

Adolescent's Attitude Towards Biopsychosocial Changes and their Self-Esteem in Langata Sub-County, Nairobi-Kenya

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ABSTRACT

This study examined adolescents' attitudes towards biopsychosocial changes and self-esteem at Maono Education Centre Secondary School Langata-Nairobi, Kenya. The person-centred theory of Carl Rogers and the Psychosocial Theory of Human Development by Eric Erickson guided the study. The study adopted a correlational design to establish the relationship between the attitude of adolescents towards biopsychosocial changes and self-esteem. The following objectives guided the study: to determine the adolescents' attitude towards their biological changes, the adolescents' attitude towards the experience of psychosocial changes, to find out the level of self-esteem among adolescents, and to establish the relationship that exists between the adolescent's attitudes towards biopsychosocial changes and self-esteem. The target population was all the 106 students in Maono Education Centre since the population was small. The researcher's main tool for data collection was a survey questionnaire on the Rosenberg Self-esteem Scale (RSE). This scale was first adopted and used in 1965 for High school Students. It used the Body Image - Acceptance and Action Questionnaire (BI-AAQ) by Sandoz Wilson to measure adolescents' attitudes towards biopsychosocial changes. The study used descriptive analysis to analyse the quantitative data using tables, frequencies, and percentages. The study used the Pearson Product Moment correlation to analyse the relationship between isolated attitudes towards biopsychosocial changes and self-esteem in this study. The findings indicated that most adolescents do not have body image and psychosocial disturbances. It also indicated that more than half of the adolescents have high self-esteem. Finally, the study concluded that no significant relationship exists between attitude towards biopsychosocial changes and adolescents' self-esteem. This means that adolescents' attitudes towards biopsychosocial changes do not have a strong influence on their self-esteem as predicted.

Keywords: Attitude, biopsychosocial, adolescents, self-esteem, relationships

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Background of the study

Adolescence is a critical period in a person's development leading up to maturity, during which profound behavioural, psychological, and physical changes exist. Adolescents experience a surge in body image concerns during this time because of peer and family pressure. Because of its peculiarity, it requires an atmosphere of love and understanding to function well. As a result, adolescents are often in a state of dilemma due to their unique nature and tend to question a lot about these experiences. This is the reason the study dealt with the attitude of adolescents towards various biopsychosocial changes experienced during the period of puberty and their self-esteem.

The adolescent's behavioural issues are evident from data about social ills highlighted by Özdemir et al. (2016), such as drug abuse and substance abuse, sexual behaviours, violence in schools, suicide tendencies, alcoholism, and induced changes in behaviour or lifestyle as a coping mechanism such as alterations in physical appearances. This could be one of the reasons many of the youths easily experience stress and depression. Thus, Özdemir et al. (2016) argue that the changes in this period give people a new body, personality and identity.

Consequently, a healthy way of passing this period will positively affect individuals' perspectives on life. Since self-esteem is one of the crucial growth elements during this stage, this study investigated how these changes may have a relationship with it. This is because some researchers have argued that there is a link between self-esteem and children's experiences. Doherty and Hughes (2013) explained that when the child receives positive feedback from friends and significant others, it improves self-image and vice versa. Van der Crujisen et al. (2021) argued that low self-esteem can have detrimental effects on young people's mental health if they do not navigate the experiences successfully; they can experience stress, anxiety and depression, as well as social isolation and academic challenges just like high self-esteem can promote mental well-being and mental health.

The biopsychosocial approach used in this study is a term coined from three words: biological, psychological and social experiences of adolescents. Biological, in this sense, means physical changes like size, height, shape and sexual maturation (body image). Physical appearance is based on the fact that internal negative evaluation of one's physical appearance or body image dissatisfaction may result in negative affective symptomatology, including depression, anxiety, and hostility (adjustments to one's mental and emotional state) that reflect the psychological aspects. At the same time, relationships, identity, social duty and responsibility all play a part in social change in the life of adolescents (Stitz, 2013, as cited in Presnell et al., 2004).

