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Impact of Locus of Control on Psychological Well-Being Among Male and Female Adolescents in Anambra State

Chinwe Augustina Enwere*

PhD, Lecturer at the Department of Educational Psychology Guidance and Counselling, Nwafor Orizu College of Education, Nsugbe, Nigeria, <https://orcid.org/0009-0003-3597-5019>

Dorothy Mma Afunugo

PhD, Lecturer at the Department of Educational Psychology Guidance and Counselling, Nwafor Orizu College of Education, Nsugbe, Nigeria, <https://orcid.org/0009-0002-6478-365X>

***Correspondence email:** enwere.chinwe.augustina@nocen.edu.ng.

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Abstract: This study focused on investigating how locus of control influences the mental well-being of male and female adolescents from Anambra State, Nigeria. The type of research study was correlational and the respondents were senior Secondary School students of which 396 were males and 367 females. The sampling methods used were multistage and stratified sampling. In data

collection the Locus of Control of Behaviour Scale (LCBS) and the Psychological Well-Being Scale (PWS) were used; both instruments yielded high reliability as assessed by Cronbach's alpha coefficients of 0.72 and 0.86, respectively. Specifically, in the regression equations it was discovered that locus of control has a positive correlation with psychological well-being and explained 21% of the variability. It accounts for 8% of the variability in all adolescent youth, 18.1% among males and 24% among females. The findings underscored the significance of building an internal sense of control to improve adolescents' psychological adjustment. The study revealed the need to apply such methods to enhance the students' perceived control in educational programs and calls for future studies to discover other factors that have an impact on psychological well-being across various cultures.

Keywords: Locus of control, psychological well-being, adolescents, gender differences, mental health.

Introduction

The locus of control is one of the most significant psychological concepts that regulate behaviour and mental conditions of teenagers. This concept is divided into two categories: internal locus of control and the external locus of control. The locus of control in adolescents refers to the extent to which they perceive that they have the control over events affecting them in their lives by the choices they make (Arkorf & Hilton, 2022). On the other hand, an external locus of control entails the notion that one is fate, luck or other people controlled in his or her life. For instance, adolescents who possess an internal locus of control are more proactive in their behaviour, and they also exhibit higher levels of self-efficacy as argued by Clark and Zhu (2024). They also believe that success or failure is within their control, and that luck plays no part in it. This belief leads to responsible behaviour. This disposition helps adolescents cope with adversities and failings as they continue to strive for personal development, regarding difficulties as growth processes (Galvin et al., 2018; Greenblatt-Kimron et al., 2024).

Adolescents' population evidence affirms the positive impact of an internal locus of control on the psychological health of adolescents. A review by Lassi et al. (2019) agrees with the former hold that students who have internal locus of control have a lower probability of developing anxiety and depression. When individuals make their own decisions, they feel empowered and responsible for their own lives, leading to increased self-esteem and overall life satisfaction. This positive attitude can perhaps, improve the results yielded in class and more so improve interpersonal relationships in society (Filipiak & Łubianka, 2021; Hamzah & Othman, 2023). In contrast, a negative locus of control in adolescents is characterised by feeling overwhelmed and helpless, as they perceive their future is not in their hands. From this point of view, people may feel that they cannot effect much change and find less reason to exert effort to change their circumstances. Therefore, these adolescents are likely to develop increased levels of stress, anxiety, and depression.

According to the findings made by Galvin et al. (2018), there is significant proof that young people belonging to the domain of external Locus of control exhibited depression, anxiety and less self-esteem as compared to their peers. This demographic is also prone to risky behaviours as they may not whatever they do has repercussions. Additionally, they may experience higher levels of academic problems and have a tendency of displaying problems in forming and maintaining positive social relationships as compared to their counterparts since they may have low perceived

control over choices in interactions with others (LeBaron-Black et al., 2022; Santokhie & Lipps 2020). The subjective well-being, mental health, positive, self and negative affectivity, psychological score, psychological wellness. In sum, adolescents with internal LOC are reported to be characterised by better level of psychological well-being in comparison with other adolescents with external LOC. For example, a work by Horvat-Gitsels et al. (2024) revealed that having a strong sense of self-efficacy can promote behaviours that support mental health and personal effectiveness. This is in consistent with the study conducted by Costantini et al. (2021) who observed a negative relation between an internal locus of control and depression and Anxiety in adolescent.

