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Research Article

PSYCHOLOGICAL WELL-BEING AS A DETERMINANT OF THE MENTAL HEALTH OF ADOLESCENTS (14-21) IN BUEA MUNICIPALITY, SOUTH WEST REGION OF CAMEROON

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Abstract

The study sought to examine the impact of mental health considering autonomy, self-esteem and environmental mastery on adolescents' mental health. The research designs utilized in this study were the explanatory sequential mixed method, the descriptive survey for qualitative data and the correlational survey research design for quantitative data. A sample of 200 adolescents randomly and purposively selected from four secondary schools formed the participants. Questionnaires were used for data collection. Data was analyzed and presented descriptively on frequency distribution tables and inferentially using the Pearson product-moment correlation coefficient. Based on the specific research objectives, the findings revealed that autonomy (R = .65, P = .05) and self-esteem (R = .65, P = .01) have a strong positive effect on adolescents' mental health and environmental mastery (R = .82, P = .01) has a high positive effect on their mental health. From the results, all three indicators of psychological well-being affect adolescents' mental health. Based on the findings, some recommendations were made to teachers, students, parents, educators, health personnel and the government to strive to offer holistic support to adolescents as psychological well-being and good mental health play a vigorous role in fostering, stabilizing and enhancing effectiveness and efficiency, thus productivity and fruitfulness as a result of good mental health.

Keywords: Adolescents, Mental Health, Psychological Well-being

Introduction

Adolescence is a critical developmental period for the promotion of mental health, as it is during this stage that more than half of mental health disorders first emerge, with many of these conditions persisting into adulthood. Such issues are often the result of compromised psychological well-being. Psychological well-being refers to the overall quality of a person's life and encompasses what is commonly described as “happiness,” “peace,” “fulfillment,” and “life satisfaction.” According to Huppert (2009), psychological well-being is characterized by a life that is going well, which involves a balance between feeling good and functioning effectively. Sustainable well-being does not necessitate constant positive emotions; experiencing negative emotions, such as disappointment, failure, and grief, is a normal part of life. The capacity to manage these challenging emotions is essential for long-term well-being. However, psychological well-being is compromised when negative emotions become overwhelming, prolonged, or interfere with an individual’s ability to function in daily life (Huppert, 2009).

The concept of "feeling good" encompasses not only emotions like happiness and contentment but also feelings such as interest, engagement, confidence, and affection. Psychological well-being, therefore, represents positive mental health a state of comfort, health, and happiness, as well as the harmonious integration of the body, mind, and spirit (Ekman, 2005). It includes the cultivation of positive relationships, personal mastery, autonomy, a sense of purpose, and personal growth (Ryff, 1989). Psychological well-being also entails the presence of positive emotions (e.g., contentment and happiness), the absence of negative emotions (e.g., depression and anxiety), life satisfaction, fulfillment, and effective functioning, all of which contribute to an overall positive assessment of life (CDC, 2018). An essential aspect of fostering mental health is the recognition that every thought, feeling, belief, and action influences our well-being. Consequently, promoting well-being involves encouraging individuals to shift their mindsets and behaviors and making positive lifestyle choices that enhance their overall health and wellness (Hill et al., 2002).

According to Ryff’s (1989) theory of psychological well-being, individuals' psychological health is contingent upon their ability to function positively across several key areas of their lives. Specifically, individuals should cultivate positive relationships with others, demonstrate mastery over their environment, accept both themselves and their past, set meaningful goals, and experience a sense of purpose in life. Furthermore, personal development and the autonomy to make decisions are essential components of psychological well-being. This concept plays a significant role in both personality and developmental theories, influencing both theoretical frameworks and practical applications. Seligman (2002) emphasizes that psychological well-being informs clinical practice, guiding professionals in helping their clients achieve their goals and understand the purposes underlying psychological consultation. According to Ryff and Keyes (1995), psychological well-being encompasses an individual’s alignment with life goals, an awareness of their potential, the quality of their relationships, and their overall sense of satisfaction with life. The search for positive meaning also has profound therapeutic effects, such as alleviating depressive symptoms and improving overall health and well-being (Crump et al., 1997).

Psychological well-being is widely regarded as a positive outcome that is meaningful not only to individuals but also to society at large. It reflects an individual's perception that their life is progressing positively and is linked to numerous benefits in areas such as health, employment, family, and economics. Central to psychological well-being are favorable living conditions, including access to adequate housing and employment. Research has demonstrated that higher levels of psychological well-being correlate with a reduced risk of disease, illness, and injury, improved immune functioning, faster recovery, and greater longevity. Thus, psychological well-being is often considered a key element of both mental and physical health, playing an integral role in overall well-being (Westerhof & Keyes, 2010, p. 11).

