


# Mental Well-Being in Adolescence: A Systematic Review

## *Ergenlik Döneminde Mental İyi Oluş: Sistematik Bir Gözden Geçirme*

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### ABSTRACT

Mental well-being is defined as an individual's awareness of his/her own potentials, making an effort to overcome the challenging experiences he/she encounters, being productive in his/her individual and social life and trying to contribute to society within the framework of his/her abilities. In this study, it is aimed to systematically review the research theses conducted to determine the variables associated with mental well-being in adolescents. For this purpose, a search was made in the National Thesis Center database using the key concept of mental well-being. As a result of the screening, 4 postgraduate theses conducted with adolescents were accessed. In the studies conducted with adolescents, the relationship between mental well-being and variables such as playing sports, time spent on social media, perceived social support, attachment to mother and father, gender, age, level of education of mother and father, perceived income level are examined. The findings of the research show that the mental well-being scores of the groups who regularly do sports and participate in social activities increase. In the studies examined, there was a significant positive relationship between the level of secure attachment to mother and father and mental well-being, and a significant negative relationship with social media time. Perceived social support was found to be a significant predictor of mental well-being in adolescents. As a result, doing regular sports, spending less time on social media, being aware of social support resources, and having secure attachment positively benefit adolescents' mental well-being levels. These results will shed light on preventive and protective guidance and counseling practices for adolescents' well-being levels.

**Keywords:** Mental well-being, adolescence, secondary education, mental health, positive psychology

### ÖZ

Mental iyi oluş bireyin kendi potansiyellerinin farkında olması, karşılaştığı zorlantılı yaşantıların üstesinden gelmek için çaba sarf etmesi, bireysel ve sosyal hayatında üretken olabilmesi ve yetenekleri çerçevesinde topluma katkı sağlamaya çalışması olarak tanımlanmaktadır. Bu çalışmada ergenlerde mental iyi oluş ile ilişkili değişkenleri belirlemek için yapılmış araştırma tezlerinin sistematik gözden geçirilmesi amaçlanmaktadır. Bu amaçla mental iyi oluş anahtar kavramı kullanılarak Ulusal Tez Merkezi veri tabanında tarama yapılmıştır. Tarama sonucunda ergenler ile yapılan 4 adet lisansüstü teze erişim sağlanmıştır. Ergenlerle yapılan araştırmalarda mental iyi oluş ile spor yapma durumu, sosyal medyada geçirilen zaman, algılanan sosyal destek, anne ve babaya bağlanma, cinsiyet, yaş, anne ve baba eğitim düzeyi, algılanan gelir düzeyi gibi değişkenlerle arasındaki ilişki incelenmektedir. Araştırma bulguları düzenli spor yapan ve sosyal aktivite katılan grupların mental iyi oluş puanlarında artış olduğunu göstermektedir. İncelenen çalışmalarda anneye ve babaya güvenli bağlanma düzeyi ile mental iyi oluş arasında pozitif yönde, sosyal medya süreleri ile negatif yönde anlamlı ilişki bulunmuştur. Ergenlerde algılanan sosyal desteğin mental iyi oluşun anlamlı bir yordayıcısı olduğu görülmüştür. Sonuç olarak ergenlerin mental iyi oluş düzeylerine düzenli spor yapmak, daha az sosyal medyada zaman harcamak, sosyal destek kaynaklarının farkında olmak, güvenli bağlanmaya sahip olmak olumlu anlamda fayda sağlamaktadır. Bu sonuçlar ergenlerin iyi oluş düzeyleri için yapılacak önleyici ve koruyucu rehberlik ve psikolojik danışma uygulamalarına ışık tutacaktır.

**Anahtar sözcükler:** Mental iyi oluş, ergenlik dönemi, ortaöğretim, ruh sağlığı, pozitif psikoloji

## Introduction

Over the past twenty years, there has been widespread societal concern about the decline in adolescents' mental well-being levels (Bor et al. 2014). The mental well-being of adolescents is increasingly becoming a public health issue (Cosma et al. 2020). The adolescent period is a critical developmental stage for mental health. Typically, symptoms of mental illness that persist throughout life emerge before age 25 (Call et al. 2002). However, rates of reported mental health problems among adolescents are high (Kessler et al. 2012). The World Health Organization estimates that 10% to 20% of the world's child and adolescent population have mental disorders

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or problems, and half of all mental illnesses begin by age 14 (Lai et al. 2008). Nearly 20% of young people reporting mental health problems also report three or more issues (Heneghan et al. 2013).

