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Unveiling Gender Differences in Adolescent Coping: Insights from High School Students in Jakarta

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Abstract. Adolescence is a crucial developmental stage characterized by various challenges that require effective coping techniques. This study examines gender differences in adolescent girls' and boys' cognitive-emotional coping methods. Conducted on 130 high school students in Jakarta, Indonesia, the research utilized the Cognitive Emotion Regulation Questionnaire (CERQ) and SPSS 20 for analysis. The findings reveal significant gender-specific differences in coping strategies. Female students predominantly employ maladaptive coping strategies, scoring higher in Catastrophizing (Mean = 14.2, SD = 3.1) and Rumination (Mean = 15.6, SD = 3.5) compared to their male counterparts (Catastrophizing: Mean = 12.3, SD = 3.4; Rumination: Mean = 13.2, SD = 3.2). In contrast, male students exhibit a more balanced use of adaptive and maladaptive strategies, with higher scores in strategies like Positive Reappraisal (Mean = 16.4, SD = 3.2) compared to females (Mean = 14.8, SD = 3.0). These gender-specific differences highlight the need for tailored interventions and educational programs that address the unique coping needs of each gender. Furthermore, this study contributes novel insights into the cognitive-emotional coping landscape within Southeast Asia, a region with limited existing research. By understanding these gender-specific coping strategies, educators, parents, and mental health professionals can better support adolescents in developing healthier coping mechanisms, ultimately enhancing their psychological resilience and well-being. This research lays the groundwork for future studies and practical applications aimed at improving adolescent mental health through targeted coping strategy interventions.

Keywords: Adolescence; coping strategies; gender difference; maladaptive coping; cognitive-emotional coping.

INTRODUCTION

Adolescence is widely recognized as a transitional phase that serves as a bridge between puberty and adulthood. This developmental period is marked by attaining physical, intellectual, and moral maturity, yet it often falls short in emotional maturity. Adolescents remain reliant on the need for affection and emotional support from those around them (Feingold et al., 2022). This phase is known by various names, including the "turbulent revolution," and "second birth." (Griffin et al., 2022), "storm and stress," or simply a time of heightened

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anxiety. Adolescence is universally acknowledged as a challenging and tumultuous stage of life, characterized by heightened stress levels and emotional volatility, primarily due to the numerous life changes they must navigate.

Previous studies have extensively documented the biological intricacies of adolescence, highlighting the period's rapid physical growth, hormonal fluctuations, and their profound impacts on self-esteem and self-confidence (Zavareh et al., 2015; Cîndea & Balaci, 2022). Traditionally, the turbulence of adolescence was attributed primarily to hormonal changes. However, contemporary research has increasingly recognized the pivotal role of brain development in shaping adolescent behavior and cognition. Daniel J. Siegel's seminal work, "Brainstorm: The Power and Purpose of the Teenage Brain," delves into the unique functioning of the adolescent mind, emphasizing alterations in memory, cognition, emotional regulation, and interpersonal relationships during this transformative phase (Mideksa et al., 2021). Despite significant advances in understanding brain development, there remains a notable gap in research regarding the specific mechanisms behind the reorganization of cerebral connections and myelination in cortical regions, and their implications for adolescent behavior and psychological well-being. Thus, while existing studies provide valuable insights into the biological underpinnings of adolescence, further research is needed to elucidate the nuanced interactions between brain development, hormonal changes, and psychological functioning during this critical developmental period.

Previous research has highlighted the complex dynamics of adolescent relationships, emphasizing a transition marked by distancing from parental authority and a heightened focus on peer connections (Wang et al., 2023). This shift reflects adolescents' growing need for independence and self-assertion often manifested through experimentation with novel behaviors within their peer groups. However, despite the exploration of new social roles, adolescents grapple with challenges in identity formation and self-evaluation (Reid et al., 1998; Shaunessy & Suldo, 2010). Furthermore, contemporary adolescents navigate additional complexities, such as the influence of digital communication and social media on their social interactions and self-perception. Romantic relationships remain a significant aspect of adolescent psychological development. Moreover, they are now contending with the pressures of online communication, virtual interactions, and cyberbullying. Additionally, the contemporary educational landscape presents adolescents with a myriad of options and challenges, including increased academic competition, technological advancements, and uncertainty about future career prospects. These evolving socio-cultural factors underscore the need for a nuanced understanding of contemporary adolescent experiences and coping strategies, reflecting a gap in current literature and emphasizing the relevance and timeliness of the present study.

This study's importance underscores the pressing need to comprehend cognitive-emotional coping strategies among adolescents. As a critical phase in individual development, Understanding how teenagers manage stress and emotional challenges can provide invaluable guidance for mental health practitioners, educators, and parents alike. This research aims to shed light on the coping strategies employed by adolescent girls and boys, as well as to discern gender differences in the utilization of these coping strategies. By understanding the factors influencing adolescents' ability to cope with stress and challenges, mental health practitioners can design more effective and targeted interventions. Furthermore, educators can develop coping skills development programs tailored to the needs of adolescents within formal education settings. Parents can also leverage the findings of this research to assist their children in navigating emotional challenges more effectively and promoting their mental well-being during this challenging transitional period. Thus, research on cognitive-emotional coping strategies among adolescents holds significant urgency in supporting

their positive development and well-being.