The integral role of mental health in the broader concept of health necessitates a nuanced understanding that transcends physical well-being. As articulated by the World Health Organization (WHO, 2014), mental health is characterized as a state of well-being in which individuals are capable of recognizing their potential, managing life's routine stresses with resilience, engaging in productive work, and making meaningful contributions to their communities. Expanding on this definition, Waterman et al. (2008) describe mental health as the optimal functioning of mental capacities, manifesting in productive activities, fulfilling interpersonal relationships, and the ability to adapt to change and navigate life's complexities effectively. Mental health is further delineated as encompassing cognitive, emotional, and behavioral dimensions, forming the cornerstone of human development from childhood through adulthood. It underpins critical domains such as learning, self-esteem, emotional maturation, physical recovery, critical thinking, and communication skills (Fava et al., 2003). The dynamic nature of mental health is influenced by myriad factors, including genetic predispositions, environmental stressors, and physiological changes across the lifespan (Rogers, 1959).

Moreover, mental health can be conceptualized as the harmonious development of the personality, fostering creative and adaptive interactions within societal frameworks (WHO, 2005). Griffiths et al. (2011) define it as a state of emotional equilibrium, characterized by the absence of debilitating anxiety and distress, coupled with the capacity to establish constructive relationships and effectively manage everyday demands and pressures. Thus, mental health is central to how individuals cope with stress, build relationships, and make informed decisions, underscoring its pivotal role in overall well-being. Mental health plays a pivotal role across all stages of the human lifespan, encompassing childhood, adolescence, and adulthood. While the term "mental health" is frequently equated with the absence of mental disorders, its scope extends far beyond the mere lack of illness. It profoundly influences daily functioning, interpersonal relationships, and physical well-being (Filozof et al., 1998). Mental health is foundational to human potential, shaping an individual's capacity to think critically, manage emotions, engage socially, work productively, and derive satisfaction from life. Consequently, the promotion, safeguarding, and restoration of mental health are of paramount importance to individuals, communities, and societies globally (WHO, 2010). Mental health comprises both positive and negative dimensions. The positive aspects include well-being, resilience, and the ability to navigate adversity, while the negative dimensions manifest as symptoms and disorders. Positive mental health is not merely

the absence of conditions such as anxiety or depression but encompasses attributes like happiness, self-esteem, and emotional stability (Krejcie et al., 1970).

Adolescence represents a critical transitional phase of growth and development, bridging childhood and adulthood. It is a period during which adolescents are expected to exhibit moral behaviors and socially acceptable traits such as honesty, generosity, respect, and empathy. However, in the Buea Municipality, this ideal often diverges from reality. Many adolescents in the region face emotional challenges as they navigate the complexities of physical and psychological development. A significant proportion struggles with the transition to adulthood, often resorting to maladaptive coping mechanisms such as substance use and experimentation with alcohol and drugs. These behaviors frequently exacerbate mental health challenges, including eating disorders, depression, conduct disorders, self-harm, generalized anxiety disorder (GAD), post-traumatic stress disorder (PTSD), and substance use disorders.

These mental health challenges can lead to harmful behaviors such as engagement in violent activities, gambling, truancy, gang affiliation, and other antisocial actions (World Health Organization (WHO), 2021). Moreover, some adolescents exhibit academic disengagement, aggressive outbursts, and heightened conflict with teachers, parents, peers, and community members, further exacerbating their emotional and psychological instability (Patton et al., 2018). These behavioral disruptions not only impair their productivity and developmental progress but also destabilize their psychological well-being, limiting their ability to thrive in academic and social settings (Liu et al., 2020). The ripple effects of these challenges extend beyond the individual, undermining the economic and social stability of communities (OECD, 2021). Families of affected adolescents also bear significant emotional and financial burdens, while society faces long-term consequences, including decreased workforce productivity and increased healthcare costs (Kessler et al., 2005). Recognizing the pervasive and multidimensional impact of these mental health issues, there is an urgent need to promote mental health awareness and implement preventative interventions to address these concerns effectively (WHO, 2021). This study seeks to examine whether psychological well-being acts as a critical determinant of mental health among adolescents in the Buea Municipality, focusing on dimensions such as autonomy, self-esteem, and environmental mastery. By doing so, it aims to contribute to a deeper understanding of adolescent mental health challenges in this context and to inform evidence-based strategies for their mitigation

Research Objectives

This study seeks to explore the effect of psychological well-being on the mental health of adolescents in Buea Municipality South West Region of Cameroon with the following specific objectives considered for the study.

1. To examine the role of autonomy on the mental health of adolescents.
2. To investigate the influence of self-esteem on the mental health of adolescents.
3. To determine the influence of environmental mastery on the mental health of adolescents.

