping, psychological, pandemic COVID-19

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1. INTRODUCTION

Bullying COVID-19 that occurs worldwide is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).¹ COVID-19 has an impact on people's physical and mental health. The psychological condition in the

community is the anxiety of being infected by the virus.² This virus can infect all ages, including adolescents with minimal experience with prevention and compliance behaviors like adults.³ Adolescents are a vulnerable group that has the potential to have complex health problems.⁴

Adolescents often experience concerns about their health conditions.⁵ So maintaining adolescents' physical health and mental health is one of the efforts to reduce psychosocial problems in adolescents.

The psychological impacts that adolescents commonly experience are anxiety, stress, and depression.⁶ Psychological problems in adolescents (12-18 years) during the COVID-19 outbreak include symptoms of depression (43%), anxiety (37%), and a combination of depression and anxiety (31%). Adolescents experience moderate to very severe anxiety (21%) and depression (34%) during the first week of lockdown.⁷ Anxiety in adolescents was classified into severe anxiety occurring in 0.9% of adolescents, 2.7% moderate anxiety, and 21.3% mild anxiety.⁸ Anxiety in adolescents occurs because of excessive fear, ignorance of preventing disease, lack of knowledge, and various infodemics in the mass media.⁹ Adolescents with psychological problems will experience various other disorders such as sleep disorders, decreased productivity, decreased focus, decreased concentration in learning, and memory disorders.¹⁰

Adolescents experience various psychosocial problems due to large-scale acute stressors from the COVID-19 pandemic but do not know how to deal with them. This problem is fundamental to be addressed immediately through collaborative efforts from health workers, schools, and parents². In addition, individual coping abilities can be used to survive and resolve stressors during a pandemic. Different coping strategies in adolescents are related to the history of trauma they have experienced.¹¹ Coping strategies are divided into two, namely active and passive coping. Active coping is an individual's active effort in reducing stress by finding solutions for problem-solving, cognitive restructuring, and planning. Passive coping is which the individual tries to ignore and avoid the source of the stressor by engaging in substance abuse and rejection behavior.¹²

Adolescents can use positive coping and resilience to deal with anxiety, stress, and depressive symptoms.¹³ Adolescents use positive coping as a protective factor in overcoming stress and trauma. Adolescents are at risk for experiencing anxiety, stress symptoms, and depression when dealing with trauma with negative coping. This

systematic review aims to identify adolescent coping strategies in overcoming psychosocial problems during the pandemic.

2. METHODS

This study uses a systematic review method by systematically searching for articles from several data based on predetermined criteria.

2.1. Article Search

The search for scientific articles from various sources is limited by inclusion and exclusion criteria were considered using PICO. The databases used are ScienceDirect, ProQuest, and Ebsco. The instrument used is the PRISMA checklist.

2.2. Inclusion and Exclusion Criteria

Articles from the search process were then selected based on inclusion criteria, namely articles that discussed groups of adolescents aged 10-24 years; the psychosocial impact of COVID-19, adolescent mental health, and coping abilities; All articles, both research and non-research, are in English. Exclusion criteria are articles that discuss population groups of children, pregnant women, and the elderly; articles analyzing the psychosocial impact of drugs; and articles that discuss adolescents' psychosocial impact and coping abilities.

2.3. Search Method

The first strategy used in this study is to search for scientific literature according to PRISMA guidelines. The selected scientific literature is related to the psychosocial impact and coping abilities of adolescents during the pandemic. A total of 370 articles were obtained from searches on three databases using predetermined keywords. Based on the review process on the abstract and title, as many as 290 articles were declared inappropriate. The researcher identified 15 duplicate articles. A total of 15 articles obtained were analyzed based on the full text.

The most common reasons why many articles were not included in this review were research respondents who were less than ten years old or more than 24 years old, and there was no discussion about coping abilities or adolescent psychological problems in the article. The document selection process is illustrated in Figure 1, as well as a summary of articles that meet the systematic review criteria can be seen in table 1.

