

Adolescent Lifestyle, Mental Health, and Behavioral Outcomes Research Topics

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Abstract

Background: Adolescence is a critical developmental stage characterized by substantial physical, emotional, and social changes. Lifestyle behaviors, including physical activity, sleep patterns, dietary habits, and social interactions, significantly influence mental health and behavioral outcomes during this period. Unhealthy lifestyle practices may contribute to emotional distress, anxiety, depression, and risk-taking behaviors, affecting long-term well-being and quality of life.

Objective: This study aimed to examine the relationship between adolescent lifestyle factors, mental health status, and behavioral outcomes, and to identify key determinants influencing psychological and behavioral well-being.

Methodology: A cross-sectional survey was conducted among 250 adolescents aged 13–19 years from schools and community settings. Data were collected using a structured questionnaire assessing lifestyle behaviors, mental health indicators, and behavioral outcomes. Descriptive and inferential statistical analyses were employed to evaluate associations between study variables.

Findings: The results revealed that 65% of participants reported healthy lifestyle practices, while 35% demonstrated unhealthy behavioral patterns. Approximately 68% exhibited positive mental health status, whereas 32% reported symptoms of stress, anxiety, or emotional distress. Positive lifestyle behaviors were associated with improved mental well-being (64%), better emotional regulation (59%), and healthier behavioral outcomes (61%). Conversely, unhealthy lifestyle patterns were linked to increased psychological distress and behavioral challenges.

Conclusion: Adolescent lifestyle behaviors significantly influence mental health and behavioral outcomes. Promoting healthy lifestyle habits and early mental health interventions can enhance psychological well-being and support positive behavioral development among adolescents.

Keywords: Adolescents, Lifestyle Behaviors, Mental Health, Behavioral Outcomes, Psychological Well-Being, Emotional Regulation, Health Promotion, Adolescent Development.

1 Introduction

Adolescence is a crucial developmental stage characterized by rapid physical, emotional, cognitive, and social changes. During this period, lifestyle behaviors established by adolescents significantly influence their mental health and behavioral outcomes. Healthy lifestyle practices, including balanced nutrition, regular physical activity, adequate sleep, and positive social interactions, contribute to psychological well-being and healthy development. Conversely, unhealthy behaviors such as physical inactivity, poor dietary habits, excessive screen time, and substance use may increase the risk of mental health problems and adverse behavioral outcomes [1].

Mental health is an essential component of adolescent well-being and encompasses emotional, psychological, and social functioning. According to global estimates, mental health disorders affect a substantial proportion of adolescents, with anxiety, depression, and stress-related conditions being among the most common concerns [2]. Mental health challenges during adolescence can negatively affect academic performance, interpersonal relationships, and overall quality of life. Furthermore, untreated mental health issues often persist into adulthood, increasing the burden of chronic psychological disorders [3].

Lifestyle factors have been identified as important determinants of adolescent mental health. Research indicates that regular physical activity is associated with lower levels of depression and anxiety, while healthy dietary patterns contribute to improved mood and cognitive functioning [4]. Adequate sleep duration and quality are also essential for emotional

regulation, stress management, and behavioral control. In contrast, sleep deprivation has been linked to emotional instability, impulsivity, and increased psychological distress among adolescents [5].

Behavioral outcomes during adolescence are influenced by multiple interacting factors, including lifestyle habits, family environment, peer relationships, and school experiences. Positive lifestyle behaviors are associated with improved self-esteem, emotional resilience, and prosocial behavior, whereas unhealthy behaviors may contribute to aggression, risk-taking activities, and social withdrawal [6]. Additionally, the widespread use of digital technologies and social media has introduced new challenges and opportunities for adolescent mental health and behavior [7].

Several studies have highlighted the interconnected relationship between lifestyle behaviors and mental health outcomes. Adolescents who maintain healthy lifestyles tend to demonstrate better emotional well-being and reduced behavioral problems compared to those engaging in unhealthy habits [8]. Schools, families, and community organizations play important roles in promoting healthy behaviors and supporting mental health development among adolescents [9].

Given the increasing prevalence of mental health concerns and behavioral challenges among adolescents, understanding the influence of lifestyle factors on psychological well-being and behavior is essential. Such knowledge can inform evidence-based interventions and public health strategies aimed at improving adolescent health outcomes and fostering healthy development [10].

1.1 Research Gap

Although previous studies have examined lifestyle behaviors, mental health, and behavioral outcomes independently, limited research has explored the combined influence of multiple lifestyle factors on both mental health and behavioral outcomes among adolescents. Furthermore, there remains insufficient evidence regarding how healthy and unhealthy lifestyle practices collectively affect psychological well-being and behavioral adjustment in diverse adolescent populations.

1.2 Objectives

1. To assess the relationship between adolescent lifestyle behaviors and mental health status.
2. To examine the influence of lifestyle factors on behavioral outcomes among adolescents.