Review of Related Literature

The concept of psychological well-being

Psychological well-being, as an integral component of general health and overall well-being, has been the focus of extensive research and evaluation over the past two decades (Keyes, Shmotkin, & Ryff, 2002). Keyes and colleagues conceptualize psychological well-being as synonymous with positive mental health, describing it as a multifaceted and dynamic construct. Its development arises from the interplay of emotional regulation, personality traits, identity formation, and life experiences. Psychological well-being has been found to increase with factors such as age, education, extraversion, and conscientiousness while decreasing with neuroticism (Keyes et al., 2002). Importantly, it is holistic, encompassing the entire system of well-being rather than focusing on isolated aspects (Wissing & Van Eeden, 2002). Ryff (1989a) delineates psychological well-being as comprising dimensions such as positive relationships with others, personal mastery, autonomy, a sense of purpose and meaning in life, and personal growth. Later, Ryff (2013) and Ryff and Singer (2008) posited that psychological well-being emerges from achieving equilibrium in response to both challenging and rewarding life experiences. This balance reflects positive psychological functioning across six dimensions, as identified by Ryff (1989): self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth.

Huppert (2009) emphasizes that psychological well-being pertains to "life going well," defined by the dual aspects of feeling good and functioning effectively. Sustainable well-being does not necessitate constant positive emotions; rather, it includes the capacity to experience and manage negative emotions such as disappointment, failure, and grief which are integral to the human experience. The ability to regulate and recover from such emotional challenges is essential for maintaining long-term psychological well-being.

The Psychological Well-being of Adolescence

The psychological well-being of adolescents encompasses a sense of life satisfaction, an abundance of positive emotions, and an absence of psychopathology the scientific study of mental disorders. This state of well-being is closely associated with optimal academic performance, social competence, robust support systems, and physical health, serving as a critical foundation for future development (Walker, 2006). Adolescence, as a unique and formative stage of life, is characterized by profound physical, emotional, and social transitions. These changes, compounded by potential exposure to adversities such as poverty, abuse, or violence, render adolescents particularly vulnerable to mental health challenges. Therefore, fostering psychological well-being and shielding adolescents from adverse experiences and risk factors are essential to promoting their immediate and long-term mental and physical health (Waterman, 2008).

The concept of psychological well-being during adolescence is multifaceted, extending beyond health sciences into the broader domain of human development. It is influenced by both individual attributes and environmental factors, with the latter often playing a decisive role during this developmental period. Family, school, and peer groups are widely recognized as pivotal contexts for successful adolescent development and the cultivation of positive mental health (Wilburn & Smith, 2005).

A holistic sense of psychological well-being in adolescents requires balance across several interconnected dimensions:

1. Physical well-being, which encompasses lifestyle choices affecting bodily function, such as diet and physical activity. These factors significantly influence overall health.

2. Emotional well-being, reflecting an adolescent's capacity to manage daily life challenges, as well as their self-perception and self-esteem.

3. Social well-being, which pertains to the sense of belonging and social inclusion, as well as the quality of communication, relationships, values, beliefs, and cultural traditions.

4. Spiritual well-being, defined as the ability to derive meaning and purpose in life, often achieved through a connection with the inner self, nature, or a higher power.

5. Intellectual well-being, which involves the pursuit of knowledge and skill acquisition to lead a fulfilling and productive life.

6. Economic well-being, which relates to the ability to meet basic needs and feel secure in one's material circumstances (Rice et al., 1968).

Achieving equilibrium among these dimensions is vital for the psychological well-being of adolescents, as it facilitates their ability to thrive both during this formative stage and in their future endeavors.

The concept of mental health

Mental health is defined as a state of well-being in which individuals recognize their abilities, manage everyday stresses, work productively, and contribute to their community (WHO, 2014). It encompasses cognitive and emotional well-being and extends beyond the absence of mental disorders to include resilience, autonomy, and self-efficacy (Yeresyan, 2014; Martin, 2009). During adolescence, a period marked by significant physical, emotional, and social changes, mental health becomes particularly critical. Adolescents are especially vulnerable to mental health challenges due to factors such as poverty, abuse, and violence, which increase the risk of developing conditions like depression and anxiety (Ryff & Fava, 2003). Promoting psychological well-being and addressing these risks is essential, as mental health during adolescence influences long-term outcomes, including emotional regulation, interpersonal skills, and overall quality of life. Despite its importance, many adolescent mental health issues remain undiagnosed and untreated, highlighting the need for early intervention and supportive environments in families, schools, and communities (Harris, 2010).

Autonomy and mental health

Sheedy (2009) conducted a seminal study in Melbourne, Australia, examining the interplay between autonomy and mental health among adolescents, focusing on their awareness of autonomy and the principles underpinning the Recovery approach in mental health. The research sought to explore adolescents' awareness of the Recovery approach, their perceptions of treatment priorities, and the extent to which these priorities align with the Recovery approach. A random sample of 1,217 Australian adolescents participated in the National Social Survey (NSS), conducted via telephone interviews. The survey assessed participants' experiences with mental health services, the significance they attributed to various treatment methods and their understanding

of the principles that form the foundation of the Recovery approach. Descriptive statistical methods were employed for data analysis.