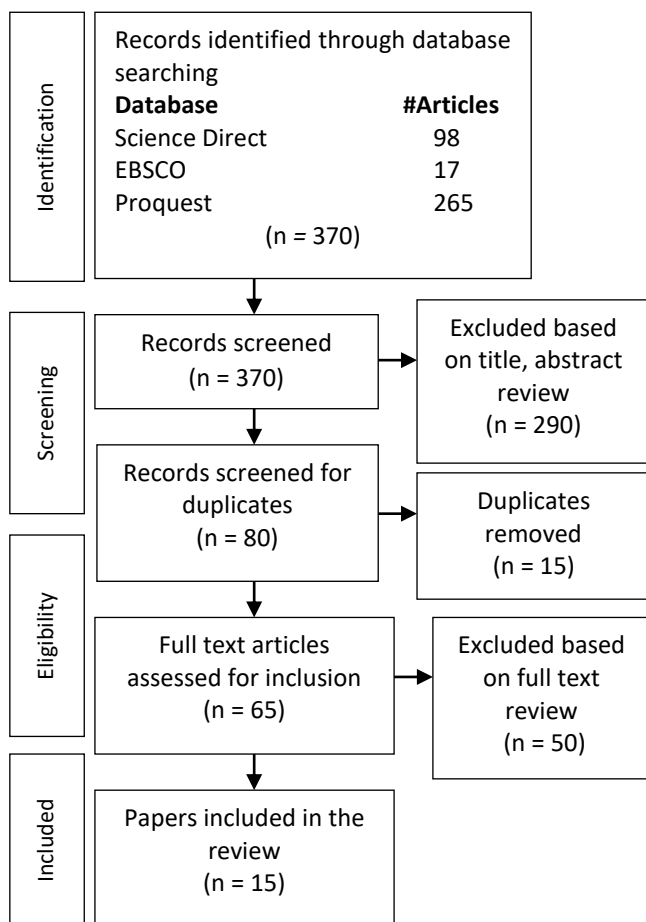


Figure 1. PRISMA Flowchart for Systematics Review

3. RESULTS

The initial search found as many as 370 articles on three databases using predetermined keywords. Based on the review abstract and title, as many as 290 articles were declared inappropriate. The researcher identified duplication and found 15 duplicate articles. A total of 15 articles were analyzed based on their full text. The study came from China (n=26%), Hong Kong (n=30%). Research participants consisted of adolescents aged between 10-24 years. The minimum number of participants is 420 respondents, and the maximum is 2,104 respondents. The research composition in this systematic review is 90% quantitative research, with the majority being a cross-sectional approach and 10% is qualitative research. The reason most articles are not included in this review is articles involving children, the elderly, or health workers, and articles that do not discuss the pandemic's psychological and mental health impacts.

3.1. Psychosocial impact on adolescents

This systematic review will first discuss the psychosocial impacts experienced by adolescents during the pandemic before explaining adolescent coping abilities. Psychosocial impacts are classified into two, namely psychological and social impacts, which are described in Figure 2.

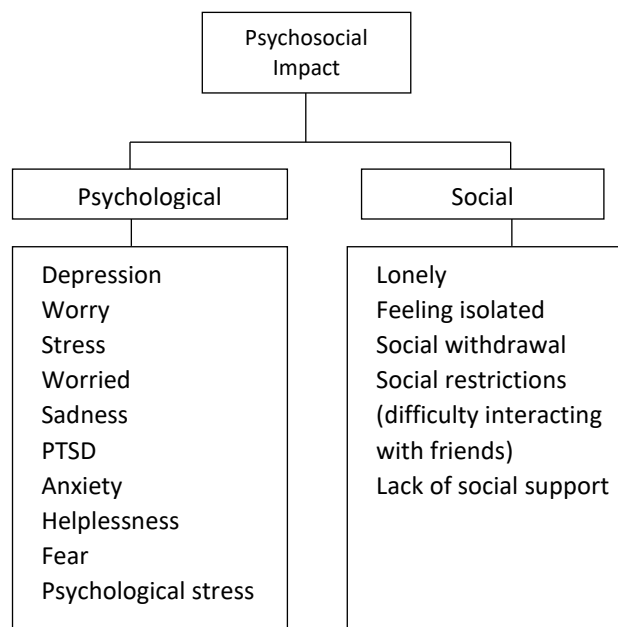


Figure 2. Psychosocial Impact

Psychological impacts experienced by adolescents are anxiety, stress, PTSD, and depression. Symptoms of stress, anxiety, and moderate to severe depression are common among junior high school students, while high school students only experience anxiety.¹³ Other research shows that high school students experience more anxiety and depression.¹⁴ The bootstrap test showed that the indirect effect of wishful thinking and self-criticism coping strategies on PTSD symptoms was not significant.¹⁵ Problems of sadness, loneliness, and mental anxiety have also increased during this pandemic.¹⁶ Loneliness among young people is one of the biggest problems to emerge during the pandemic.¹⁷

3.2. Adolescents coping abilities

This systematic review describes adolescent coping during the pandemic. Adolescent coping abilities are classified into positive coping (active coping) and negative coping (passive coping), which are depicted in Figure 3.