Cognitive and Emotional Coping Strategies

Coping strategies are often defined as the holistic cognitive and behavioral efforts individuals use to manage external and internal demands perceived as threatening or exceeding their available resources (Boima et al., 2023; Hidayati & Taufik, 2020). Thus, they play a pivotal role in navigating the challenges of adolescence. These strategies can be broadly categorized into problem-centered coping and emotion-centered coping. Problem-centered coping focuses on directly addressing or modifying the underlying issue causing distress to improve the situation (Attia et al., 2022). In contrast, emotion-centered coping focuses on regulating the emotional response to a given situation, particularly when individuals perceive limited opportunities to alter the distressing conditions. The choice between these coping mechanisms often depends on the individual's assessment of the situation's changeability.

Cognitive and emotional coping strategies involve the cognitive processes that enable individuals to regulate their emotions or feelings arising from negative or traumatic experiences (Thomas et al., 2017). These strategies prevent individuals from being overwhelmed by the intensity of their emotional responses. It is crucial to understand that while these coping mechanisms provide emotional relief and contribute to an improved sense of well-being, they may not necessarily address the root causes of stress (Verdeş & Rotaru-sîrbu, 2019). Instead, they serve as tools for individuals to manage and navigate their emotional responses, allowing individuals to focus on addressing the underlying stressors and negative situations in their lives.

Furthermore, coping strategies are not static; they evolve across different stages of life, reflecting the varying levels of human development in terms of cognition, emotional intelligence, neurological development, and social interaction (Moral-Jiménez & González-Sáez, 2020). As children advance through their developmental stages, they acquire new and increasingly sophisticated coping mechanisms. In early childhood, children often rely on external support, frequently seeking comfort and guidance from their parents to regulate their emotions (Zarbo et al., 2018). However, as they mature and their cognitive abilities expand, they gradually transition towards self-regulation. In the unique context of adolescence, the emotion regulation process transforms, becoming more internalized and cognitively oriented. Advanced cognitive skills such as self-reflection and abstract reasoning develop during this phase, enabling adolescents to navigate their emotional responses with greater complexity and introspection (Çar et al., 2022; Çar et al., 2023; Sudarji et al., 2022).

Coping Across the Lifespan

The evolution of coping strategies extends beyond adolescent and continues to adapt and mature throughout one's lifespan (Happé et al., 2016). These adaptations are closely linked to the unique psychological tasks, conflicts, and life events that individuals encounter at different stages of life. In early childhood, the coping landscape is marked by the gradual development of emotional regulation and social skills (De Rosbo-Davies et al., 2022; Poon & Knight, 2012). At this stage, children rely on external support, including parents and caregivers, to help them manage their emotions and navigate life's challenges.

As individuals progress into adulthood, coping strategies become more nuanced and sophisticated. Adults generally exhibit enhanced emotional regulation, particularly in interpersonal contexts, due to years of experience navigating complex social interactions (Amirkhan & Auyeung, 2007; Ingram et al., 2008). However, in some instances, coping strategies may shift toward more passive approach, such as turning to faith or acceptance (Dearing et al., 2021; E. Skinner, 1998).

This transition highlights the dynamic nature of coping mechanisms, where adaptability and context play significant roles in determining their efficacy.

The way we perceive and employ coping strategies is profoundly influenced by the societal constructs of gender roles that shape our lives. These constructs result more from socialization than biological determinants. Our understanding of gender roles and expectations begins in the early stages of life, significantly impacting our development. From a young age, we learn what it means to act "properly" as a girl or a boy, what is considered appropriate or inappropriate behavior for each gender, and implicitly, how these concepts are intertwined with the sociocultural context in which we exist. This early socialization influences for how we approach and respond to various life challenges (Berg et al., 1998; Tesoriero, 2005).

As children progress through their formative years into adolescence, they are already socialized differently based on gender. Boys are often encouraged to emphasize skill development, autonomy, independence, and ambition (Aragonès et al., 2023; Cabras et al., 2023). These qualities are deemed desirable and are cultivated in their upbringing. In contrast, girls are often encouraged to focus on social connections, seeking and offering support to others. These distinctions reflect the gender-specific roles and expectations deeply ingrained in society (Skinner & Zimmer-Gembeck, 2015; Wilson & Gentzler, 2021).

This early gender-based socialization profoundly influences how boys and girls understand and evaluate stressful events. Research reveals that female adolescents tend to perceive the same events as significantly more stressful compared to their male counterparts (Ashley & Kleinpeter, 2002). Notably, girls experience stress levels up to four times higher than boys when it comes to issues related to school, family conflicts, or interpersonal misunderstandings (Acquati & Kayser, 2019; Aldwin, 2012). These disparities in stress appraisal can drive the varying coping strategies preferred by boys and girls.

Studies have highlighted that boys often gravitate towards emotional release through outlets like sports and recreational activities. In some cases, they may resort to substances such as drugs and alcohol. Conversely, girls tend to lean more toward seeking social support as a coping mechanism (Adasi et al., 2020; Sanchez-Céspedes et al., 2022). Another perspective on this is that boys are more inclined to employ problem-centered coping strategies, which focus on directly addressing the issue causing distress, while girls are more likely to opt for emotion-centered coping strategies, concentrating on regulating their emotional responses to the challenges they encounter (Lee & Mason, 2014; Senad, 2022; Xu et al., 2022).