Drennan (2021) and Hughes (2018) pointed out further that Puberty is a time of transition, including periods of joy and crisis. Hughes asserts that it is the period in which adolescents continue to question and search for meaning that may threaten the security, protection, and affection they enjoy in the infancy stage. This transition period is vital in building adolescents' self-esteem because it is the hallmark of adolescents' growth and development. The attitude attached to the changes plays an important role in one's identity.

Self-esteem is a feeling of value or self-worth (Okpalaenwe, 2023). Similarly, it is how one feels about himself or herself. This has to do with what one thinks he or she is worthy of and what they deserve in life. How we think and feel about ourselves may depend on the experiences we have had and the feedback we received from peers and significant others. This is supported in the writings of Feist and Feist (2009) when they argued that a child's self-esteem is influenced highly by the treatment the child receives from parents and the experiences they go through as they grow.

This explains why the adolescent's experiences have been chosen for this study due to their implication on the child's formation. Berger (2008) highlights adolescent psychosocial development as a quest for identity; that is, identity versus diffusion as a time of psychological dilemma of life as described by Erikson in the stages of human development. Hence, some easily cope with the changes and develop high self-esteem. In contrast, others find it difficult to cope, especially when faced with the reality of society through interaction with peers and may develop low self-esteem. Birkeland et al. (2012) argue that "self-esteem usually rises from mid to late adolescence for most teenagers, especially if they feel competent in their peer relationships, appearance, and athletic abilities".

Arnett (2019) and Santrock (2016) believe that secondary schools are unique settings where adolescents go through various pubertal experiences that influence their personality negatively or positively. This is because it is the time they are faced with the outside world and its demands, which may turn to contradict or favour developmental changes. Therefore, they become conscious of what is happening within them, especially as they interact with other peers based on the feedback they receive. For example, a good number of girls go through what is called the sexual maturation process, where a child starts developing breasts, and some become too conscious about their body image. These might be very discomfoting and disgusting if they disturb their system. Boys go through the sexual development process, too, including the growth of hair around the chin and chest as they take on what is known as the muscular form. Both boys and girls are likely to experience low or high self-esteem depending on how they perceive these experiences and the feedback concerning the changes. This is why this study has set out to examine the influence the attitudes of adolescents towards biopsychosocial changes may have on adolescents' self-esteem during their secondary school period.

Kibera in Langata Sub-county, Nairobi-Kenya, has been chosen for this study because it is a mixture of boys and girls who are susceptible to these experiences and as boys and girls interact with one another, there might be a likelihood that they will become more sensitive to whatever is happening within and outside of them. Navigating this cloudy period successfully may boost their self-esteem; otherwise, their self-esteem may be affected negatively. Egunjobi (2010) highlights the critical adolescent period, characterised by changes and struggles influenced by biological, psychological, social, and spiritual factors. As parental influence diminishes and peer impact increases, youths face identity crises as they try to define themselves. This may imply that they might be prone to certain personality traits as a means to cope with these changes if they are not comfortable; they may get into drugs, alcoholism and aggressive behaviour. Santrock (2016) also opined the significant role of family, peers, and schools in adolescent self-esteem development. Strong family cohesiveness increases self-esteem, while well-to-do youth may think highly of themselves. Peer judgment also plays a crucial role in self-worth, with peer approval increasing self-worth.

Maono Education Centre Secondary School is a private Secondary School established on 5th February 2007 by the initiative of several Christian men and women. They saw the need to join forces to solve various problems affecting their community. They were moved by deteriorating poverty, which was marked by illiteracy, teenage parenthood, malnutrition, drug abuse and insecurity, which were causing havoc in the slums, among other challenges (Njeru & Mugi, 2018). The reality of their lives would most likely influence adolescents in this school. This is one of the reasons this school is selected for the studies to examine the influence of the pubertal experience on their attitude from the biological, psychological and social point of view on their self-esteem. Maono Education Centre Secondary School (MECSS) is a co-educational secondary school that

gives rise to interpersonal relationships; it is one of the determining factors for self-esteem as boys and girls mingle among themselves, giving rise to a quest for identity and role confusion.