Good mental health and levels of mental well-being are essential components of daily life. They influence an individual's perception, understanding of their environment, and their potential for interpersonal communication (Cilar et al. 2020). The mental well-being levels of adolescents impact their social and emotional characteristics. On the other hand, there is increasing international interest in the contribution of positive mental health to all aspects of human life (Tennant et al. 2007).

Traditional psychology has primarily focused on reducing dysfunctional states caused by problems like stress, anxiety, and depression. On the other hand, positive psychology focuses on the science of positive mental conditions rather than merely avoiding negative ones (Seligman and Csikszentmihalyi, 2000). This approach aligns with the World Health Organization's view, which defines health as the absence of disease and a state of complete mental, social, and physical well-being (WHO, 2004). Mental well-being is described as an individual's awareness of their potential, efforts to overcome challenging experiences, the ability to be productive in personal and social life, and striving to contribute to society within the limits of their capabilities (World Health Organization, 2004). Well-being is a fundamental component of health and quality of life, encompassing well-being elements of hedonic and eudaimonic (psychological functioning) (Ryan and Deci 2001, Henderson and Knight 2012). Maintaining high levels of subjective well-being in adolescents, which includes distancing oneself from adverse events and situations, being in control in relationships, positive thinking, having a positive time perspective, desiring happiness-focused behaviors, problem-solving, and turning to religious beliefs, is essential for their mental control (Eryilmaz 2012).

Adolescence includes a range of physical, cognitive, and social changes and mood fluctuations that can increase vulnerability to psychological distress, crises, or mental health issues (Lahey et al. 2017). According to the World Health Organization, adolescence, as defined, covers individuals aged 10 to 19 years. Adolescents are sometimes categorized as "children," for example, the 1989 Convention on the Rights of the Child, which applies to all individuals under 18 (Delisle 2005). Adolescence is a crucial period in life, and health attitudes and behaviors during these formative years affect all areas of an individual's health throughout their life course (Henriksson et al. 2017). Promoting mental well-being in adolescents is a high global priority. However, it is hindered by the predominance of mental illness and weak measures of psychological well-being. Despite the growing acceptance of the need for mental health measurements, the number of validated instruments for assessing mental health among adolescents is relatively limited (Hunter et al. 2015). Adolescents' high levels of mental well-being contribute to their social, intellectual, and emotional development, enrich self-esteem and academic achievement, and facilitate the transition to adulthood (WHO 2012). However, stress and anxiety levels among young people are increasing, putting them at risk for mental, behavioral, and emotional disorders (Collishaw et al. 2010). Poverty, trauma, exposure to discrimination, and the pressure for excessive achievement in affluent environments are among the four "high-risk" factors for adolescents' mental health (Luthar et al. 2020b). Decreasing rates of mental well-being and the increasing number of early-onset mental problems in this age group indicate the need for better insights into the determinants and triggers to enhance mental well-being (Zhang et al. 2020). Research findings suggest a significant decline in well-being among young people, particularly 15-year-old girls. A study conducted with Italian adolescents from 2010 to 2018 found that while life satisfaction remained stable, health complaints, including psychological and somatic health problems, increased across all age and gender groups (Bersia et al. 2022).

The transition from childhood to adulthood, known as adolescence, is a very important period in life. However, the physical, emotional, intellectual, and social changes during this period can increase the risk of mental health problems. Mental and behavioral disorders are common among young people, with one in five adolescents experiencing some form of mental health issue (WHO 2012). Research results indicate that a connection with nature may be associated with mental health and well-being. Behavioral changes resulting from the COVID-19 pandemic can negatively impact adolescents' connection with nature and, in turn, affect their health and well-being (Jackson et al. 2021). Strong and meaningful relationships have been found between adolescents' eating behaviors and their mental well-being (Puloka et al. 2017). Research results also highlight the influence of social support from family on adolescents' mental health, emphasizing the importance and effective role of family support. These findings also draw attention to cultural issues, such as differences in the roles of social networks (e.g., family, peers) during adolescence and gender differences in mental health indicators (e.g., girls having higher subjective well-being levels) (Alshammari et al. 2021). Protective factors for mental well-being are considered promising for promoting mental well-being (Stewart-Browne et al. 2011). Exposure to green spaces has been shown to have beneficial relationships with reduced stress, positive mood, fewer depressive symptoms, improved emotional well-being, better mental health, behavioral improvements, and reduced psychological

distress among adolescents. The presence, accessibility, and quality of green spaces are likely to have positive effects on adolescents' mental well-being (Zhang et al. 2020).