The present study aims to delve into adolescents' specific emotional-cognitive coping strategies. To address this goal, the research seeks answers to the following key questions:

- a) Which emotional-cognitive coping strategies are predominantly utilized by adolescents?
- b) Do emotional-cognitive coping strategies with maladaptive characteristics carry more weight among adolescents than those characterized as adaptive?
- c) Do the proportions of adolescents employing adaptive and maladaptive emotional-cognitive coping strategies differ based on gender?

METHOD

The study involved 130 high school students from various technological branches in Jakarta, Indonesia. Random sampling method was used to ensure balanced representation of gender and age with an age range of 16-18 years. Specifically, the sample comprised 40 students aged 16 (20 males and 20 females), 50 students aged 17 (25 males and 25 females), and 40 students aged 18

(20 males and 20 females), achieving a gender distribution of 51% girls and 49% boys. Calculating the weighted mean age across all participants yielded an approximate age of 17.00 years, with both males and females exhibiting a mean age of around 17.00 years. This rigorous sampling strategy aimed to accurately capture the technological literacy levels of high school students in Jakarta, Indonesia, while ensuring representation across diverse age and gender demographics.

Data collection for this study was conducted through a structured survey administered to participants during regular school hours. The survey was facilitated within participants' classrooms under the supervision of a school counselor. Utilizing a standardized approach recommended by the Cognitive Emotion Regulation Questionnaire (CERQ) administration manual, participants were provided with clear instructions on how to complete the questionnaire. The questionnaire consisted of 36 items, each focusing on different cognitive-emotional coping strategies.

Participants were asked to rate the frequency of employing each coping strategy on a five-point Likert scale, ranging from 1 (rarely) to 5 (almost always). This method allowed for the quantification of participants' engagement with various coping strategies. To ensure consistency and reliability in data collection, the survey was administered using established protocols outlined in the CERQ administration manual. Additionally, the presence of a school counselor during the survey helped address any queries or concerns raised by participants, further enhancing the quality of the data collected.

The variables used in this study are as follows: Self-blame refers to the tendency of individuals to attribute responsibility and fault to themselves for adverse events or outcomes, reflecting the extent of self-criticism and self-reproach when facing stressors. Acceptance denotes the ability to acknowledge and accept the reality of stressful situations without attempting to change or resist them, indicating a non-judgmental and non-resistive stance towards adversity. Rumination pertains to the repetitive dwelling on negative thoughts and feelings related to past or current stressors, assessing persistent and unproductive reflection. Positive refocusing refers to the capacity to redirect attention towards positive aspects or alternative perspectives in response to stressors, measuring the shift from negative to constructive aspects of experiences. Planning denotes the cognitive process of formulating strategies and action plans to cope with stressors or achieve desired goals, evaluating systematic and organized thinking. Positive reappraisal reflects the ability to reinterpret or reevaluate stressful situations optimistically, assessing the use of cognitive strategies to find meaning or growth. Putting into perspective refers to viewing stressful events within a broader context or timeframe, measuring the adoption of a balanced and nuanced perspective. Catastrophizing denotes the tendency to exaggerate the severity or consequences of stressful events, leading to heightened distress and hopelessness, and assesses catastrophic thinking. Blaming others pertains to attributing responsibility or fault for adverse events to external factors or other people, measuring the extent of deflecting accountability and assigning blame to others.

The primary instrument used for data collection was the Cognitive Emotion Regulation Questionnaire (CERQ), a validated tool designed to assess cognitive coping strategies. The CERQ consists of 36 items divided into nine subscales: Self-Blame, Acceptance, Rumination, Positive Refocusing, Refocus on Planning, Positive Reappraisal, Putting into Perspective, Catastrophizing, and Blaming Others. Each item is rated on a five-point Likert scale ranging from 1 (almost never) to 5 (almost always). The questionnaire items are distributed evenly across nine evaluation scales, each focusing on a distinct cognitive-emotional coping strategy: Self-blame, Acceptance, Rumination, Positive refocusing, Planning, Positive reappraisal, Putting into perspective, Catastrophizing, and Blaming others.

Participants completed the questionnaire during regular school hours, within their

classrooms, under the supervision of a school counselor. Following the recommendations in the questionnaire's application and user manual, standard instructions were used to complete the CERQ. For rating, participants assessed the extent to which they employed each cognitive-emotional coping strategy on a five-point scale, ranging from 1 (rarely) to 5 (almost always). Subscale scores for each individual were computed by summing the scores corresponding to the items within the respective subscale, with scores ranging from 4 (indicating the strategy is rarely used) to 20 (indicating the strategy is frequently used).