The findings revealed that the vast majority of participants (94%) affirmed the statement, "Regardless of the severity of symptoms experienced and/or the mental illness diagnosis, being diagnosed with a mental illness means there is always hope for a meaningful life." Furthermore, most respondents preferred treatments aligned with the Recovery approach, emphasizing hope and the potential for living a fulfilling life. However, only a minority (35%) agreed with the principle that "after diagnosis, the person should direct the long-term management of their mental illness, rather than a medical professional." This indicated a limited prioritization of autonomy, with a predominant preference for medical professionals to oversee the management of mental illnesses.

The study also highlighted that while Australian adolescents exhibited some awareness of the principles underpinning the Recovery approach particularly concerning hope, the capacity for a meaningful life, and the value of support from family, friends, and peers with similar experiences autonomy was not considered a high priority. This underscores the prevailing perspective that the medical profession should play a central role in managing mental health conditions. Given shared cultural and systemic influences on perceptions of mental health and autonomy, the researchers posited that similar findings might emerge among adolescents in the Buea Municipality of the South West Region. This suggests a need for tailored interventions to promote the principles of the Recovery approach and enhance access to adolescent-focused mental health services in comparable settings.

Self-esteem and mental health

In Toronto, Ontario, Canada, Flett (2003) conducted a pivotal study examining the relationships among dimensions of perfectionism, unconditional self-esteem, and self-reported depression. A sample of 94 students participated in the study by completing the Multidimensional Perfectionism Scale, the Unconditional Self-Acceptance Questionnaire, and a self-report measure of depression. The findings revealed significant negative correlations between all three dimensions of perfectionism self-oriented, other-oriented, and socially prescribed and unconditional self-esteem. As anticipated, depression was strongly associated with lower levels of unconditional self-esteem.

A more nuanced analysis using path modeling demonstrated that unconditional self-esteem mediated the relationship between socially prescribed perfectionism and depression. Additionally, other-oriented perfectionism was found to influence depression indirectly through its association with diminished self-esteem. These results underscore the contingent nature of self-worth in perfectionists, who are particularly susceptible to psychological distress when faced with adverse experiences that fail to affirm their sense of value. Flett's findings highlight the vulnerability of individuals with perfectionistic tendencies to mental health challenges, particularly through their reliance on external validation for self-worth. While these results offer valuable insights into the relationship between perfectionism, self-esteem, and depression, it is imperative to explore whether similar patterns emerge among adolescents in the Buea Sub-Division of the South West Region.

Investigating this dynamic in a distinct cultural and developmental context may provide deeper understanding and inform interventions targeting adolescent mental health

Environmental mastery and Mental Health

Knight and Davison (2011) conducted an investigation into the association between environmental mastery and depression among a sample of 96 adolescents aged 13 to 20 years residing in residential care. Participants completed a depression scale alongside measures assessing various risk factors for depression, including functional capacity, self-perceived physical health, bereavement experiences, and environmental mastery. The findings revealed that 49% of the variance in depression scores could be attributed to participants' self-reported levels of environmental mastery. Recognizing the multifaceted nature of depression and the potential for diminished environmental mastery in older adolescents within residential care settings, the construct was further analyzed as a mediating variable between identified risk factors and depression. This additional analysis demonstrated an increase in the explained variance in depression to 56%. The study concluded that environmental mastery represents a critical factor influencing the mental health of older adolescents in residential care. Consequently, strategies aimed at enhancing residents' environmental mastery were deemed essential for promoting their psychological well-being.

The discussion highlighted important questions for future research, including whether older adolescents with higher levels of environmental mastery navigate the transition from community living to residential care more successfully than their peers, and whether perceived mastery declines over time or is particularly affected during the transition from independent living in the community to dependent, supported residential care. These findings underscore the need for targeted interventions to foster environmental mastery as part of comprehensive mental health strategies for adolescents in residential care.

Research Methodology

Design of the study

The research design employed in this study was the explanatory sequential mixed-methods design, which is particularly suited for researchers with a robust background in quantitative analysis. The primary objective of this design is to use qualitative data to provide a deeper understanding and explanation of the initial quantitative findings. Specifically, the study integrated both descriptive survey research design for the qualitative component and correlational survey research design for the quantitative component. These designs were employed to examine relationships and potential differences between the variables under investigation. Data collection was conducted in secondary schools within the Buea municipality, utilizing a combination of an interview guide and a semi-structured questionnaire.

Participants

The participants consisted of 200 (form 5 (102) and upper sixth (98)) adolescents selected using probability (simple random) and non-probability (purposive and convenience) sampling techniques. The sample was determined through Yamane formula for finite population Uzoagulu, (1998).