External locus of control makes adolescents feel like they have no control over their lives and hence their reactions are likely to be more passive resulting in worse psychological well-being. Flores et al. (2020) in a study that established the relationship between adolescents' Locus of control, stress levels, and self-esteem found that adolescents with external locus of control had higher stress levels and lower self-esteem. This study supports the earlier finding of Graham et al. (2022) in their examination of the relationship between locus of control and depression where external locus of control was showed positive correlation with psychological distress and negative correlation with overall mental health. Several studies suggest that the interaction between and locus of control with gender may have an impact on psychological well-being. In the light of the studies, Adak and Sarkar (2021) pointed out that the male adolescent students had a significantly higher internal locus of control than the female adolescent students. This makes it understandable that the socialization processes that make boys to be more independent and self-reliant may be affecting the results. Shifrer (2019) in a similar study indicated that there exists an insignificant general difference on psychological well-being between male and female adolescents; however, the internal locus of control was significantly associated with increased levels of life satisfaction, and a decrease in incidences of anxiety and depression among male adolescents.

Female adolescents are likely to score lower on internal locus of control as compared to males, and are more likely to have external locus of control. In a study conducted by Anmol and Rath in 2022, it was observed that female adolescents displayed a greater inclination towards external attribution for both successes and failures. This external orientation was found to be significantly correlated with heightened levels of psychological distress within the female adolescent demographic. For instance, LeBaron-Black et al. in their study conducted in 2022, assessed the level of the subject's anxiety and depressive symptoms depending on gender and locus of control, which was external among the female adolescents, and observed significant differences in these parameters between male and female adolescents. Thus, sociocultural factors also contribute to the relationship between locus of control and psychological well-being. This means the cultural provisions, expectations, and roles given to children based on their biological sex as male or female may influence adolescents' locus of control orientations and, in the process, their psychological well-being (Arkorful & Hilton, 2022). For example, in patriarchal societies in which females are expected to be submissive to males, they are likely to have an external LOC. On the other hand, cultures, which provide equal opportunities for all to prevent the feeling of oppression of one gender by the other, facilitate adolescents of any gender to have a more internal locus of control. In accordance with this concept, a study was conducted by Eriksson et al. (2020), the results of which identified that Gender-egalitarian culture was significantly associated with internal locus of control and better psychological wellbeing of the adolescents.

For example, a study by Cui et al. (2023) investigated how the family environment influences adolescents' locus of control and psychological health. The findings revealed that a family

environment that promotes autonomy and self-efficacy in children is associated with an internal locus of control and improved psychological well-being. On the other hand, family environments of overprotection and control were associated to the external locus of control and to the poor psychological well-being (Peter & Spiess, 2016). This study stresses the need to create healthy and encouraging contexts for youth in order to prevent mental illness. Considering the fact that locus of control has a great influence on Psychological health, Interventions that have an intention of promoting internal locus of control may be helpful for the adolescent. CBT and other person-centred therapeutic approaches that aim at changing maladaptive assumptions as well as enhancing perceived competence have been identified as efficient.

For instance, a study by Cuppari (2018) described how young people who received CBT showed a change in their locus of control towards being more internal, and thereby enhanced psychological wellbeing. Another factor that seems to promote the development of an internal locus of control in adolescents is the inclusion of school-based programs focused on enhancing skills for managing stress, anger, and other challenges. Research done by Parray and Kumar (2017) has noted that such programs have achieved the goal of enhancing stress reduction and increasing self-esteem of adolescents. These interventions are particularly vital for adolescent females, who often exhibit a greater tendency to internalise their surroundings and experience higher levels of psychological dysfunction.

Research Problem

Mental health of adolescents constitutes an important consideration for the society stakeholders among them being the educators, parents and policy makers in Anambra State in Nigeria. Adolescence is a developmental stage the is characterised by physical, emotional and social changes hence reasons why one needs to know what contributes to the mental health status of adolescent individuals. Locus of control may be described as a hypothetical construct of a psychological character, which could represent the amount of control, in regard to the occurrence of some events in one's life, an individual has. However, to the author's opinion, there are no research papers currently available focusing on the relationship between the concept of LOC and the level of Psychological Wellbeing of adolescents in Anambra State, Nigeria and the moderating role of gender. It is in this regard that this study intends to come in handy by exploring on the effect that locus of control has on the psychological health among male and female adolescents in the region in question.

First, adolescents' mental health is an emerging problem internationally with enhanced common anxiety, depression, and several psychologic disorders (Hossain et al., 2022). From this growing literature, it emerged that Nigeria's socio-economic, cultural and educational backdrop endorses mental health challenges among adolescents in Nigeria. It is crucial to comprehend the psychological factors that define the individual's quality of life to design proper approaches (Imbur, 2024). Secondly, the present studies on locus of control primarily focus on samples from the Western world, leaving a gap in research on the construct in African settings, with limited studies specifically in Nigeria. Culture is a major determinant of this locus of control and therefore this dissertation brings into perspective particular analysis of the socio-cultural factors in Anambra State. The findings of this study will be useful in filling the existing gap in the literature on locus of control and adolescent mental health in Nigeria.