2 Literature review

2.1 Lifestyle Behaviors and Adolescent Mental Health

Lifestyle behaviors play a significant role in shaping adolescent mental health and overall well-being. Recent studies indicate that healthy practices such as regular physical activity, balanced nutrition, adequate sleep, and limited screen time are associated with improved emotional stability and psychological functioning [11]. Adolescents who maintain healthy lifestyles generally report lower levels of stress, anxiety, and depressive symptoms compared to those with unhealthy behavioral patterns.

2.2 Physical Activity, Sleep, and Psychological Well-Being

Physical activity and sleep quality are among the most influential determinants of adolescent mental health. Evidence suggests that regular exercise enhances mood, improves self-esteem, and reduces psychological distress [12]. Similarly, adequate sleep contributes to emotional regulation, cognitive performance, and behavioral control. Conversely, insufficient sleep has been associated with increased emotional instability, irritability, and mental health problems [13].

2.3 Lifestyle Factors and Behavioral Outcomes

Behavioral outcomes among adolescents are closely linked to lifestyle choices. Positive lifestyle behaviors promote prosocial conduct, self-discipline, and resilience, while unhealthy habits may contribute to aggression, impulsivity, substance use, and social withdrawal [14]. Research has demonstrated that adolescents with balanced lifestyles are more likely to exhibit positive behavioral adjustment and healthier coping mechanisms.

2.4 Digital Lifestyle and Mental Health Challenges

The growing influence of digital technology has introduced both opportunities and challenges for adolescent well-being. While digital platforms facilitate communication and social support, excessive screen time and problematic social media use have been linked to emotional distress and behavioral difficulties [15]. Effective management of digital engagement is therefore essential for maintaining healthy mental and behavioral outcomes [16].

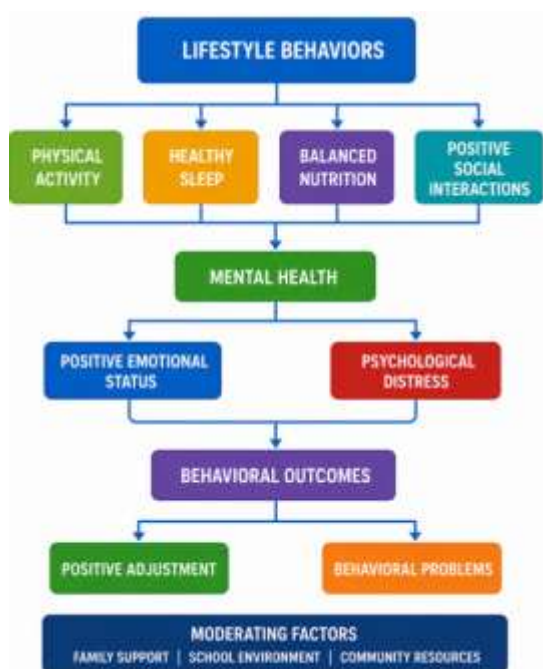


Figure 1. Conceptual Framework of Lifestyle, Mental Health, and Behavioral Outcomes

As shown in Figure 1 illustrates the relationship between adolescent lifestyle behaviors, mental health, and behavioral outcomes. Healthy lifestyle factors such as physical activity, balanced nutrition, adequate sleep, and positive social interactions contribute to improved mental health and positive behavioral development. Conversely, unhealthy lifestyle habits increase the risk of emotional distress and behavioral problems. Family support, school environments, and community resources act as moderating factors that influence the strength of these relationships and overall adolescent well-being.

3 Methodology

3.1 Research Design

This study employed a quantitative cross-sectional research design to examine the relationship between adolescent lifestyle behaviors, mental health status, and behavioral outcomes. The cross-sectional design was selected because it enables the collection of data from a defined population at a single point in time and facilitates the analysis of associations among multiple variables. The quantitative approach provided objective and measurable evidence regarding lifestyle practices, psychological well-being, and behavioral characteristics among adolescents [17].

3.2 Study Population and Sampling Technique

The study population consisted of adolescents aged 13–19 years enrolled in secondary schools and community youth programs. A total of 250 participants were selected using a simple random sampling technique to ensure equal opportunity for participation and minimize sampling bias. This method enhanced the representativeness of the sample and improved the reliability of the study findings.

Table 1. Demographic Characteristics of Participants (N = 250)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	120	48.0
	Female	130	52.0
Age Group	13–15 Years	90	36.0
	16–17 Years	100	40.0
	18–19 Years	60	24.0
Residence	Urban	145	58.0
	Rural	105	42.0

Table 1 presents the demographic profile of the respondents. Female participants constituted 52% of the sample, while males represented 48%. The largest proportion of adolescents belonged to the 16–17 years age group (40%), followed by the 13–15 years category (36%). Urban residents accounted for 58% of participants, whereas 42% were from rural areas. The demographic distribution reflects a diverse adolescent population suitable for examining lifestyle, mental health, and behavioral outcomes.