Before data collection, informed consent was obtained from all participants as well as their parents or guardians, ensuring that participants were fully aware of the study's purpose, procedures, and their rights to withdraw at any time. A pilot test was conducted with 30 students to ensure the clarity and reliability of the questionnaire items. The results indicated a Cronbach's alpha of 0.86, suggesting high internal consistency and reliability of the CERQ for this population. Feedback from the pilot test was used to make minor adjustments to the wording of certain items. The CERQ was administered to participants in their respective schools during a scheduled class period. Researchers provided instructions and were available to answer any questions. To ensure honest responses, students were assured of the confidentiality and anonymity of their answers. Completed questionnaires were collected and checked for completeness. Data was then entered into SPSS 20 for analysis. Any incomplete or inconsistent responses were excluded from the dataset.

The collected data underwent a rigorous quantitative analysis using SPSS 20 software. This process involved computing the percentage distribution of cognitive-emotional coping strategies among adolescent girls and boys across different usage levels, including "very high," "high," "above average," "average," and "below average." Additionally, a comparative analysis was conducted within the SPSS 20 environment to investigate potential gender disparities in the prevalence and utilization levels of these strategies. Through a thorough examination of distribution tables, any notable distinctions between girls and boys in their adoption of cognitive-emotional coping strategies were identified.

Furthermore, strategies were meticulously classified as either adaptive or maladaptive based on their observed usage levels using SPSS 20's analytical capabilities. Adaptive strategies, such as Positive reappraisal, putting into perspective, and Planning, were discerned from maladaptive ones, including Catastrophizing, Rumination, Self-blame, and Blaming others. To enhance comprehension and elucidate trends, the findings were visually depicted using tables and figures generated within the SPSS 20 software. These visual representations provided a clear overview of the distribution patterns of cognitive-emotional coping strategies among adolescent girls and boys, facilitating a comprehensive understanding of the study outcomes.

RESULTS AND DISCUSSION

The analysis of the data obtained from the Cognitive-Emotion Regulation Questionnaire (CERQ) revealed intriguing patterns of cognitive-emotional coping strategies used by adolescent girls and boys within the study sample. To provide a comprehensive overview, we have included tables to illustrate the distribution of these strategies.

Table 1 shows the percentage distribution of cognitive emotional coping strategies employed by adolescent girls. These strategies were divided into different usage levels, ranging from "very high" to "below average". From Table 1, it is evident that girls predominantly employ Catastrophizing and Rumination at very high levels, indicating that a significant proportion engage in negative thought patterns when facing stressful situations. Self-blame is also employed at a high level.

While Acceptance, Positive refocusing, and other blame are employed at above-average levels, no strategies are used at an average level. However, Planning, Positive reappraisal, and Putting into perspective are found at below-average levels, with relatively higher proportions.

Table 1.
 Girls' Distribution of Cognitive-Emotional Coping Strategies (%)

Strategy	Very High	High	Above Average	Average	Below Average
Catastrophizing	0.35	-	-	-	-
Rumination	0.29	-	-	-	-
Self-blame	-	0.26	-	-	-
Acceptance	-	-	0.33	-	-
Positive refocusing	-	-	0.34	-	-
Other-blame	-	-	0.27	-	-
Planning	-	-	-	-	0.3
Positive reappraisal	-	-	-	-	0.29
Putting into perspective	-	-	-	-	0.36

Table 2 presents the distribution of cognitive-emotional coping strategies among adolescent boys, categorized by usage levels.

Table 2.
 Boys' Distribution of Cognitive-Emotional Coping Strategies (%)

Strategy	Very High	High	Above Average	Average	Below Average
Catastrophizing	-	-	0.31	-	-
Rumination	-	-	0.22	0.26	0.14
Self-blame	-	0.26	0.2	-	-
Acceptance	-	-	0.32	-	-
Positive refocusing	-	-	0.34	-	-
Other-blame	-	0.31	0.2	-	-
Planning	-	-	0.13	0.35	0.2
Positive reappraisal	-	-	0.19	0.37	0.25
Putting into perspective	-	-	0.28	0.22	0.20

Table 2 reveals a more balanced distribution of cognitive-emotional coping strategies among boys. Unlike girls, boys do not employ any strategies at a "very high" level. However, they utilize strategies such as Self-blame, Blaming others, Catastrophizing, and Rumination at "high" or "above average" levels. Additionally, boys show greater diversity in their use of strategies, with some adaptive strategies like Positive refocusing, putting into perspective, and Acceptance also being employed at "above average" levels.

Figures 1 and 2 graphically represent the levels of use for a comprehensive understanding of the prevalence of adaptive and maladaptive strategies among girls and boys. In Figure 1, it is evident that girls use maladaptive strategies more frequently than adaptive strategies. Specifically, rumination and catastrophizing are used at a "very high" level, while self-blame is employed at a "high" level, and blaming others is used at an "above average" level. Conversely, adaptive strategies like positive reappraisal, putting into perspective, and planning are employed at lower levels, with

the majority of them being "below average."

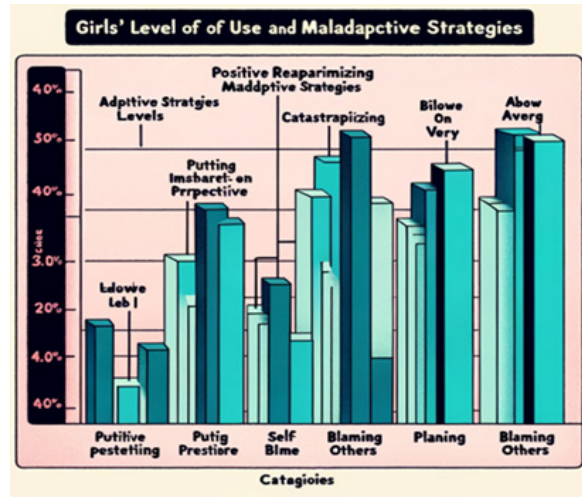


Figure 1.