Thirdly, while there is research supporting gender differences in locus of control and psychological well-being in Western societies, there is a lack of data on these issues within Nigerian

culture. Gender expectations within society and culture can also have a varied influence on locus of control in male and female adolescent learners as stated by Churchill et al. (2020). Having this knowledge will enable us to provide more targeted and effective mental health support services for all students, regardless of gender. There is still more to be learnt about locus of control in relation to psychological well-being; actual knowledge gaps or voids that have been highlighted with reference to Anambra State. The study of the relationship between locus of control and psychological well-being of adolescent in this area is not well understood. Cheng et al. (2013) disclosed that many related researches have been done in the western or other non-African area that can barely represent the Nigerian adolescent. Additionally, while existing research studies have examined the differences in locus of control and psychological well-being between males and females, there is a noticeable gap in the literature when it comes to exploring these gender dynamics specifically within the context of Anambra State. Neglecting to address this gap hinders the progression of implementing gender-sensitive interventions for treating mental health disorders effectively.

Moreover, the relationship between cultural effects and the locus of control is not appropriately discussed. It is therefore important to assert that Nigerian adolescents have a distinct culture, family related and social norms that influence their locus of control in a way that sets them apart from their counterparts in other parts of the world. This work poses the question of seeking these cultural mechanisms as well as the possible implications for mental health. Therefore, interventions aimed at enhancing adolescent mental health in Anambra State may be ineffective, as they lack an understanding of the factors that impact adolescents in this particular demographic. Additionally, there is ongoing research that examines the specific factors affecting this population, including their locus of control orientation.

Research Focus

1. Find out whether the locus of control predicts adolescents psychological well- being of secondary school adolescent in Anambra State.
2. Find out whether the locus of control predicts psychological well-being of male and female senior secondary school adolescents Anambra State.

Research Questions

The study was guided by following research questions:

1. How does the locus of control predict psychological well- being of secondary school adolescent in Anambra State?
2. How does the locus of control predict psychological well-being of male and female senior secondary school adolescents Anambra State?

Hypotheses

The following five null hypotheses were formulated and tested at .05 level of significance:

1. The locus of control is not significant predictor of psychological well- being of senior secondary school adolescents in Anambra State.
2. The locus of control is not significant predictor of psychological well- being of male and female senior secondary adolescents in Anambra State.

Literature Review and Theoretical Overview

The study is based on the Multidimensional Well-Being Theory proposed by Martin Seligman (2011). This theory, also known as the PERMA model, posits that the well-being comprises five core elements: positivity, with the themes of engagement, relationship, meaning, and achievement. All of these aspects are crucial to people’s health and can be attained individually, although all of them are interdependent. Positive Emotions refer to aspects such as pleasure, thankfulness, and satisfaction. It is important for one to be actively involved in activities, loosely translated as engagement. Interpersonal interactions regard referring to sound interpersonal relations with other people. The purpose, as part of meaning, is the search for reasons for existence and the co-actualisation is the endeavour to attain objectives.

Using the Seligman’s (2011) theory of psychological well-being and the terminology of internal and external locus of control, one can identify how the internal locus of control could positively influence each of the PERMA factors and increase the level of psychological well-being among the adolescents in Anambra State, Nigeria. Specifically, the internal locus of control is likely to lead to a higher level of positive emotions in adolescents. They may be more productive in school as well as in other sports-related or co-curricular activities because they make efforts that yield results. They can be enabled to take responsibility over their social interactions that results into positive and meaningful relationships. From that point of view, a feeling of significance can arise from their confidence in their ability to influence their life circumstances. Additionally, their desire for success will be heightened as they see themselves as capable of chasing and achieving personal aspirations. Therefore, fostering an internal locus of control could potentially boost the mental well-being of teenagers in alignment with Seligman's PERMA theory.

Table 1

The Description of Empirical Results

Author(s) and Year	Research Design	Population and Sampling	Method of Data Collection	Method of Data Analysis	Findings
Siggayo (2023)	Descriptive, cross-sectional	122 student-athletes selected via purposive sampling	42-item Psychological Well-Being by Carol Ryff, 12-item Grit Scale by Angela Duckworth, 40-item Adult Nowicki-Strickland Locus of Control Scales by Steve Nowicki and Bonnie Strickland	Descriptive statistics (mean) and inferential statistics (Pearson r)	Grit has a mean score of 3.16 (SD = 0.43). Locus of control exhibits a mean score of 19.52 (SD = 2.46), indicating an external locus of control. Grit is positively correlated with all dimensions of psychological well-being. Locus of control is not significantly related to autonomy and environmental mastery but has moderately significant relationships with