3.3 Data Collection Instrument

Data were collected using a structured questionnaire consisting of four sections: demographic information, lifestyle behaviors, mental health indicators, and behavioral outcomes. The lifestyle section assessed physical activity, sleep patterns, nutrition, and screen time. Mental health measures included emotional well-being, stress, and anxiety indicators, while behavioral outcomes focused on social adjustment and risk-related behaviors. The questionnaire was validated through expert review before administration [18].

3.4 Data Analysis

The collected data were coded and analyzed using Statistical Package for Social Sciences (SPSS) Version 26. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participant characteristics and study variables. Inferential analyses were conducted to determine associations between lifestyle behaviors, mental health status, and behavioral outcomes.



Figure 2. Research Methodology Framework
Figure 2 illustrates the methodological framework adopted for the study. The research process began with identifying the adolescent population and selecting participants through simple random sampling. A structured questionnaire was developed and administered to collect information regarding lifestyle behaviors, mental health status, and behavioral outcomes. The collected data were analyzed statistically using SPSS software. Finally, the results were interpreted to identify significant patterns and relationships among the study variables.

3.5 Ethical Considerations

Ethical approval was obtained from the appropriate institutional review committee before the commencement of data collection. Participation was voluntary, and informed consent was obtained from participants and guardians where necessary. Confidentiality and anonymity were maintained throughout the research process. Participants were informed about the purpose of the study and their right to withdraw at any stage without penalty [19].

4 Results & Discussion

This section presents the findings of the study on adolescent lifestyle behaviors, mental health status, and behavioral outcomes. Data collected from 250 adolescents were analyzed using descriptive statistical techniques. The results provide insights into the prevalence of healthy and unhealthy lifestyle practices, levels of mental well-being, and associated behavioral outcomes. Tables and figures are used to summarize the findings, while explanatory interpretations highlight the relationship between lifestyle factors, psychological health, and behavioral adjustment among adolescents.

Table 2. Lifestyle Behavior Patterns Among Adolescents (N = 250)

Lifestyle Behavior Pattern	Frequency (n)	Percentage (%)
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Healthy Lifestyle Practices	163	65.2
Unhealthy Lifestyle Practices	87	34.8
Total	250	100.0

Table 2 presents the distribution of lifestyle behavior patterns among adolescents. The majority of respondents (65.2%) reported engaging in healthy lifestyle practices, including regular physical activity, adequate sleep, balanced nutrition, and limited screen time. However, 34.8% demonstrated unhealthy lifestyle behaviors. These findings indicate that while most adolescents maintain positive health habits, a substantial proportion remains vulnerable to lifestyle-related health and behavioral challenges.

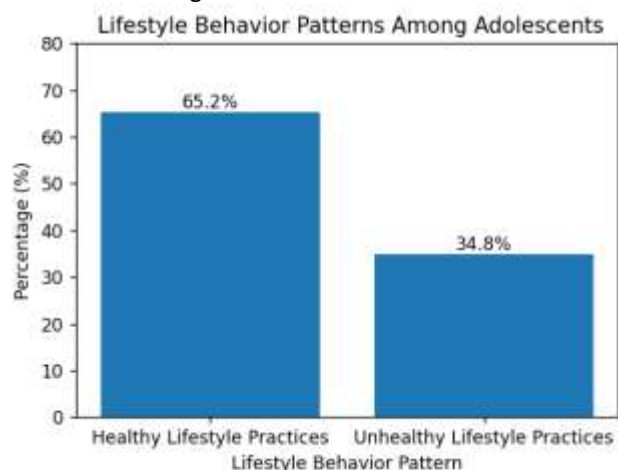


Figure 3. Lifestyle Behavior Patterns Among Adolescents

Figure 3 illustrates the prevalence of healthy and unhealthy lifestyle behaviors among adolescents. Healthy lifestyle practices were reported by nearly two-thirds of participants, indicating a generally positive health profile. Nevertheless, more than one-third engaged in unhealthy behaviors, which may negatively influence mental health and behavioral functioning. These results emphasize the importance of health promotion programs aimed at encouraging healthy lifestyle choices among adolescents.

Table 3. Mental Health and Behavioral Outcomes (N = 250)

Variable	Frequency (n)	Percentage (%)
Positive Mental Health Status	170	68.0
Emotional Distress (Stress/Anxiety)	80	32.0
Positive Behavioral Adjustment	153	61.2
Behavioral Problems	97	38.8

Table 3 shows the distribution of mental health and behavioral outcomes among participants. Positive mental health status was reported by 68% of adolescents, while 32% experienced emotional distress, including symptoms of stress and anxiety. Furthermore, 61.2% demonstrated positive behavioral adjustment, whereas 38.8% reported behavioral difficulties. These findings suggest that favorable mental health is associated with healthier behavioral outcomes among adolescents.