Girls' Level of Use of Adaptive and Maladaptive Strategies

Figure 2 illustrates that boys have a more balanced distribution of cognitive-emotional coping strategies, with no strategies reaching "very high" usage levels. Maladaptive strategies such as self-blame, catastrophizing, Blaming others, and rumination are employed.

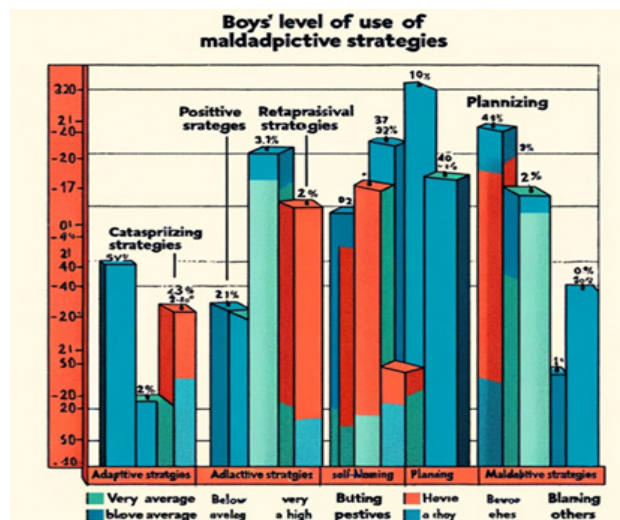


Figure 2.

Boys' Level of Use of Adaptive and Maladaptive Strategies

The findings of this study provide valuable insights into the cognitive-emotional coping strategies adopted by adolescent girls and boys, highlighting how gender influences their approach to managing stressors. However, further exploration is needed to fully understand the nuances of these gender disparities, their prevalence, implications for adolescent mental well-being, and ongoing debates within the field, drawing from prior research.

Our study's findings align with existing research, confirming significant gender disparities in coping strategies among adolescents. Notably, adolescent girls exhibit a pronounced inclination towards employing maladaptive coping mechanisms, with Catastrophizing and Rumination being predominant strategies. These maladaptive approaches involve amplifying adverse outcomes and

persistently dwelling on distressing thoughts, indicating a propensity towards negative cognitive patterns during stress strategies (Ashley & Kleinpeter, 2002; Senad, 2022). This aligns with the findings of Xu et al. (2022) and Lee & Mason (2014), which underscores the prevalence of these maladaptive approaches among adolescent girls. These maladaptive strategies involve amplifying adverse outcomes and persistently dwelling on distressing thoughts, indicating a propensity towards negative cognitive patterns during times of stress.

In contrast, boys shows a more balanced distribution of coping strategies, incorporating both maladaptive options, such as Self-blame and Catastrophizing, and adaptive strategies like Positive refocusing, Putting into perspective, and Acceptance (Eschenbeck et al., 2007). This multifaceted approach suggests that boys possess greater coping versatility when confronted with various stressors. Research by Mideksa et al. (2021) further supports this notion, highlighting the diverse coping repertoire exhibited by boys in managing stressors. Similarly, Wang et al. (2023) found that adolescent boys tend to utilize a broader range of coping mechanisms compared to girls, indicating greater flexibility in their approach to dealing with stress.

A central debate in adolescent coping strategies concerns the delicate balance between coping versatility and the prevalence of maladaptive strategies. Some researchers argue that the diversified coping repertoire displayed by boys may enhance resilience and adaptability in the face of stress (De Rosbo-Davies et al., 2022; Happé et al., 2016; Poon & Knight, 2012). Boys' willingness to engage with a wide range of coping mechanisms implies that they may have a more extensive toolkit for effectively managing diverse stressors. This aligns with by De Rosbo-Davies et al. (2022), who proposed that boys' willingness to engage with a wide range of coping mechanisms implies that they may have a more extensive toolkit for effectively managing diverse stressors. This multifaceted approach to coping may equip boys with greater resilience and adaptability, enabling them to navigate various challenges more effectively.

However, it is crucial to acknowledge the concerns raised by the significant use of maladaptive coping strategies observed among both girls and boys. While boys exhibit coping versatility, the prevalence of maladaptive strategies across the gender spectrum warrants serious consideration. Research suggests that an overreliance on maladaptive coping mechanisms may lead to adverse emotional consequences, potentially exacerbating stress and anxiety levels among adolescents. The findings of this study have profound implications for adolescent mental well-being. Understanding gender-specific coping patterns can inform targeted interventions aimed at promoting healthier coping strategies, particularly among adolescent girls who appear to be at a higher risk of employing maladaptive approaches. These interventions hold the potential to enhance emotional resilience and mitigate the adverse effects of stress during this critical developmental phase.