						other dimensions of psychological well-being.
Filipiak and Łubianka (2024)	Cross-sectional	1016 students (49% boys, 51% girls)	Picture Based Personality Survey for Children, Locus of Control Questionnaire	Correlation analysis		Conscientiousness correlates highly with locus of control in success situations for both genders. Neuroticism negatively correlates with both types of locus of control. Gender moderates the relationship between openness to experience and locus of control of successes, stronger in girls.
Luque et al., (2023)	Longitudinal and cross-sectional	593 cardiac outpatients (323 at follow-up)	Multidimensional Health Locus of Control Scale, Positivity Scale, Hospital Anxiety and Depression Scale	Spearman rank correlation, structural equation modelling		Internal health locus of control and positivity are negatively associated with anxiety and depression, and positively associated with health-related quality of life. Positivity negatively affects anxiety and depression and, along with internal health locus of control, positively affects health-related quality of life longitudinally.
Hamidizadeh et al., (2023)	Cross-sectional	219 nursing students	Oxford Happiness Questionnaire, Locus of Control Questionnaire, General Health Questionnaire, Psychological Well-Being Questionnaire	Structural equation modelling using AMOS and SPSS software		Psychological well-being partially mediates the relationship between locus of control ($\beta = 0.08$, $p < 0.05$) and general health ($\beta = -0.24$, $p < 0.001$) with happiness.
Farhan et al. (2024)	Cross-sectional	220 Muslim undergraduate students (111 males, 109 females)	Psychological Well-Being Scale (PWBS), Muslim Religiosity Scale, Multidimensional Locus of Control	Pearson product correlation, multiple regression,		Intrinsic religiosity and internal locus of control positively relate to psychological well-being, while

			Scale, Brief Resilience Scale	moderation analysis, t-test	extrinsic religiosity and external locus of control negatively relate to psychological well-being. Resilience moderates the relationship between religiosity and psychological well-being but not between locus of control and psychological well-being. No significant gender differences in psychological well-being.
Shin and Lee (2021)	Cross-sectional	600 adults over 20 years of age	Online survey	Hierarchical regression analysis, SPSS Process Macro	Internal health locus of control negatively affects mental health problems. Mental health problems mediate the relationship between internal health locus of control and subjective well-being. Strengthening internal health locus of control and addressing mental health issues can improve subjective well-being.
Churchill et al., (2020)	Longitudinal	Data from HILDA survey	Household, Income, and Labour Dynamics in Australia (HILDA) survey	Blinder-Oaxaca decomposition	Gender differences in locus of control contribute significantly to the gender gap in mental health, favoring males. Enhancing internal locus of control in females could potentially reduce this mental health gender gap.
Farnier et al., (2021)	Multiple studies (exploratory, confirmatory)	Study 1: 349 participants, Study 2: 341 participants,	WB-LOC12 Scale	Exploratory and confirmatory factor analysis	The WB-LOC12 scale demonstrates solid reliability and validity, with a confirmed three-

			Study 3: 586 participants			factor structure. The scale is applicable in diverse cultural contexts and can be used for further research on well-being locus of control.
Flores et al., (2020)	Cross-sectional	3,664 schoolchildren (primary and secondary)	Short version of Nowicki-Strickland scale, self-control scale, and Child Adolescent Evaluation System (SENA)	Correlation analysis, regression analysis		Greater self-control is associated with lower levels of internalizing and externalizing problems. Higher external locus of control correlates with higher levels of these problems. Self-control, locus of control, and gender together predict internalizing and externalizing problems, but gender is not a predictor in all models.
Würtzen et al., (2022)	Comparative study	Danish populations: 2016 (n = 1656), 2017 (n = 3366), 2020 (n = 1538)	Surveys on general health, mental well-being, and locus of control	Two-tailed tests of proportions		Younger men and women, as well as elderly women, reported lower mental well-being during the pandemic. Both men and women in 2020 had lower levels of internal locus of control compared to the 2017 sample. No significant differences in general health between populations. Further longitudinal studies are needed to investigate long-term effects.

Source: Compiled by the authors.

The synthesised studies reveal that the locus of control (LoC) significantly influenced psychological well-being (PWB) across different populations. Internal LoC generally correlates positively with PWB, while external LoC is linked to poorer mental health outcomes (Churchill et al.,

2020; Filipiak & Łubianka, 2024; Siggayo, 2023). Studies also indicate that gender moderates the relationship between LoC and PWB, with females often exhibiting lower internal LoC and poorer mental health compared to males (Churchill et al., 2020; Shin & Lee, 2021). In addition to that, studies revealed that personal characteristics like grit, resilience and religiosity moderate the relationship between LoC and PWB (Farhan et al. 2024; Hamidzadeh et al., 2023). However, the extent to which these dynamics manifest among adolescents in Anambra State, Nigeria remains largely unexplored. The next step is to determine if there is a notable correlation between Locus of Control (LoC) and Psychological Well-Being (PWB) among secondary school students in Anambra State.