Adolescence is a stage characterized by a prevalence of mental disorders, underscoring the imperative of comprehending their determinants for the purpose of efficacious interventions (Nagy-Pénzes et al. 2020). The diminishing levels of mental well-being among adolescents have burgeoned into a mounting concern within the purview of public health. Notably, the daily routines and exposure to potential risks for adolescents have undergone profound transformations in the 21st century. These transformations necessitate a contemporaneous refinement of conventional risk models to encompass novel preventive measures (Walsh et al. 2020). The paramount significance of holistic mental health within the scholastic milieu has garnered substantial attention in recent years. Positive psychology interventions are frequently linked with ameliorations in mental health outcomes (Arslan et al. 2022).

The phenomenon of bullying victimization within the context of school-age children constitutes a consequential public health challenge. A discernible correlation between mental well-being and experiences of bullying victimization has been ascertained, with a particular emphasis on the augmentation of this relationship over time among female adolescents subjected to bullying (Cosma et al., 2017). The educational institutions, particularly in the aftermath of the COVID-19 pandemic, have registered heightened apprehension pertaining to the mental health of their students. This concern stems from documented escalations in anxiety, depression, delinquent behaviors, and substance utilization among the adolescent demographic (Luthar et al., 2020b). Nonetheless, it is worth noting that the utilization of assessment tools for evaluating the mental well-being of adolescents is often a time-intensive endeavor. When the application duration of these measurement instruments is abbreviated, it invariably constrains the breadth of their evaluative scope (Luthar et al., 2020b). Collectively, the pervasive diminution in well-being and the escalating pressures experienced within the educational milieu are unmistakably manifest in high-income nations. The incremental augmentation in scholastic pressures across countries has, to some extent, elucidated the declination in psychosomatic health complaints (Cosma et al. 2020).

The positive psychology literature has emphasized positive psychological interventions and character-based education to promote well-being and positive mental health. There is empirical evidence supporting the relationship between character-based education and positive mental health outcomes (Billington et al. 2010). Storytelling in practice has been shown to lead to improvements in students' awareness, optimism, happiness, and positive emotions and to result in small to large effect size reductions in depression, anxiety, pessimism, and other negative emotions over a 5-week period (Arslan et al. 2022). Exposure to green spaces is a promising intervention to promote adolescents' mental well-being. An increasing body of research indicates various positive effects of exposure to green spaces on young people's health (Zhang et al. 2020). In another study, the relationship between parental involvement and mental health among 13-15-year-old school-going adolescents in India was examined. It was observed that as students' age increased, parental involvement decreased, while poor mental health increased with the student's age. High levels of reported parental involvement were significantly associated with a reduced likelihood of poor mental health (Hasumi et al. 2012). In other words, parental support is positively related to adolescents' mental well-being.

Previous studies have mostly examined the relationship between traditional risk behaviors and adolescent mental health, while some studies have focused on risk factors that threaten mental health, such as social support deficiency. However, these studies have not yet brought these factors together to emphasize the most important risks to adolescent mental health. In a study, new and traditional risk behaviors and risk factors were combined to derive an empirical-based risk clusters model. The relative relationship of these clusters with adolescents' psychological well-being was examined. Seven risk clusters were identified, including substance use and early sexual intercourse, low social support, inadequate nutrition, bullying, sugary food and drink consumption, physical health risk, and problematic social media use (Walsh et al. 2020). According to many empirical studies, mental health is considered crucial during adolescence. While adolescents' social networks undergo significant changes, depression also increases. Research results indicate that the self-assessment of family social class is not related to adolescents' mental well-being. Both parents' employment and unemployment status are shown to be the most important determinants of mental health (Varga et al. 2014). In another review study, initially, 1,199 articles were found. Then, based on inclusion criteria, 57 articles were initially selected, and only four studies were ultimately evaluated as high quality for analysis and synthesis. More than half of the interventions (56.14%) in applications related to mental health and well-being, positive psychology, problem-solving and stress reduction, mindfulness, and physical activity themes showed positive

results after interventions were applied. Most of these interventions focused on positive psychology and mindfulness (Cilar et al. 2020).