Future research endeavors should delve deeper into the factors influencing the selection of coping strategies among adolescents. Consideration of the intricate interplay between sociocultural, familial, and individual variables is essential for a more comprehensive understanding of adolescent coping. Furthermore, investigating the effectiveness of interventions designed to foster adaptive coping strategies should be a priority, with a focus on their impact on adolescent mental health and emotional well being.

CONCLUSION

Our study reveals the diverse cognitive-emotional coping mechanisms used by adolescent girls and boys, highlighting significant gender differences and providing insight into important aspects of adolescent mental health. The observed differences highlight the intricate nature of teenage

development and emphasize the necessity for focused interventions that aim to strengthen emotional resilience, customized to address the unique requirements of each gender.

The results of this study have significant consequences for mental health professionals, educators, and parents. The strong tendency of teenage girls to use unhealthy coping mechanisms highlights the urgent requirement for therapies aimed at improving their emotional coping abilities. By attending to this requirement, therapies can alleviate the possible adverse emotional outcomes linked to maladaptive coping mechanisms and promote more favorable emotional growth.

Furthermore, the ongoing discussion about the fragile balance between adaptability in dealing with challenges and the prevalence use of ineffective strategies emphasizes the need for further research and action. Although the diverse range of coping method may enhance boys' resilience, the high occurrence of maladaptive strategies among teenagers, regardless of gender, remains a concern. It is crucial to address this issue through evidence-based therapies to decrease stress and anxiety among teenagers and increase their general well-being.

As we contemplate the consequences of our discoveries, we are reminded of the significant duty that accompanies the examination of teenage growth. It is not just a scholarly endeavor but a dedication to comprehending and assisting the real-life encounters of young folks as they navigate the challenging journey of puberty. By providing support and personalized interventions, we can encourage teenagers to face difficulties with resilience, determination, and mental health as they transition into adulthood.

The findings of this study offer valuable insights into the cognitive-emotional coping strategies employed by adolescent girls and boys, shedding light on potential underlying mechanisms and contributing factors. From a theoretical perspective, the identification of gender-specific patterns in coping strategies adds nuance to existing theories of adolescent development and coping mechanisms. It underscores the importance of considering gender dynamics in understanding how adolescents navigate stressors and challenges. Additionally, the classification of coping strategies as adaptive or maladaptive provides a framework for further theoretical exploration into the effectiveness of different coping mechanisms in promoting psychological well-being and resilience during adolescence.

Mental health professionals can develop tailored interventions that specifically address the coping strategies employed by adolescent girls. These interventions can promote adaptive coping mechanisms while reducing the reliance on maladaptive strategies. Schools and educators can incorporate emotional coping skill development programs into their curricula, aiming to equip adolescents, regardless of gender, with effective strategies to navigate stressors. Parents play a crucial role in supporting their children's emotional well-being. This study underscores the importance of parents understanding and guiding their adolescents in adopting healthier coping strategies.

Despite the valuable insights gained from this research, several limitations should be acknowledged. Firstly, the study focused on a specific demographic of adolescents from a single geographical region, which may limit the generalizability of the findings to a broader population. Additionally, the data relied on self-reported responses, which could be subject to bias or social desirability effects. Future research should aim to include a more diverse and representative sample to enhance the external validity of the findings. Moreover, incorporating qualitative methods to better understand the underlying motivations behind coping strategy selection could further enrich our knowledge in this area.

REFERENCES

Acquati, C., & Kayser, K. (2019). Dyadic coping across the lifespan: A comparison between younger

- and middle-aged couples with breast cancer. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00404>
- Adasi, G. S., Amponsah, K. D., Mohammed, S. M., Yeboah, R., & Mintah, P. C. (2020). Gender differences in stressors and coping strategies among teacher education students at University of Ghana. *Journal of Education and Learning*, 9(2), 123-133. <https://doi.org/10.5539/jel.v9n2p123>
- Aldwin, C. (2012). *Stress and coping across the lifespan*. In *The Oxford Handbook of Stress, Health, and Coping*. <https://doi.org/10.1093/oxfordhb/9780195375343.013.0002>
- Amirkhan, J., & Auyeung, B. (2007). Coping with stress across the lifespan: Absolute vs. relative changes in strategy. *Journal of Applied Developmental Psychology*, 28(4), 298-317. <https://doi.org/10.1016/j.appdev.2007.04.002>
- Aragonès, E., Fernández-San-Martín, M., Rodríguez-Barragán, M., Martín-Luján, F., Solanes, M., Berenguera, A., Sisó, A., & Basora, J. (2023). Gender differences in GPs' strategies for coping with the stress of the Covid-19 pandemic in Catalonia: A cross-sectional study. *European Journal of General Practice*, 29(2). <https://doi.org/10.1080/13814788.2022.2155135>
- Ashley, N. R., & Kleinpeter, C. H. (2002). Gender differences in coping strategies of spousal dementia caregivers. *Journal of Human Behavior in the Social Environment*, 6(2), 29-46. https://doi.org/10.1300/J137v06n02_03
- Attia, M., Ibrahim, F. A., Elsady, M. A. E., Khorkhash, M. K., Rizk, M. A., Shah, J., & Amer, S. A. (2022). Cognitive, emotional, physical, and behavioral stress-related symptoms and coping strategies among university students during the third wave of Covid-19 pandemic. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsyg.2022.933981>
- Berg, C. A., Meegan, S. P., & Deviney, F. P. (1998). A social-contextual model of coping with everyday problems across the lifespan. *International Journal of Behavioral Development*, 22(2), 239-261. <https://doi.org/10.1080/016502598384360>
- Boima, V., Yorke, E., Ganu, V., Gyaban-Mensah, A., Ekem-Ferguson, G., Kretchy, I. A., & Mate-Kole, C. C. (2023). Coping strategies and resilience among patients with hypertension in Ghana. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1038346>
- Cabras, C., Konyukhova, T., Lukianova, N., Mondo, M., & Sechi, C. (2023). Gender and country differences in academic motivation, coping strategies, and academic burnout in a sample of Italian and Russian first-year university students. *Heliyon*, 9(6). <https://doi.org/10.1016/j.heliyon.2023.e16617>
- Çar, B., Kurtoğlu, A., Yermakhanov, B., & Bozdağ, İ. (2023). The Effect of 8-week educational game training on cognitive flexibility, emotional intelligence and coping strategies. *Journal of Physical Education and Sport*, 23(6), 1528 - 1536. <https://doi.org/10.7752/jpes.2023.06187>
- Çar, B., Sural, V., Güler, H., & Tor, H. (2022). A study on cognitive flexibility, emotional intelligence and coping strategies. *Cypriot Journal of Educational Sciences*, 17(9), 3012-3033. <https://doi.org/10.18844/cjes.v17i9.7179>