Previous studies show a positive correlation between internal locus of control (LoC) and psychological well-being (PWB) in various countries, with interventions in education and mental health enhancing these traits. However, conflicts arise from differing theories and methodologies, such as the influence of socioeconomic and cultural factors. Research gaps include a lack of longitudinal studies and culturally-specific investigations, particularly in African contexts like Nigeria. While Western studies provide comprehensive insights, there's limited understanding of LoC and PWB dynamics in Nigeria. Addressing these gaps could lead to more effective, culturally tailored interventions for adolescent mental health. It will offer insights about LoC for adolescent mental health that may help in specific designs to boost PWB among this populace.

Research Methodology

General Background

This correlational study examined the relationships between the self-esteem, locus of control, and psychological well-being among Senior Secondary schools in Anambra State, Nigeria. Using validated scales, data were collected and analysed with regression techniques in order to determine the predictive power of self-esteem and locus of control on psychological well-being.

Sample

The study's population comprised Senior Secondary Two (SS2) students in public schools in Anambra State, Nigeria, with a sample of 763 students (396 male and 367 female) drawn using Multistage and Stratified Random Sampling. Twenty percent of the sampled schools were selected from each educational zone through proportionate random sampling to ensure gender representation. This state was chosen because negative behaviours such as cultism and drug abuse are some of the behavioural issues witnessed amongst adolescents. Anambra State is one of the most populous federating units in Nigeria made up of artisans, traders, industrialists, farmer and civil servants and we are aware that there are 262 public secondary schools in the state being controlled and managed by the State Post Primary Service Commission.

Instrument and Procedures

The assessment instruments included the Locus of Control of Behaviour Scale (LCBS) and Psychological Well-Being Scale (PWS). The LCBS, developed by Craig et al. (1984), consisted of 17 items with 5 response options ranging from not at all to extremely. The PWS, adopted from Ryff's (1989) model, included 30 items focusing on 6 dimensions of well-being. Both instruments underwent a validation process by experts, revealing Cronbach's alpha coefficients of 0.86 for the PWS. Data was collected by the researcher and 5 trained assistants, distributing questionnaires by hand and achieving a 98% response rate.

Data Analysis

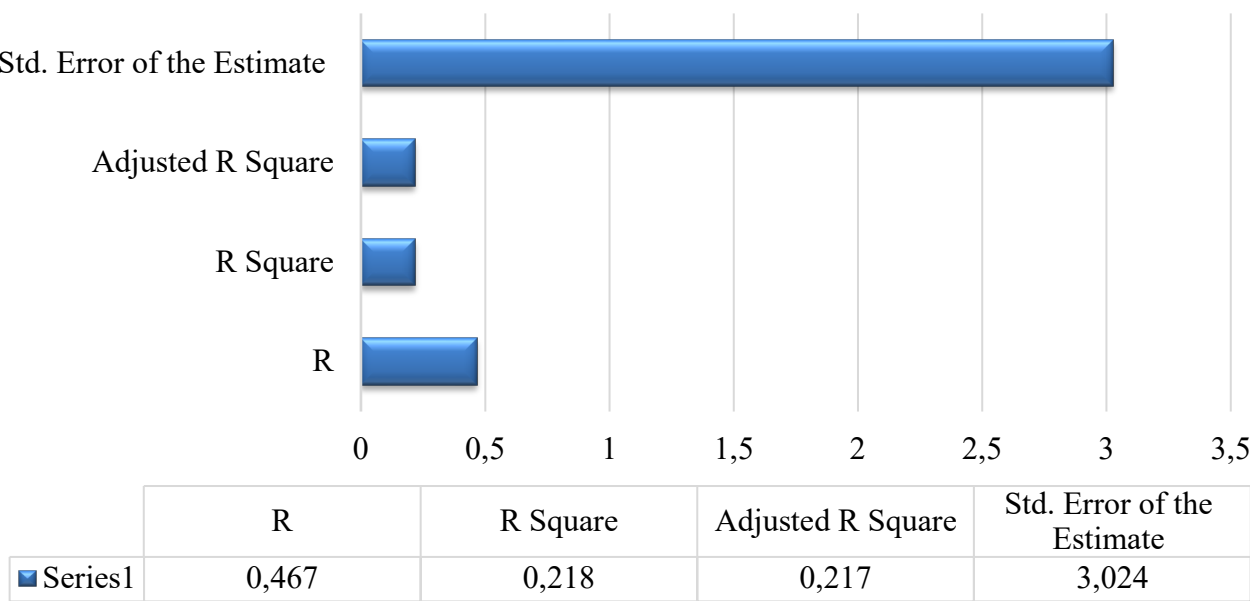
The study employed the correlation design to identify the correlations between self-esteem, locus of control and self-psychology of senior school students. The study used this method to assess the impact of self-esteem and locus of control on psychological well-being, establishing specific criteria for significance. Any regression coefficient above 0.5 was deemed a significant predictor, and any p-value below 0.05 was considered statistically significant. This methodological approach provided insights into the psychological factors affecting adolescents' quality of life in Anambra State's sociocultural context.