In another study, a relationship between acculturative stress and mental well-being was observed. Acculturative stress was found to be associated with depressive symptoms, hope, and self-esteem (Romero et al. 2020). There is a suggested potential relationship between pet ownership and mental well-being. Owning a dog has been shown to have a positive impact on mental well-being compared to not owning a dog, while owning a cat has been shown to have a negative impact compared to not owning a cat. Therefore, owning dogs and cats has been found to have different effects on adolescents' mental well-being, suggesting that underlying mechanisms activated by different types of pet ownership may be at play (Endo et al. 2020). In another study, factors influencing suicide risk in adolescents with bipolar experiences and the mediating role of protective factors were examined. Risk factors such as emotional and peer problems were found to have a stronger mediating effect on the relationship between bipolar experiences and suicide risk than protective factors like mental well-being and prosocial behavior. Additionally, risk factors had a greater impact on males, while protective factors were more prevalent among females (Fumero et al. 2021).

Adolescence is a period characterized by intense physical, emotional, and psychological development, and the challenges posed by these factors can be stressful (Moksnes et al. 2010). In one study, the relationship between physical and mental well-being and daily difficulties and improvements in adolescents' daily lives was examined. Daily hassles were positively related to same-day negative affect and emotional problems, and negatively related to nightly sleep duration. Daily uplifts were positively related to same-day positive affect and negatively related to same-day negative affect and emotional problems. The diversity of daily difficulties was associated with more emotional problems, while the diversity of daily uplifts was related to lower levels of negative affect (Zheng et al. 2023). Overweight and obesity are considered significant contributors to poor mental health in the adolescent population. The perception of body weight has been found to mediate the relationship between perceived body weight, overweight, or obesity and mental well-being. Perceiving one's body weight as "too thin" or "too fat" has been associated with worse mental well-being, independent of actual weight status. The perception of body weight varied by gender, socioeconomic status, and country (Fismen et al. 2022). In another study, it was shown that higher levels of national wealth inequality were associated with lower average psychological and somatic symptoms, while higher levels of national income inequality were associated with more psychological and somatic symptoms (Dierckens et al. 2020).

In the literature context, the levels of mental well-being of students in adolescence, which can serve as a buffer against the risk factors they face, are important. Being aware of the factors that can elevate and protect adolescents' mental well-being levels will benefit both parents and educators. On the other hand, the findings of this study will shed light on preventive and protective guidance and psychological counseling services related to adolescents' levels of mental well-being.

## **Method**

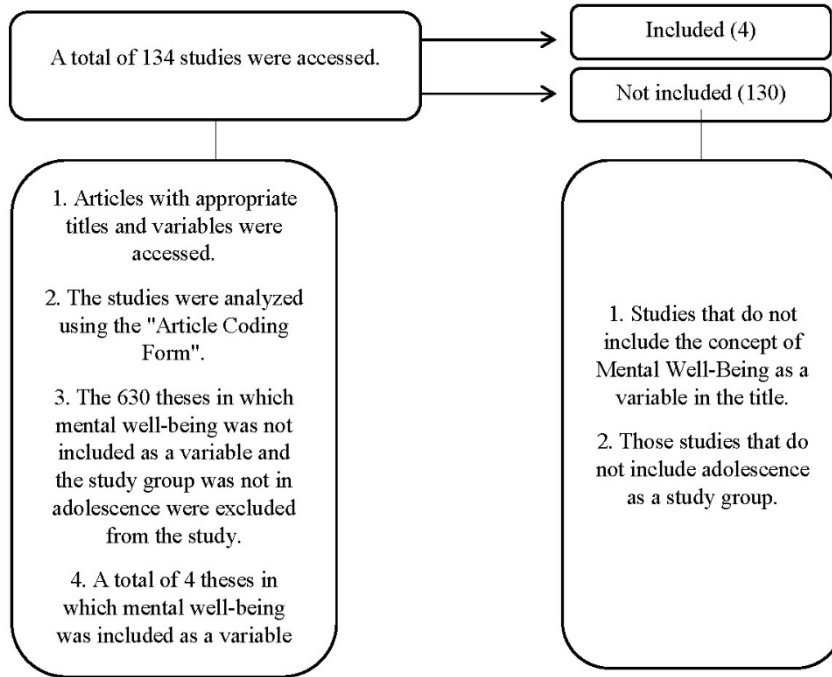
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### **Study Design**