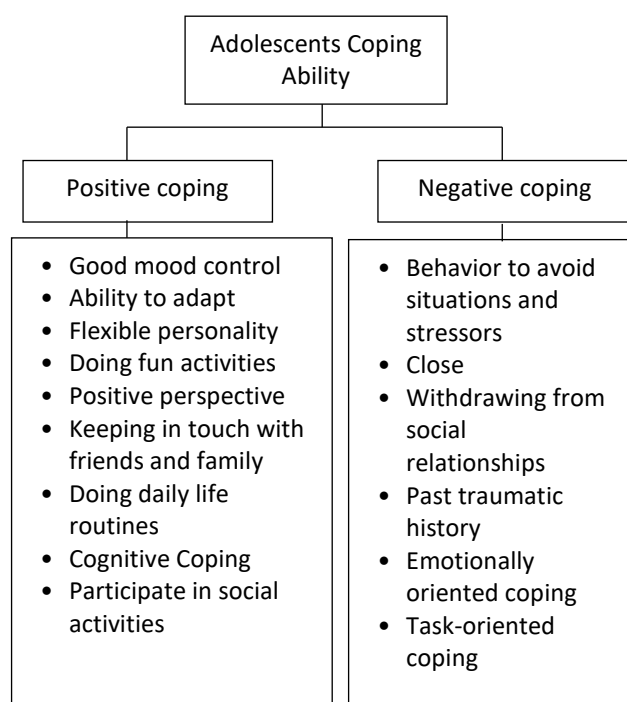


Figure 3. Adolescent Coping Ability

Adolescent coping strategies can be influenced by the intensity of communication with friends and family in person and online; the ability to deal with pandemic situations calmly and think positively; and trying to do daily activities

Positive coping ability (active)

Adolescents have a protective factor against stress and trauma in the form of positive coping.¹³ Active coping can include thinking positively, trying to solve problems, and seeking help. Individuals trying to adapt to the environment, improve social relationships, and have positive sources of support are active coping strategies that can improve mental health.^{18,19} Active coping strategies are influenced by psychological resilience, the ability to control moods, and adaptive coping abilities.²⁰

Individuals can use effective coping strategies in dealing with emergency conditions that can impact mental health.²¹ The strategies that are considered to be used most often are carrying out daily activities, making activity schedules, doing light physical activities and fun activities.¹⁶ Adaptive coping is beneficial for mental health during social isolation during a pandemic. Coping strategies used during isolation are doing daily activities, light physical activity, and mindfulness.²² Other strategies that can be used include regular telephone communication with friends and family; doing fun activities according to hobbies (exercise, reading, playing musical instruments, playing

games, or watching television). Deal with situations calmly and think positively, and have their scheduled activities.²³

Negative coping ability (passive)

Negative coping is a risk factor for symptoms of depression, stress, and anxiety in students due to problems at school.¹³ Negative coping includes avoiding stressors, shutting down, avoiding situations, and not wanting to socialize with other people. Negative coping can hinder adaptability and worsen adolescent mental health.²⁴ Negative coping strategies are used when social skills and support cannot cope with the stressor that occurs.¹⁵ Based on the results of other studies, negative coping such as avoidance behavior, can increase the incidence of PTSD in adolescents.²⁵ In addition, the lack of social support can also be at risk for the incidence of PTSD.²⁶ Individuals with negative coping accompanied by symptoms of depression can cause psychological disorders.²⁷

4. DISCUSSION

The COVID-19 pandemic has had an impact on the psychological status of adolescents. Many studies have discussed the impact of the COVID-19 pandemic on psychological problems in adolescents, but how adolescents cope with these stressors has not been explained.¹³ The main objective of this systematic review is to identify adolescents' coping abilities in dealing with psychosocial problems during a pandemic. The main results of this systematic review are psychosocial problems experienced by adolescents in the form of anxiety, stress, PTSD, depression, loneliness, sadness, and inner anxiety. These psychosocial problems should be resolved using different coping abilities classified into adaptive and maladaptive coping. Adolescents perform adaptive coping to deal with stressors, while maladaptive coping is done to avoid their stressors.

The psychological impact of the pandemic occurs in many countries with different levels of stress, anxiety, and depression. Ethiopia noted that 66.4% of respondents experienced psychological problems,²⁸ this figure is higher when compared to Italy (38%),²⁹ China (53.8%),³⁰ France (38.6%),³¹ and India (25.3%)³². These differences can be influenced by socio-economic, cultural, and environmental differences.¹⁷ Adolescence is a critical period in which hormonal changes and brain development are still taking place. Adolescents feel isolated,

lonely and rarely interact with peers due to the pandemic.³³ Various sources can be used to overcome these psychological problems during the pandemic with knowledge, attitudes, behavior, and human resources.²⁸ Anxiety levels are related to stress, lack of gratitude, emotional and coping ability to avoid stressors.³⁴

Positive coping ability scores more on female medical students compared to non-medical male students. A person's psychological problems are influenced by the coping strategies they have. Individual coping styles are also related to psychological health and well-being. Positive coping is related to cognitive abilities and positive behavior in dealing with stressors to reduce the risk of depression and anxiety.³⁵ Individuals who use positive coping appear to be more optimistic in participating in social activities and can control the impact of perceived stress.³⁶