Results

Research Question 1: *How does the locus of control predicts psychological well-being of senior secondary school adolescents in Anambra State?*

Figure 1

Regression Coefficient r on the Locus of Control and Psychological Well-Being of Secondary School Adolescents



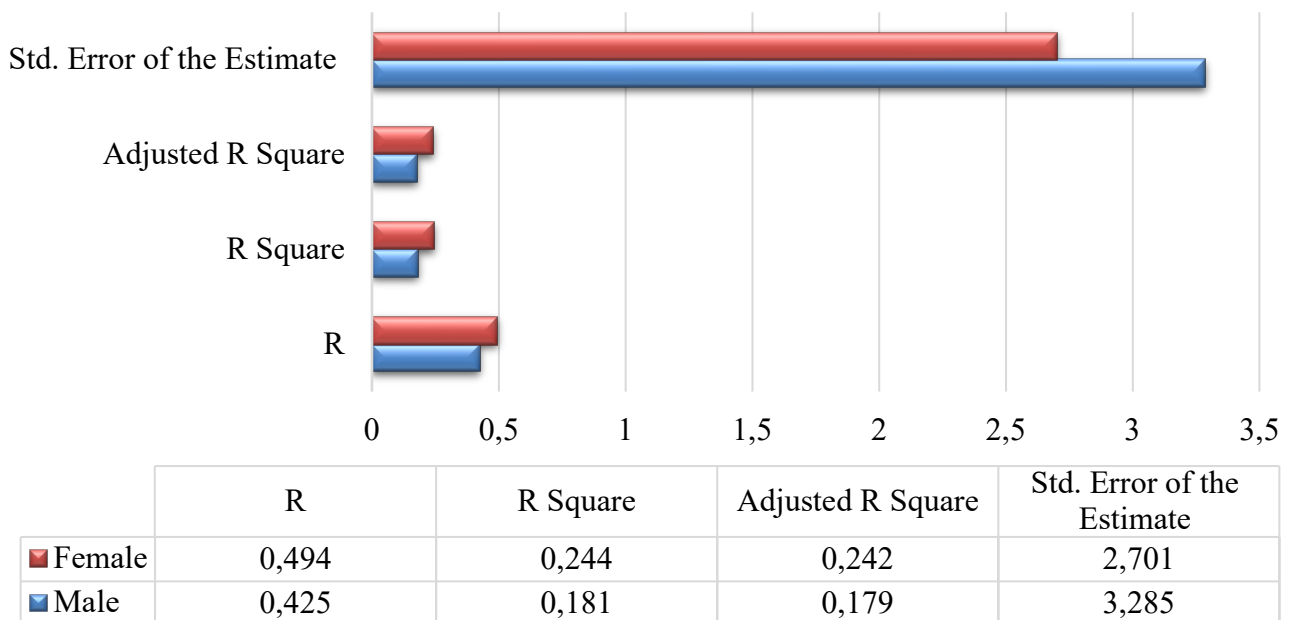
Source: Authors' own development.

The results of the regression analysis examining the link between locus of control and psychological wellbeing in secondary school adolescents are depicted in figure 1. The correlation coefficient (r) is 0.467, indicating a moderate positive correlation. The R Square value of 0.218 suggests that locus of control accounts for 21% of the observed variation in psychological wellbeing. This means that the Adjusted R Square of 0.217 reflects the minimal change in the model with regards to the predictors involved. The standard error of estimate is 3.024, serving as a measure of precision in showcasing the average distance of observed values from the regression line.

Research Question 2: How does the locus of control predicts psychological well-being of male and female senior secondary school adolescents in Anambra State?

Figure 2

Regression Coefficient r on the Locus of Control and Psychological Well-Being of Male and Female Secondary School Adolescents



Source: Authors' own development.

The data on the correlation between locus of control indicated in figure 2 reveals that the correlation coefficient between locus of control and psychological well-being of male and female school adolescents are .425 and .494 with coefficient of determination of .181 and .244 respectively. This shows that 18.1% and 24.4% change in male and female school adolescents' psychological well-being is explained by locus of control. The regression Coefficient r of dot is 0.425 and 0.494 for the male and female student respectively revealed that locus of control is of moderate importance in the psychological well-being of male and female senior secondary school adolescents in Anambra state.

Hypothesis 1: *The locus of control is not a significant predictor of psychological well-being of senior secondary school adolescents in Anambra State.*

Table 2

Test of Significance of Simple Regression Analysis with the Locus of Control as Predictor of Psychological Well-being of Secondary School Adolescents

Predictor	R	R ²	F	P-value	Remark
Locus of Control	.467	.218	207.924	.000	*S

Note. S - Significant.