This study aims to systematically review the research theses conducted to determine the variables associated with mental well-being in adolescents. For this purpose, the National Thesis Center database was searched using the key word mental well-being. In addition, PRISMA guide was used for systematic review for this purpose (Moher et al. 2009). The study group of the research consists of 4 graduate theses obtained from the National Thesis Center of the Council of Higher Education (YÖK), in which the mental well-being levels of adolescents were explored.

### **Data Collection Process**

After the literature review was completed, the studies were evaluated based on the inclusion criteria. The inclusion criteria were that the study group was adolescence, the concept of mental well-being was included as a variable in the study, and there was information on the relationship or explanation and prediction of mental well-being and other variables. The exclusion criteria were the presence of a study group other than adolescence and the use of other well-being concepts instead of the mental well-being variable.



**Figure 1. PRISMA flow chart**

<b>Table 1. Results of the studies included in the systematic review</b>				
<b>Study</b>	<b>Sample</b>	<b>Research Model</b>	<b>Measure</b>	<b>Outcomes</b>
Bakır (2017)	Grade 10 Students	Pre-test, post-test, control group experimental design	Warwick-Edinburgh Mental Well-Being Scale	There was an increase in the mental well-being scores of the sports and social activity groups, while there was a decrease in the control group. In the study, no significant difference was found in mental well-being scores according to gender and academic achievement.
Koç (2019)	Adolescents aged 16-18 attending high school	Relational survey model	Warwick-Edinburgh Mental Well-Being Scale	A significant positive relationship was detected between secure attachment to mother and attachment to father and mental well-being.
Tosun (2020)	Adolescents aged 14-17 attending high school	Relational survey model	Adolescent Happiness Scale Multidimensional Student's Life Satisfaction Scale	A significant relationship was found between perceived social support and adolescent happiness and multidimensional life satisfaction. Perceived social support was a significant predictor of mental well-being in adolescents.
Karagöz (2022)	9th, 10th, 11th, 12th grade students	Relational survey model	Warwick-Edinburgh Mental Well-Being Scale	When the difference between Mental Well-Being according to grades was examined, a significant difference between the students of 9th and 11th grades was found in favor of 10th grade students. A negative and significant relationship was observed between social media addiction levels and mental well-being of students who do sports.

In the national thesis center, mental well-being was searched as a keyword as of March 01, 2023 without time limitation. The key concepts used in the search were written in different ways such as "well-being" and "mental well-being". A coding form was developed in the context of the research in line with the purpose of this study.

The coding form was designed as researcher information and research year, study group, research method, measurement tool, results.

Since the study is a systematic literature review and document review study, it is not included in the group of studies that require Ethics Committee permission. Therefore, Ethics Committee Permission was not declared.

## Results

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Information about the studies are provided in Table 1. Table 1 includes information about the researcher and research year, study group, research model, scale information and results.

The results of the study show that there is an increase in the mental well-being scores of the groups who do regular sports (physical activities) and social activities. A significant positive correlation was observed between the level of secure attachment to mother and father and mental well-being, and a significant negative correlation was noted between social media time and mental well-being in the studies analyzed. Perceived social support was a significant predictor of mental well-being in adolescents. To conclude, doing regular sports, spending less time on social media, being aware of social support resources, and having secure attachment positively benefit adolescents' mental well-being levels.

## Discussion

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The present study endeavors to elucidate the multifarious factors that underlie mental well-being among adolescents. This section elucidates the independent variables that expound upon the mental well-being of adolescents in light of the findings derived from this investigation and existing scholarly discourse. Research focused on adolescents has probed the intricate nexus between mental well-being and an array of variables including engagement in sports activities, social media utilization, perceived social support, attachment to maternal and paternal figures, gender, age, parental educational attainment, and perceived income levels. It is noteworthy that empirical findings have consistently highlighted a positive association between regular participation in sports activities and heightened levels of mental well-being, as reported by Bakır (2017). Moreover, a comprehensive review of extant literature reveals a congruent pattern in studies that explore the interplay between adolescents' social activity levels, participation in sports, and their mental well-being. For instance, research by Cilar et al. (2020) demonstrated that mental well-being tends to increase in programs that incorporate physical activity components, affirming the salutary effects of such activities on mental health. Furthermore, studies by Nagy-Pénzes et al. (2020) and Jackson et al. (2021) underscored the beneficial impact of nature-related experiences on adolescents' mental health, advocating for outdoor engagement as a means to enhance mental well-being in this demographic.