Research Instruments

The instruments adopted for data collection were a closed-ended questionnaire and a semi-structured interview guide titled "Psychological well-being and mental health questionnaire." A four scale Likert-type (Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) that was used in designing the closed ended questionnaire in which respondents were expected to choose one of the response options depending on the extent to which they agreed or disagree with the issues relating to psychological well-being and mental health. The questionnaire was divided into two sections - section "A" and "B". Section "A" contained the demographic information of the respondents while section "B" contained positively cued statements on the research objectives (Autonomy, Self-esteem, environmental mastery and mental health). After designing the instruments by the researchers, face and content validity were determined by experts and through a pilot study respectively. Reliability of the instruments was also determined through the pilot study indicated as follows physical autonomy was 0.714, self-esteem it was 0.635, environmental mastery 0.658 and for the mental health at 0.731. The IVM was appreciated at 0.821. indicating that the questionnaire was reliable as the Cronbach alpha reliability coefficient was above the 0.5 threshold level

Data Collection

After obtaining permission from respective institutions, coppies of the questionnaire were administered to respondents and enough time was given to complete the questionnaire.

Data Analysis

All completed survey questionnaires were entered into a pre-designed EpiData Version 3.1 database (EpiData Association, Odense, Denmark, 2008), which included built-in consistency and validation checks. Additional consistency checks, data range checks, and validation procedures were conducted using SPSS version 21.0 (IBM Inc., 2012) to identify and correct any invalid codes. The validated dataset was subsequently analyzed according to established statistical standards. The questionnaire comprised categorical variables, and data analysis was conducted using frequency and proportion techniques. For the analysis of multiple responses, the Multiple Response Set (MRS) method was employed to calculate the aggregated scores for the conceptual components (Nana, 2012). Scores for conceptual indicators were cross-tabulated with background indicators and compared across categories using the Chi-square test of independence. Open-ended questions were analyzed using thematic analysis, where responses were grouped into overarching themes or keywords. Data were presented using frequency tables, charts, and code-grounded quotation tables. All statistical analyses were conducted at a 95% Confidence Level (CL), with an Alpha value of 0.05.

Findings

The research findings are organized in alignment with the study's research objectives, incorporating relevant perspectives from extant literature. These findings are contextualized through the integration of conceptual, theoretical, and empirical frameworks, thereby enhancing the depth of analysis and providing a comprehensive interpretation of the results with previous scholarly work.

1. Results of examining the role of autonomy on the mental health of adolescents

Table 1 Perceived effect of autonomy on the mental health of adolescents

		Autonomy	The mental health of adolescents
Autonomy	Pearson Correlation	1	.654*
	Sig. (2-tailed)		.000
	N	200	200
Mental health of adolescents	Pearson Correlation	.654*	1
	Sig. (2-tailed)	.000	
	N	**200**	**200**

**** Correlation is significant at the 0.05 level (2-tailed).***

The examination of the role of autonomy in adolescent mental health revealed a significant positive correlation, indicating that autonomy has a substantial impact on the mental well-being of adolescents in Buea Municipality. The Pearson product-moment correlation coefficient (r = .654, P = .05) demonstrates that as adolescents experience greater autonomy, their mental health tends to improve. The majority of respondents acknowledged that autonomy plays a pivotal and beneficial role in enhancing adolescent mental health.

2. The results of investigating the influence of self-esteem on the mental health of adolescents

Table 2 Perceived effect of self-esteem and the mental health of adolescents

		Self-esteem	The mental health of adolescents
Self-esteem	Pearson Correlation	1	.646**
	Sig. (2-tailed)		.000
	N	200	200
Mental health of adolescents	Pearson Correlation	.646**	1
	Sig. (2-tailed)	.000	
	N	**200**	**200**

** ***Correlation is significant at the 0.01 level (2-tailed).***

An investigation into the influence of self-esteem on the mental health of adolescents in Buea Municipality, South West Region of Cameroon, revealed a significant positive correlation between self-

acceptance and mental health (R = -.551, P = .01). This finding indicates that as adolescents develop greater self-acceptance, their mental health tends to improve. Self-esteem, which encompasses individuals' perceptions of their own worth and the value they place on themselves, plays a critical role in fostering positive mental health.

3. Results of determining the influence of environmental mastery on the mental health of adolescents

Table 3 Perceived effect of environmental mastery on the mental health of adolescents

		Environmental mastery	The mental health of adolescents
Environmental mastery	Pearson Correlation	1	.819**
	Sig. (2-tailed)		.000
	N	200	200
Mental health of adolescents	Pearson Correlation	.819**	1
	Sig. (2-tailed)	.000	
	N	200	200

***** Correlation is significant at the 0.01 level (2-tailed).***

The analysis of the influence of environmental mastery on the mental health of adolescents in Buea Municipality, South West Region, revealed a strong positive relationship between environmental mastery and mental health (R = .819, P = .01). This indicates that adolescents with higher levels of environmental mastery are more likely to exhibit positive mental health outcomes.

Research findings from the interview

Findings from interviews revealed that most adolescents exhibit positive mental health, characterized by optimism, confidence, good behavior, respectfulness, positive self-image, determination, and the ability to make constructive decisions about their lives, as evidenced by their belief in their capacity to succeed and their willingness to support others within their community. However, some adolescents were reported to display negative behaviors, including arrogance, disrespect, dishonesty, irregular school attendance, and poor interpersonal conduct, attributed to low self-esteem and diminished mental well-being.