Statement of the Problem

The primary concern driving this study is the prevalent challenge among adolescents in grappling with self-esteem, particularly during puberty. This period often prompts questioning and the search for life's meaning, influenced by biopsychosocial changes surrounding physical transformations, such as body image and psychosocial experiences. It has been noticed that some of the students experiencing puberty exhibit signs of anxiety, loneliness, aggression, identity issues, stress, and drug abuse during the puberty stage. They exhibit indications of feeling disconnected and lacking in self-confidence. Though these traits and habits cut across most adolescents, the students around the locality of Langata sub-county are not exempted. As a result, they manifest signs of low self-esteem, especially when asked to perform roles such as leadership responsibility, taking initiative, showing respect for themselves and having healthy relationships. This is supported by research by Chen and Ma (2023), who argued that adolescents' self-esteem substantially influences many aspects of their psychological functioning and mental health and can be influenced by their physical attributes or attractiveness and psychosocial experiences.

Since the students in this locality are in a critical period of development, where physical changes and psychosocial experiences are expected to be more pronounced, there is a possibility that these can impact their level of self-esteem because this stage is associated with a lot of adolescents' experiences which is greatly influenced by their attitudes towards them. It appears that the adolescents' self-esteem has not been addressed from the attitude towards the biopsychosocial perspective in the study area. According to Gitonga (2013) and Aremu et al. (2019), self-esteem is common among adolescents in secondary schools and is sometimes related to academic performance. According to Davison and McCabe (2006), adolescents who have a poor body image are more likely to experience anxiety and lower self-esteem than those who have a good body image. The biopsychosocial changes and their self-esteem are evident in the following areas sense of identity, level of confidence, sense of belongingness, stress, aggression, anxiety, self-awareness, and self-knowledge.

Despite the notable biopsychosocial changes experienced by adolescents and their impact on self-esteem, there is a scarcity of studies investigating these changes and their correlation with self-esteem levels in the study area. Hence, this study aimed to fill this gap by exploring the relationship between biopsychosocial changes and adolescents' self-esteem.

Research Questions

What is the relationship between the attitude of adolescents towards biopsychosocial change and their self-esteem in Langata Sub-County, Kenya?

Theoretical Framework

This study is informed by Carl R. Rogers's humanistic theory, developed in the early (1940s) and Eric Erickson's Psychosocial Theory of Development (1950). These two theories are used for this study because they complement each other in their view of a healthy or unhealthy personality, specifically on self-esteem. The theories explain the experiences youth and children pass through as they grow, including biological, psychological, and social experiences. Humanistic theory by Carl Rogers gives a vivid appraisal of how human experiences of freedom, choices, values and goals can contribute to developing a healthy personality. On the other hand, Erickson explains how human growth, development and maturity stretch beyond early childhood through adolescence to adulthood. In adolescence, growth and development are governed by personal identity, psychological maturation and social development. Both theories focus on how these experiences shape a child's self-esteem depending on how he or she navigates the experiences.

The behavioural patterns of adolescents in the Kibera locality are just like those of any other adolescent stemming from childhood experiences. Adolescent growth and development come with freedom, choices, values, and goals. They are governed by personal identity, sexual maturation, and psychological and social development, which give rise to self-image or concept depending on how they navigate this crucial period.

Review of Related Literature

Adolescence is a time when adolescents are preoccupied with questions of who they are, probably due to changes experienced at this important stage in life. Self-esteem cannot happen in isolation; some factors can influence self-esteem positively or negatively. That is why Erickson calls it the period of confusion. In other words, during adolescence, we experience a "psychological moratorium, where teens put commitment to an identity on hold while exploring the options" (Lally & Valentine-French, 2019).

According to Kaur et al. (2019), attitudes are evaluative reactions to persons, objects, and events. This includes the beliefs and positive and negative feelings possessed about something. Attitudes can be positive, negative, or neutral, influencing how individuals perceive and interact with the world. Attitudes are typically formed through experiences, upbringing, culture, and social influences, and they can shape behaviour and decision-making. Puberty is a crucial stage for adolescents, and it can affect their attitude because of the different experiences, biological, psychological, social, and environmental. As such, it has attracted the attention of many scholars worldwide to articulate the changes in adolescence and the behaviours concerning these changes. This section then examines adolescents' attitudes towards biological changes as they go through this period of puberty.