- Cîndea, A., & Balaci, I. (2022). Cognitive-emotional coping strategies for high school students. *Psihologia. Revista Științifico-Practică = Psychology. Scientific-Practical Journal*, 40(1), 13-24. <https://doi.org/10.46728/pspj.2022.v40.i1.p13-24>
- Moral-Jiménez, M. V. & González-Sáez, M. E. (2020). Cognitive distortions and coping strategies in young people with emotional dependence. *Revista Iberoamericana de Psicología y Salud*, 11(1), 15-30. <https://doi.org/10.23923/j.rips.2020.01.032>
- De Rosbo-Davies, C., Laletas, S., & Round, P. (2022). Women's experiences of adolescent maternal loss: grief, attachment and adolescent development. *Mortality*, 29(1), 53–68. <https://doi.org/10.1080/13576275.2022.2107423>
- Dearing, C., Morano, R., Ptaskiewicz, E., Mahbod, P., Scheimann, J. R., Franco-Villanueva, A., Wulsin, L., & Myers, B. (2021). Glucoregulation and coping behavior after chronic stress in rats: Sex differences across the lifespan. *Hormones and Behavior*, 136. <https://doi.org/10.1016/j.yhbeh.2021.105060>
- Eschenbeck, H., Kohlmann, C. W., & Lohaus, A. (2007). Gender differences in coping strategies in children and adolescents. *Journal of Individual Differences*, 28(1), 18–26. <https://doi.org/10.1027/1614-0001.28.1.18>
- Feingold, J. H., Kaplan, C. A., Hart, A., Waldman, R., Kronman, H., Brody, J., Hargrove, J., Hurtado, A., & Simon, A. B. (2022). We get by with a little help from our peers: The practice enhancement, engagement, resilience, and support program for building community and well-being in medical Education. *Academic Medicine*, 97(6), 858–862. <https://doi.org/10.1097/ACM.0000000000004669>
- Griffin, C. B., Gray, D. L., Hope, E., Metzger, I. W., & Henderson, D. X. (2022). Do coping responses and racial identity promote school adjustment among black youth? Applying an equity-elaborated social-emotional learning lens. *Urban Education*, 57(2), 198-223.. <https://doi.org/10.1177/0042085920933346>
- Happé, F. G., Mansour, H., Barrett, P., Brown, T., Abbott, P., & Charlton, R. A. (2016). Demographic and cognitive profile of individuals seeking a diagnosis of autism spectrum disorder in adulthood. *Journal of Autism and Developmental Disorders*, 46(11), 3469–3480. <https://doi.org/10.1007/s10803-016-2886-2>
- Hidayati, I. A., & Taufik, T. (2020). Adversity quotient of outstanding students with limited conditions. *Indigenous: Jurnal Ilmiah Psikologi*, 5(2), 195-206. <https://doi.org/10.23917/indigenous.v5i2.10823>
- Ingram, S., Ringle, J. L., Hallstrom, K., Schill, D. E., Gohr, V. M., & Thompson, R. W. (2008). Coping with crisis across the lifespan: The role of a telephone hotline. *Journal of Child and Family Studies*, 17(5), 663–674. <https://doi.org/10.1007/s10826-007-9180-z>
- Lee, H. S., & Mason, D. (2014). Cultural and gender differences in coping strategies between Caucasian American and Korean American older people. *Journal of Cross-Cultural Gerontology*, 29(4), 429–446. <https://doi.org/10.1007/s10823-014-9241-x>
- Mideksa, S., Galang, D. D., Endeshaw, M., Feyera, F., Gebreyohannes, Y., Ararso, D., & Solomon, D.