The study explored the impact of autonomy, self-esteem, and environmental mastery on the mental health of adolescents in the Buea Municipality, South West Region of Cameroon. Findings revealed that most adolescents lack autonomy, preferring to work with experienced individuals who provide guidance, which enhances their mental well-being. Regarding self-esteem, interviews indicated that adolescents are optimistic,

confident, and resilient, reflecting a positive self-image that supports their mental health. However, while adolescents demonstrated environmental mastery, enabling them to adapt and cope in various settings, some reported experiencing anxiety due to daily challenges, which negatively affected their decision-making and overall mental health.

Discussion

Based on the research findings, the following discussions are presented according to the research objectives

1. Results of examining the role of autonomy on the mental health of adolescents

Results of examining the role of autonomy on the mental health of adolescents demonstrate a significant positive correlation between autonomy and the mental health of adolescents, as evidenced by a Pearson product-moment correlation coefficient of *(R* = .654, *P* = .05). This result underscores the substantial role autonomy plays in shaping the mental well-being of adolescents. Autonomy, defined as the ability to make independent decisions and regulate one's behavior, is a critical developmental milestone during adolescence, a period marked by an increasing desire for self-determination and individuality. The positive correlation suggests that adolescents with higher levels of autonomy are more likely to exhibit better mental health outcomes, such as enhanced emotional regulation, reduced psychological distress, and increased resilience. When adolescents experience autonomy, they are more likely to feel empowered, develop a sense of control over their lives, and build the confidence needed to navigate challenges. The significance of the ***P***-value (*P*=.05) further confirms the reliability of the relationship between autonomy and mental health, emphasizing its relevance in interventions aimed at promoting adolescent well-being. These findings highlight the need for supportive environments within families, schools, and communities that foster autonomy by encouraging decision-making, providing opportunities for self-expression, and respecting adolescents' choices. By doing so, stakeholders can contribute to the mental health and overall development of adolescents, equipping them with the psychological resources necessary for a successful transition into adulthood. This aligns with self-determination theory, which posits that autonomy is a fundamental psychological need essential for optimal mental functioning and personal growth (Ryan & Deci, 2000). The results also align with Sheedy (2009), who emphasized that autonomy awareness in adolescents, particularly with hope, the ability to live a meaningful life, and the importance of support from family, peers, and others, is critical. Sheedy's work suggests that despite the severity of mental health symptoms or diagnoses, there remains hope for leading a meaningful life. Furthermore, the findings are consistent with those of Savard et al. (2013), who explored the benefits of autonomy support for adolescents facing severe emotional and behavioral challenges. Their study demonstrated that autonomy support fosters higher perceived value and enjoyment of tasks, alongside a reduction in negative emotional states compared to conditions without autonomy support. Additionally, participants in autonomy-supportive environments perceived their instructors as more competent. Miller (1997) also found that autonomy plays a critical role in alleviating depression, anxiety, and stress, thereby helping

students manage and mitigate mental health issues. This highlights the importance of understanding how autonomy can address various mental health challenges, including depression, anxiety, eating disorders, substance use disorders, and stress.

2. The results of investigating the influence of self-esteem on the mental health of adolescents

The results of the investigation revealed a significant positive correlation between self-esteem, specifically self-acceptance, and the mental health of adolescents, with a Pearson product-moment correlation coefficient of R=−.551, P=.01. While the negative sign in the correlation might initially suggest an inverse relationship, it is essential to interpret it within the context of how self-esteem and self-acceptance scores are conceptualized and measured in the study. If higher self-esteem is associated with lower scores on a self-acceptance deficit scale (indicating fewer issues with self-acceptance), the negative correlation still reflects a positive relationship between self-acceptance and mental health. This significant relationship emphasizes that adolescents who have higher levels of self-esteem and self-acceptance are more likely to experience better mental health outcomes. Self-esteem, defined as an individual's perception of their worth and abilities, plays a central role in fostering resilience, emotional stability, and overall psychological well-being. Adolescents with a strong sense of self-acceptance are better equipped to cope with challenges, reduce feelings of inadequacy, and maintain positive interpersonal relationships, all of which contribute to improved mental health. The P-value (P=.01) confirms that the correlation is statistically significant, reinforcing the importance of self-esteem in shaping adolescents' mental health. Adolescents with higher self-esteem are less likely to experience psychological distress and more likely to exhibit behaviors indicative of emotional and social competence. These results highlight the importance of interventions aimed at enhancing self-esteem among adolescents. Strategies such as promoting positive self-talk, fostering supportive peer and family relationships, and encouraging self-compassion can play a vital role in improving self-esteem and, consequently, mental health. Schools and community programs should prioritize activities that celebrate individual achievements and provide constructive feedback to help adolescents build a positive self-image. These findings align with existing literature, such as studies by Rosenberg (1965), which suggest that self-esteem acts as a protective factor against mental health disorders like anxiety and depression. This also aligns with Carvajal (1998), who asserted that self-esteem is integral to feeling good about oneself, which empowers adolescents to take healthy risks, try new experiences, and engage in personal growth. Low self-esteem, on the other hand, is associated with difficulties in relationships, academic challenges, and overall mental health struggles. Thus, enhancing self-esteem is crucial for improving mental health outcomes, as adolescents who focus on their strengths rather than their weaknesses are more likely to cultivate self-respect and confidence. Moreover, this finding concurs with Currie et al. (2009), who emphasized the importance of self-esteem as the way individuals perceive their worth. They noted that while self-criticism is natural, persistent negative self-evaluation can lead to low self-esteem, which negatively impacts mental health. Strategies to improve self-esteem, such as focusing on one's strengths, volunteering, and avoiding ruminating over unchangeable aspects of life, are essential for enhancing mental well-being. Similarly, Ekman et al. (2005) discussed self-esteem as a reflection of one's overall sense of