Additionally, the level of secure attachment to both maternal and paternal figures has been consistently linked to enhanced mental well-being among adolescents, as evidenced by Koç (2019). A complementary body of research examining the association between parental support and mental well-being further substantiates this relationship. Indeed, higher levels of parental support correlate positively with augmented mental well-being (Hasumi et al. 2012). The receipt of support from parents, coupled with a sense of trust in parental figures, has been posited as a contributory factor to the overall mental well-being of adolescents. Furthermore, the perceived social support received by adolescents emerged as a pivotal predictor of their mental well-being in research conducted by Tosun (2020). A review of the literature corroborates this finding, revealing analogous studies that investigate the correlation between adolescents' perceived social support and their levels of mental well-being. Notably, Walsh et al. (2020) identified insufficient social support as a risk factor impinging upon mental well-being, underscoring the importance of social support systems in the lives of adolescents. Conversely, Nagy-Pénzes et al. (2020) documented a significant positive relationship between social support and mental well-being, positing that perceived social support empowers adolescents during the challenging and pivotal phases of their development.

Furthermore, an independent study indicates that increased time spent on social media platforms by adolescents may correspond with diminished levels of mental well-being, albeit without reaching statistical significance, as posited by Karagöz (2022). In the same study, a noteworthy negative and statistically significant association was observed between social media addiction levels and the mental well-being of adolescents engaged in sports. A parallel body of research examining the relationship between social media usage duration and adolescents' mental well-being levels is prevalent in extant literature, consistently revealing an inverse relationship between time spent on social media and mental well-being (Schonning et al, 2020). Moreover, problematic social media use has emerged as a consequential risk factor in studies aiming to elucidate factors affecting adolescents' mental

well-being (Walsh et al. 2020). In sum, the findings suggest that adolescents who engage in sports activities and limit their social media usage tend to exhibit heightened levels of mental well-being.

However, it is imperative to acknowledge the limitations of this study. Firstly, the limited inclusion of only four studies with adolescents as the study group inherently curtails the generalizability of the study's findings. Secondly, certain critical constructs, including well-being, psychological well-being, and subjective well-being, were notably omitted from the scope of this study. Future research endeavors would benefit from their inclusion and exploration. Lastly, the exclusive focus on adolescents as the study group introduces constraints on the overall generalizability of the study. To enhance the breadth and applicability of future studies, it is advisable to widen the age range of participants and incorporate adults within the study group.

## Conclusion

In the present investigation, an examination of these has revealed significant associations between various variables and the mental well-being of adolescents. This study has identified that engaging in regular physical activity, minimizing the time spent on social media platforms, possessing awareness of available social support resources, and cultivating secure attachment relationships all contribute positively to the levels of mental well-being experienced by adolescents. These findings hold valuable implications for the development of preventive and protective guidance and counseling interventions aimed at enhancing the well-being of adolescents. Furthermore, it is worth noting that activity-based psychoeducation may hold promise as an effective approach for future program development, as suggested by Lam and Kam (2023). It is recommended that future research endeavors delve into the examination of both risk behaviors and protective and preventive factors to comprehensively elucidate the determinants of adolescents' mental well-being.

The outcomes of this research underline the importance of considering certain demographic factors. Specifically, the results indicate that individuals with unemployed or working parents should be regarded as a high-risk group concerning mental health within the context of school-based mental health programs, as indicated by Varga et al. (2014). The mental well-being of adolescents plays a pivotal role in their overall healthy development, and nations acknowledge that the well-being of their youth is a precursor to the emergence of healthy adults who can make meaningful contributions to society. This recognition underscores the economic benefits of investing in interventions that prevent mental disorders. Consequently, there exists a pressing need to devise multidimensional mental well-being interventions aimed at fostering the mental well-being of adolescents, as underscored by Cilar et al. (2020). The exploration of novel approaches to bolster mental health among adolescents is a fundamental responsibility of school health services, as articulated by Bjørnsen et al. (2019).

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