- (2021). Social support as determinants of disaster preparedness. *Ethiopian Journal of Public Health and Nutrition*, 4(2), 89–94. Retrieved from: <https://ejphn.ephi.gov.et/ejphn/article/view/79>
- Poon, C. Y. M., & Knight, B. G. (2012). Emotional reactivity to network stress in middle and late adulthood: The role of childhood parental emotional abuse and support. *Gerontologist*, 52(6), 782–791. <https://doi.org/10.1093/geront/gns009>
- Predescu, E., & Şipoş, R. (2013). Cognitive coping strategies, emotional distress and quality of life in mothers of children with ASD and ADHD—A comparative study in a Romanian population sample. *Open Journal of Psychiatry*, 3(2A), 11-17. <https://doi.org/10.4236/ojpsych.2013.32a003>
- Reid, G. J., Gilbert, C. A., & McGrath, P. J. (1998). The pain coping questionnaire: Preliminary validation. *Pain*, 76(1–2), 83–96. [https://doi.org/10.1016/S0304-3959\(98\)00029-3](https://doi.org/10.1016/S0304-3959(98)00029-3)
- Sanchez-Céspedes, L. M., Suárez-Higuera, E. L., Soto-Rojas, V. E., Rosas-Vargas, L. J., & Del Castillo-Matamoros, S. E. (2022). Gender differences in the use of coping strategies to reduce food insecurity in Colombia. *Cadernos de Saude Publica*, 38(8). <https://doi.org/10.1590/0102-311XEN252121>
- Senad, R. R. (2022). Gender differences in coping strategies (ego defense mechanisms) among professional and non- professional degree courses of students. *International Journal of Health Sciences*, 6(S1), 5829-5836. <https://doi.org/10.53730/ijhs.v6ns1.6187>
- Shaunessy, E., & Suldo, S. M. (2010). Strategies used by intellectually gifted students to cope with stress during their participation in a high school international baccalaureate program. *Gifted Child Quarterly*, 54(2), 127–137. <https://doi.org/10.1177/0016986209355977>
- Skinner, E. (1998). Reflections on coping and development across the lifespan. *International Journal of Behavioral Development*, 22(2). <https://doi.org/10.1080/016502598384414>
- Skinner, E. A., & Zimmer-Gembeck, M. (2015). Coping across the lifespan. In *International encyclopedia of the social & behavioral sciences: Second edition*. <https://doi.org/10.1016/B978-0-08-097086-8.26015-7>
- Sudarji, S., Panggabean, H., & Marta, R. F. (2022). Challenges of the sandwich generation: stress and coping strategy of the multigenerational care. *Indigenous: Jurnal Ilmiah Psikologi*, 7(3), 263-275. <https://doi.org/10.23917/indigenous.v7i3.19433>
- Tesoriero, F. (2005). Understanding human development: A multidimensional approach. *Australian Social Work*, 58(4), 434-436. <https://doi.org/10.1111/j.1447-0748.2005.00238.x>
- Thomas, C. L., Cassady, J. C., & Heller, M. L. (2017). The influence of emotional intelligence, cognitive test anxiety, and coping strategies on undergraduate academic performance. *Learning and Individual Differences*, 55, 40–48. <https://doi.org/10.1016/j.lindif.2017.03.001>
- Verdeş, A., & Rotaru-sîrbu, N. (2019). Cognitive emotional coping strategies in women abused in their childhood. *Scientific Annals of the “Alexandru Ioan Cuza” University, Iaşi. New Series Sociology And Social Work Section*, 12(1), 61-68. Retrieved from: <https://anale.fssp.uaic.ro/index.php/asas/article/view/563>

-
- Wang, Y., Liu, X., Wu, T., Zheng, D., Chen, Q., & Chen, C. (2023). Longitudinal associations between sluggish cognitive tempo and academic achievement in adolescents: A mediated moderation model. *Child Psychiatry and Human Development*. <https://doi.org/10.1007/s10578-023-01559-0>
- Wilson, T. K., & Gentzler, A. L. (2021). Emotion regulation and coping with racial stressors among African Americans across the lifespan. *Developmental Review*, *61*. <https://doi.org/10.1016/j.dr.2021.100967>
- Xu, Y., Delius, A. J. S., & Pape, U. J. (2022). *Gender differences in household coping strategies for covid-19 in Kenya* (Policy research working paper, no. WPS 9959). World Bank Group. Retrieved from: <http://documents.worldbank.org/curated/en/861451646668280669/Gender-Differences-in-Household-Coping-Strategies-for-COVID-19-in-Kenya>
- Zarbo, C., Brugnera, A., Frigerio, L., Malandrino, C., Rabboni, M., Bondi, E., & Compare, A. (2018). Behavioral, cognitive, and emotional coping strategies of women with endometriosis: a critical narrative review. *Archives of Women's Mental Health*, *21*(1), 1–13. <https://doi.org/10.1007/s00737-017-0779-9>
- Zavareh, M. A., Nikmani, S., & Heydamia, A. (2015). Factors associated with anger among male adolescents in Western Iran: An application of social cognitive theory. *Global Journal of Health Science*, *7*(6), 338–344.. <https://doi.org/10.5539/gjhs.v7n6p338>