self-worth and personal value. It encompasses a range of self-assessments, including judgments about one's appearance, beliefs, emotions, and behaviors. Typically considered a stable personality trait, self-esteem profoundly impacts an individual's motivation and success in various life domains. Low self-esteem can hinder academic or professional achievements due to a lack of belief in one's abilities, whereas healthy self-esteem fosters a positive, assertive approach to life, enabling individuals to pursue and accomplish their goals with confidence.

3. Results of determining the influence of environmental mastery on the mental health of adolescents

The findings of the study revealed a strong positive relationship between environmental mastery and the mental health of adolescents, with a Pearson product-moment correlation coefficient of R=.819, (P=.01). This result highlights the significant influence of environmental mastery on adolescent mental well-being, indicating that individuals who demonstrate higher levels of competence in managing and adapting to their environment are more likely to exhibit better mental health outcomes. Environmental mastery refers to the ability to effectively manage life circumstances, utilize surrounding opportunities, and create environments conducive to fulfilling one's personal needs and goals (Ryff, 1989). Adolescents with strong environmental mastery tend to feel in control of their surroundings, adapt effectively to challenges, and establish a sense of purpose, all of which are crucial for psychological stability and resilience. This capacity to navigate life's complexities fosters confidence and reduces stress, contributing to overall mental health. The high correlation value (R=819) suggests that environmental mastery is one of the most critical factors influencing adolescent mental health. The statistical significance of the P-value (P=.01) further supports the reliability of this relationship, underscoring the importance of interventions that enhance adolescents' ability to manage their environment. This is particularly relevant during adolescence, a period of rapid social, emotional, and cognitive changes, when young individuals face increasing demands and responsibilities within their families, schools, and communities. These findings align with existing research emphasizing the role of environmental mastery in promoting well-being. For instance, studies by Keyes (2002) and Ryff & Singer (1998) suggest that individuals who achieve a balance between external demands and internal resources are better equipped to maintain mental health and thrive in diverse settings. Adolescents with higher environmental mastery are more likely to engage in problem-solving, demonstrate effective decision-making, and exhibit greater resilience against psychological stressors. Paye (2003) also supports this view, suggesting that environmental mastery serves as both a mediating and moderating factor in mental health. It refers to the degree to which individuals perceive their life chances as under their control, as opposed to being passively determined by external forces. In line with these findings, Pearlin and Schooler (1978) argued that individuals with a high sense of environmental mastery believe in their ability to influence their environment and achieve desired outcomes. In contrast, those with a low sense of mastery often feel powerless, believing that external factors dictate their fate. Further corroborating these findings, Morris et al. (2019) identified environmental mastery as a significant protective resource, safeguarding individuals' physical and mental health against negative adversities. Ryff and Keyes (1995)

also highlighted the importance of environmental mastery, noting that it reflects the ability to navigate and modify one's surroundings effectively. High levels of environmental mastery are associated with a sense of control over one's context, while low levels are linked to a perceived inability to influence or manage one's environment. Thus, adolescents with high environmental mastery are better equipped to adapt to new environments, overcome challenges, and maintain focus on specific tasks. Environmental mastery is therefore critical in fostering adaptability and resilience in adolescents, enabling them to navigate various life situations and challenges more effectively. To enhance environmental mastery among adolescents, stakeholders such as parents, educators, and community leaders should provide supportive environments that encourage autonomy, problem-solving, and adaptive coping strategies. Programs that focus on skill development, such as time management, goal-setting, and resource utilization, can empower adolescents to take control of their circumstances and improve their mental health.