Result on Table 2, showed that the simple regression coefficient (R) is .467 while the R^2 is .218 showing that locus of control makes 21.8% contribution to the variance in secondary school adolescents' psychological well-being. The $F(1/749) = 207.924$ and the p -value of .000 is less than

.05. Hence due to the fact that the p - value = $0.00 < 0.05$ (the stipulated test of significance) the following conclusion can be made. Based on the findings therefore at 0.05 level of significance null hypothesis was rejected. Therefore, locus of control is a vital determinant of psychological wellbeing of senior secondary school adolescents in Anambra State.

Hypothesis 2: *The locus of control is not a significant predictor of Male and Female psychological well-being of senior secondary school adolescents in Anambra State.*

Table 3

Test of Significance of Simple Regression Analysis with the Locus of Control as Predictor of Psychological Well-being of Male and Female Secondary School Adolescents

Gender	Predictor	R	R ²	F	P-value	Remark
Male	Self Esteem	.425	.181	85.510	.000	*S
Female	Self Esteem	.494	.244	115.753	.000	*S

Note. S – Significant.

Referring to the table 3, the simple regression coefficient of male student is .425 while the R² is the prevalence of self-medication in this study among the students, as well as the high recovery rate of the sustained items, would suggest that the R² is 181 showing that 18. Being truly a predictor, locus of control accounts for 1% change in male secondary school adolescents' psychological well-being; females' basic regression coefficient (R) is. 494 The T2 is .177 while the R² is .244 showing that 24. HC analyses reveals that change of 4% in female secondary school adolescent's psychological well-being is accounted by locus of control. Whereby the $F(1/389) = 85.540$ and $F(1/360) = 115.753$. Mean scores of 753 for male and female secondary school adolescents' respectively and the p-value ($0.00 < .05$); therefore, the calculated p-value equivalent is smaller than the stipulated level of 05. Whereby the null hypothesis was rejected with the help of 05 level of significance. Thus, while identifying that locus of control is indeed a major subject that defines the psychological status of the male and female senior secondary school adolescents in Anambra State.

Discussion

The finding of the study revealed that the locus of control is a moderate predictor of psychological well-being of senior secondary school adolescents in Anambra State. This supported the finding of Saheera and Mainkandan (2016) who reported that the relationship between locus of control and psychological well-being is moderate. This is in disagreement with the findings of Harshitha et al. (2018) and Weintraub et al. (2015) which revealed that low and poorer relationship was found between Locus of Control and Psychological well-being. This also went against the research carried out by Yinghua and Lin (2015) on locus of control and their negative correlation on psychological well-being. This may be due to the difference of the area that the two studies were carried out because studies show that findings may vary depending on geographical location. The self-control was also discovered to have a positive correlation with adolescents' psychological health; perhaps because locus of control empowers students to effectively navigate daily life challenges. The locus of control leads adolescent to think that personal efforts, behaviours or skills are responsible and manage or impact on some events and thus; take full responsibility of their actions to manage their psychological well-being.

Analysis therefore demonstrated that locus of control is a crucial factor in predicting the psychological well-being of senior secondary school adolescents in Anambra State. This finding is consistent with the results of a study by Mobarakeh et al. (2015), which found a strong correlation between adolescents' locus of control and their psychological well-being. However, the finding did not agree with the finding of Shaheen et al. (2020) according to which there was insignificant relationship between LOC and Psychological well-being. This also contrast with the result of Weintraub et al. (2015) which revealed that there was insignificant correlation between locus of control and psychological well-being. Perhaps, the conflict in findings of the two studies may be attributed to the variations in the geographical setting of the studies conducted.

Consequently, this study established that locus of control is a moderate determinant of the level of adolescents' psychological well-being of male senior secondary school students. This was contrary to the prior study that was conducted by Nwankwo et al. (2017) which shows that locus of control is significant factors affecting psychological well-being on the basis of gender. This contradiction could be explained by difference in participants and geographical location. The outcomes can be easily understood when considering that both male and female students perceive themselves as having control over their actions. It is not unexpected that locus of control moderately influences the psychological well-being of male and female students, as they may believe that the results of their behaviour are tied to their beliefs in chance, luck, or fate. Both male and female students demonstrate a mix of internal and external control in different situations, which in turn impacts their psychological well-being.

Subsequent studies show that locus of control has a link with psychological well-being of male and female senior secondary school adolescents of Anambra State. This aligns with the findings of the study conducted by Saheera and Mainkandan (2016), which demonstrated a notable correlation between the locus of control and the psychological well-being of both male and female students. This may be due to fact that females being more sociable than males. The finding also corroborated the finding of Okwaraji et al. (2018) who reported that a significant association was equally noticed between gender and the locus of control. The two studies were carried out in the same country and this may account for the agreement in findings.