Negative coping styles such as avoidance behavior, drug use, smoking, and alcohol consumption are associated with depression in adolescents.^{37,38} The main indicator of a person experiencing psychological stress is the emergence of anxiety, stress, and depression.³⁹ Individuals who tend to use negative coping will experience psychological pressure and risk mental health problems.⁴⁰ Negative coping in the form of risk avoidance behavior towards PTSD and PTSD is a problem of psychological disorders.^{41,42} Thus, PTSD and negative coping are adolescent mental health problems as a result of the COVID-19 pandemic.²⁷

Based on the research results, anxiety is caused by negative coping. It can be minimized by sources of support and individual ability to solve problems.^{43,44} Anxiety disorder patients use positive coping strategies focusing on solving problems, finding solutions, and finding sources of support.⁴⁵ A person's task-oriented coping skills can be frustrating due to limited interaction during a pandemic.³⁴ Adolescents try to overcome psychological problems during the pandemic by doing physical activity. Physical activity can reduce stress, anxiety, maintain health, fitness, and weight stability during the quarantine period.³⁴ Adolescents also try to maintain physical health, sleep and rest patterns, diet, regular exercise, meditation, and progressive muscle relaxation to reduce anxiety. These behaviors have been shown to improve sleep quality and reduce anxiety

experienced by adolescents during the pandemic.^{46,47}

5. CONCLUSION

Psychosocial impacts on adolescents can be stress, anxiety, depression, posttraumatic stress, loneliness, sadness, and mental stress. Coping used in dealing with psychosocial problems in adolescents is classified into positive or active coping and negative or passive coping. Positive coping obtained by doing positive things and solving problems is protective for adolescents with psychosocial problems. Positive coping can improve mental health in adolescents. Negative coping is a risk factor for psychosocial problems such as anxiety, stress, and depression. The use of negative coping strategies can have an impact on adaptability and psychological health. The ability to use appropriate coping strategies during the COVID-19 pandemic can help adolescents prevent and overcome psychosocial problems.

6. CONFLICT OF INTEREST

All authors declared there is no conflict of interest

7. ACKNOWLEDGEMENT

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Table 1. Summary of articles included in the study (n = 15)

No.	Author	Main Findings
1.	Zhang C, et al.	a. Positive coping is a protective factor for adolescents against symptoms of depression, anxiety, and stress. b. Negative coping is a risk factor for depression, anxiety, stress, and PTSD in adolescents
2.	Wu Y, et al.	a. Students in the field of health have higher positive coping styles than non-medical students. b. Adolescents' positive coping can be beneficial for psychological well-being and mental health
3.	Schlegl S, et al.	a. Most of the patients reported experiencing anxiety about shape and weight, loneliness, sadness during the pandemic. b. Three factors that are significant for coping styles, such as mood control, adaptability and coping flexibility, c. The most frequently used and most helpful coping strategy was doing fun activities
4.	Branquinho C, et al.	Coping strategies were more emphasized on positive attitudes and perspectives in dealing with the pandemic, by doing fun activities, keeping in touch with family and friends, and doing daily activities.
5.	Thompson NJ, et al.	Avoidance coping strategies and social isolation are associate with PTSD.
6.	Cherry KE, et al.	a. Avoidance behavior will lead to more symptoms of depression and PTSD. b. A person's traumatic experience can reduce effective coping abilities.
7.	Liang L, et al.	a. Adolescents are prone to psychological problems and suffer from PTSD problems. b. Adolescent health related to the use of negative coping abilities.
8.	Rogowska AM, et al.	a. Most of the students showed mild to severe anxiety and experienced severe stress. b. Anxiety is influenced by several things such as severe stress, poor public health conditions, women, and emotional and task-oriented coping abilities.
9.	Saurabh K, et al.	Adolescents who were quarantined due to COVID-19 experienced psychological stress in the form of anxiety (68.59%), helplessness (66.11%) and fear (61.98%)
10.	Guo J, et al.	a. PTSD is a psychological problem due to COVID-19 b. The use of cognitive coping causes fewer mental health problems
11.	Guessoum SB, et al.	The COVID-19 pandemic can lead to an increase in psychiatric disorders such as PTSD, Depression, Anxiety, and grief
12.	Marques de Miranda D, et al.	Anxiety, depression, and posttraumatic symptoms are psychosocial impacts arising from the COVID-19 pandemic
13.	Guo J, et al.	Juvenile abuse before the pandemic led to more symptoms of PTSD and more anxiety
14.	Košir U, et al.	Respondents reported increased psychological distress and felt more anxious than before COVID-19.
15.	Kılınçel Ş, et al.	Anxiety in adolescents during the pandemic is caused by a history of mental disorders, or have a family or neighborhood confirmed COVID-19.