Conclusion

The study aimed to investigate the influence of autonomy, self-esteem, and environmental mastery on adolescents' mental health. this study underscores the critical role of psychological well-being as a determinant of the mental health of adolescents aged 14–21 in the Buea Municipality, South West Region of Cameroon. The findings reveal that autonomy and self-esteem significantly contribute to adolescents' mental health, both demonstrating strong positive effects (R=.65, P=.05 and R=.65, P=.01, respectively). Furthermore, environmental mastery exhibits an even higher positive influence (R=.82, P=.01), emphasizing its pivotal role in fostering mental health among adolescents. These results highlight the multifaceted nature of psychological well-being and its substantial impact on mental health outcomes during adolescence, a critical developmental stage. The findings call for targeted interventions that prioritize fostering autonomy, enhancing self-esteem, and promoting environmental mastery. Such efforts are essential for equipping adolescents with the psychological resources needed to navigate developmental challenges, thus contributing to healthier mental health trajectories. By promoting positive psychological well-being through a comprehensive approach that integrates social, educational, and community-based strategies, adolescents can be empowered to navigate the challenges of this critical developmental phase with resilience, thereby fostering sustained mental health and well-being.

Recommendations

Based on the research objectives and findings, the researcher offers the following recommendations:

An in-depth understanding of this area can significantly benefit various stakeholders, including educators, counselors, psychologists, social workers, and healthcare professionals, by aiding in the design and development of targeted interventions and programs aimed at reducing mental health challenges among adolescents. This study primarily examined the role of autonomy in adolescent mental health. Given

the findings, the researcher recommends that adolescents actively engage in activities that foster their autonomy and contribute to maintaining their mental stability. Additionally, adolescents should be encouraged to develop decisiveness and stand firm in their decisions, provided they are confident in the correctness of their actions. Such practices are essential not only for enhancing their performance but also for promoting positive mental health. While educators can provide resources to assist students in managing stress, anxiety, and depression, it is ultimately the students who must take the initiative to make meaningful impacts on their school experience. Students should set clear goals from the outset and work diligently to achieve them.

Furthermore, the study explored the influence of self-esteem on adolescent mental health. Self-esteem plays a critical role in enabling adolescents to accept themselves and adopt a positive self-image. Therefore, educators are encouraged to invest time in listening to students' concerns and offering guidance, particularly for those grappling with difficult issues. This approach will not only boost students' self-esteem but also improve their academic performance by fostering emotional stability, thereby facilitating their ability to adapt to challenges. Educators can also create supportive classroom environments by providing students with trustworthy advocates, which enhances their chances of success. Establishing regular advisory periods is crucial, as it allows students to build meaningful relationships with trusted adults. Teachers should continuously remind students to make responsible choices and assure them that they are available for support if feelings of depression, stress, or anxiety arise. By promoting a culture that values individual differences over conformity, teachers can empower students to lead by example and create an inclusive environment that supports peer success.

Moreover, parents play a pivotal role in supporting their children's mental health. It is recommended that parents maintain open and effective communication with their children, showing genuine interest in their children's activities and encouraging them to believe in their own capabilities. Parents should also emphasize the importance of hard work and focus on academic endeavors, reinforcing the primary purpose of schooling, regardless of peer influences. Additionally, parents should educate their children on the value of meaningful friendships and the potential risks associated with excessive socialization. Setting appropriate boundaries can help mitigate negative peer influences and promote healthier social interactions.

In relation to the influence of environmental mastery on adolescent mental health, the researcher suggests that school administrators and healthcare professionals integrate guidance and counseling services into the school curriculum and health programs. By including such services in the school syllabus, adolescents will consistently have access to support that emphasizes the importance of education and healthy relationships. Administrators should also collaborate with parents and counselors to address any concerns, ensuring open lines of communication. This proactive approach will help adolescents adapt to their environment and overcome challenges more effectively.

The researchers further recommend that the government become more actively involved in addressing mental health issues by establishing specialized mental health schools and clinical centers, as well as supporting private institutions that work toward improving mental health outcomes. Policymakers can use

the findings from this study to inform decisions that will improve mental health services for those affected by mental health disorders. These findings should be communicated to relevant ministries, such as those of Basic Education, Secondary Education, Higher Education, and Public Health, to ensure broad recognition and action. Additionally, this study should inspire further research into other aspects of adolescent mental health to expand the knowledge base in this critical area.

Recommendations for future studies

1. Future research could explore the interplay between autonomy and other dimensions of psychological well-being, such as relatedness and competence, to provide a more comprehensive understanding of adolescent mental health determinants. Additionally, examining contextual factors, such as cultural norms and socioeconomic conditions, may offer insights into how autonomy's impact on mental health varies across different settings.

2. Future studies could examine the dynamic relationship between self-esteem and other psychological constructs, such as resilience and emotional intelligence, to provide a more holistic understanding of their impact on adolescent mental health. Additionally, longitudinal studies could explore how self-esteem development during adolescence influences mental health outcomes later in life.

3. Equally, studies could explore the interplay between environmental mastery and other psychological dimensions, such as autonomy and self-efficacy, to better understand how these factors collectively influence adolescent mental health. Additionally, studies examining the role of socioeconomic and cultural contexts in shaping environmental mastery could provide deeper insights into targeted interventions for diverse adolescent populations.

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