Limitations of the Study

The analysis of the locus of control and psychological well-being of adolescents in Anambra State has its limitation that have conflicting effect on generalisation of the findings. Firstly, due to the nature of the study, which is a correlational study, one can only conclude a correlation between the variable of interest, locus of control, and psychological well-being, but cannot conclude causality because other variables may influence both of these variables at the same time. Furthermore, utilising self-report measures such as the LCBS and PWS can cause response bias or socially desirable responding and hence must be an issue of concern regarding the accuracy of data reported.

Furthermore, the study's findings may not be representative of adolescents in private schools or those from various socio-economic backgrounds. The focus on participants solely from public schools in Anambra State, Nigeria limits the ability to generalize the results beyond this specific context. Additionally, although attempts were made to include diverse gender representations, the study primarily concentrated on male and female adolescents, potentially neglecting other gender identities. These constraints highlight the need for caution when applying the study's conclusions broadly. Future research should strive to include a wider range of participants from different cultural

backgrounds and educational settings, utilize longitudinal methodologies for clearer causality, and incorporate a more inclusive range of gender identities for better applicability in diverse social and cultural settings.

Conclusions and Implications

This study investigated the impact of the locus of control on the psychological well-being of male and female secondary school adolescents in Anambra State. The results revealed that the locus of control is a significant predictor of psychological well-being for both male and female students. The findings of the study showed that locus of control is an independent and common determinant of psychological well-being regardless of the gender of the students. To be precise, the variable which provided the maximum explanation was locus of control at 21 percent. Percent of the total variance in adolescents' psychological well-being explained by parental solicitation: 8%, 18%. Among male respondents, 1% said they had been intimate, 24% among females' respondents said that they had been intimate with their partners during pregnancy. 4% among females. These outcomes imply that teenagers who hold the perceived self-organisational control over various life events are likely to exhibit better psychological health. The findings of the study align with previous research indicating a moderate correlation between locus of control and psychological well-being. It emphasizes the importance of promoting the development of an internal locus of control in adolescents to enhance their psychological well-being. Additionally, the study highlights the need for a gender-sensitive approach to education and psychological support to address gender differences in these outcomes.

Therefore, in the light of the bearing that the locus of control has surfaced with the selves of adolescents' psychological functioning, educational program should contain facets that enhance the internal locus of control in students. This can help them cultivate a more positive mindset towards their overall well-being and academic journey. More studies should be conducted on other factors that may determine the adolescents' psychological wellbeing and the long-term outcomes of the interventions focusing on the improvement of the locus of control. Moreover, the extension of this study to other geographical regions and cultural settings may enrich the understanding of the interaction between locus of control and psychological health.

Suggestions for Future Research

Future research designs would incorporate repeated measures and follow up to determine the casual manner as well as effects of change in self-esteem, internal locus of control, and psychological well-being before, midway through, and after an intervention designed to increase internal locus of control and psychological well-being scores. Further research should be conducted to assess out-of-school youths, tertiary education students, and younger youths to determine if the results are consistent across different age groups and education levels. Such practices would ensure that research efforts focused on developing intervention strategies that are customized for different populations are promoted.

Another important recommendation would be the development of intervention programs targeted towards internal LOC and self-esteem for adolescents, as well as the assessment of their effectiveness. Such programs could include educational workshops, counselling sessions and other forms of practice that enhance personal responsibility, coping mechanisms, and pro-social behaviours hence, therapeutically improving the overall mental health of students. Using both quantitative and qualitative data in the research would be advantageous since the two would

complement each other. Despite the fact that quantitative tools can indeed highlight trends and correlations of quantitative data, qualitative tools like interviews and focus groups can reveal more descriptive and explanatory information about students' experiences, perceptions, and reasons for behaviours and attitudes.

Examining effects of digital technology and social media on self-esteem, locus of control and psychological well-being of adolescents is gradually receiving more attention. Considering the fact that people spend a good deal of time in front of their screens, it becomes essential to know more about the impact of digital platforms in order to create appropriate interventions. Another important aspect to consider is the impact on policies. It is crucial to advocate for mental health education in schools in order to equip students with the necessary skills to navigate challenges and foster a positive mindset. Implementing such policies would not only increase awareness and understanding of mental health issues, but also improve the overall mental well-being of students. In addition, it is imperative to recognize the significance of family and community support systems. By involving parents, community members, and implementing intervention programs, the psychological well-being of adolescents participating in research studies can be greatly enhanced. By addressing these factors, future research can provide a comprehensive understanding of the factors influencing adolescents' mental health and how to effectively promote their psychological well-being.

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Conflict of Interest

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