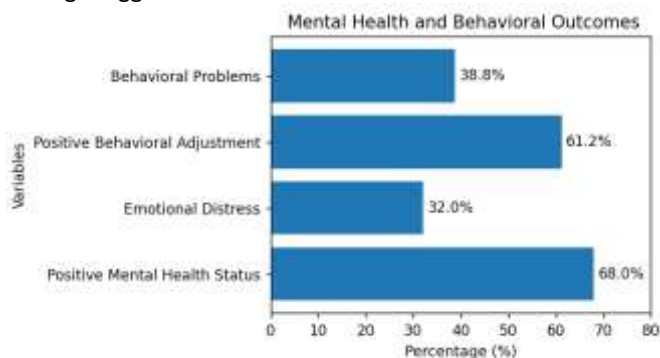


Figure 4. Mental Health and Behavioral Outcomes

Figure 4 demonstrates that positive mental health and behavioral adjustment were more prevalent than emotional distress and behavioral problems among adolescents. The findings indicate that adolescents with healthier lifestyles tend to experience better emotional well-being and social adjustment. However, the presence of emotional distress and behavioral difficulties among a considerable proportion of participants highlights the need for targeted mental health support and lifestyle-based intervention programs.

The study findings reveal a significant association between lifestyle behaviors, mental health status, and behavioral outcomes. Adolescents who reported healthy lifestyle practices generally exhibited better mental well-being and positive behavioral adjustment. Conversely, unhealthy lifestyle patterns were associated with increased emotional distress and behavioral challenges. These results underscore the importance of promoting healthy lifestyle behaviors, strengthening mental health awareness, and implementing supportive interventions to enhance adolescent psychological well-being and behavioral development.

4.1 Discussion

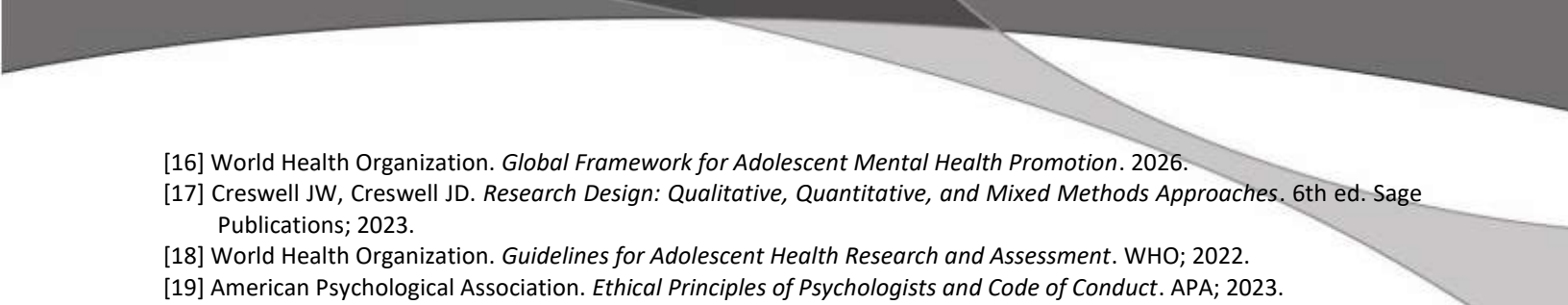
The findings of this study demonstrate that adolescent lifestyle behaviors are closely associated with mental health status and behavioral outcomes. The majority of participants reported healthy lifestyle practices, which corresponded with higher levels of positive mental health and behavioral adjustment. Adolescents who engaged in regular physical activity, adequate sleep, and balanced nutrition exhibited better emotional well-being and fewer behavioral difficulties. Conversely, unhealthy lifestyle patterns were linked to emotional distress and behavioral problems. These results support existing evidence emphasizing the importance of healthy lifestyle choices in promoting psychological resilience and positive development. Strengthening health education and mental health awareness programs may further improve adolescent well-being.

5 Conclusion

This study examined the relationship between adolescent lifestyle behaviors, mental health, and behavioral outcomes. The findings revealed that healthy lifestyle practices were associated with positive mental health status and favorable behavioral adjustment, whereas unhealthy behaviors increased the likelihood of emotional distress and behavioral challenges. The results highlight the importance of promoting balanced nutrition, regular physical activity, sufficient sleep, and healthy social interactions during adolescence. Schools, families, healthcare professionals, and policymakers should collaborate to develop effective health promotion and mental health support programs. Encouraging positive lifestyle behaviors can enhance psychological well-being, reduce behavioral problems, and contribute to healthy adolescent development. Such interventions may also support long-term physical, emotional, and social well-being into adulthood.

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