A study conducted by Song et al. (2023) in China demonstrated the attitude of high school students toward their body image perception and satisfaction. The study used a cross-sectional design to evaluate middle school children in China regarding their body image and aesthetic body form norms. The researchers collected height, weight, and demographics data for their investigation. They computed two indexes using a body silhouette. These measures were used to evaluate body image perception and body shape aesthetics. A total of 1585 students in three grades at two middle schools were included in the study (759 = female, mean age = 13.67 ± 0.90 ; 839 = male, mean age = 13.70 ± 0.90). The study shows teenagers are typically unhappy with their body

form and show cognitive bias towards it. Notably, dependent on gender and BMI grading, middle school pupils' perceptions of their bodies differed significantly. The survey also discovered a substantial gender gap in the aesthetic criteria of body form, with the prevailing belief among women that "thin is beautiful" for their body type. Though the study came out with the findings about the perception of youths about their body, it did not indicate the age range. The study also used a different research design to check the body image of youths in China. However, the present study used correlational research using quantitative methodology.

Moksnes and Reidunsdatter (2019) carried out a study to examine gender differences in adolescents' mental health (symptoms of depression/anxiety and mental well-being) and self-esteem over a school year in Norway. The study revealed that Girls reported considerably higher levels of depression and anxiety than boys did, and during the two assessments, depression and anxiety, stress, and self-esteem all exhibited a marginally significant increase. Boys reported consistent mental health throughout the academic year and scored significantly higher on mental well-being and self-esteem. Depression, anxiety, and mental health were all significantly predicted by self-esteem. This showed a strong relationship between mental health and self-esteem. Hill (2017) explained that physical beauty, athletic ability, and social competence are the areas of self-esteem that are most damaged and operationalised low self-competence, especially among adolescents in the United States of America. Children who are obese are also more prone to be bullied by their peers, both generally and specifically because they are overweight. bullying victims seem to retain certain components of their self-esteem.

Christina (2016) carried out a similar study to ascertain the association between young female Romanian university students' subjective factors of self-esteem and body image dissatisfaction using a cross-sectional research approach. She postulates a relationship between young women's self-esteem and their level of body dissatisfaction. The findings showed that there was a high rate of body dissatisfaction, with 79% of girls saying they were not happy with how they looked. There was a substantial negative connection between body dissatisfaction and self-esteem ($r(158) = -0.36, p < .0005$). Between BMI and body dissatisfaction, we discovered a reliable and statistically significant connection ($r(158) = 0.56, p < .0005$). though the study investigated the relationship between self-esteem and body image satisfaction in women, the present study intended to research body image and psychosocial changes in adolescents.

Furthermore, to explain more the relationship between self-esteem and psychosocial changes in adolescents in Kenya, a study was conducted by Mutavi, et al. (2018) on the Incidence of Self-Esteem Among Children Exposed to Sexual Abuse in Kenya, which indicated that low and average self-esteem was significantly associated with the frequency of abuse ($p < 0.001$) and how long ago the abuse had taken place ($p = 0.005$), also how long it took to receive medical attention ($p < 0.001$), change of attitude towards school ($p < 0.0001$), and use of the school to escape abuse ($p = 0.01$). The study concluded that sexual abuse of minors has detrimental effects on mental health.

Research Design and Methodology

The research design employed for this study was correlational research of quantitative methodology. In this study, the correlational design helped the researcher understand the influence of the relationship between biopsychosocial changes and self-esteem. According to Mugenda et al. (2003), the correlational design informs the researcher about the magnitude of the relationship between the two variables and the direction of the relationship. The correlational design enabled the researcher to investigate the relationship between the Biopsychosocial changes in adolescents and their level of self-esteem. Given the nature of the population, the study used a census, which means a survey of everyone or all the adolescents. The researcher's main tool for data collection was a questionnaire on the Rosenberg Self-esteem Scale (RSE) and a Body Image-Acceptance and Action Questionnaire.

The data collected was analysed following the acceptable descriptive correlational design data analysis procedure. First, the data was analysed using descriptive statistical analysis using tables, frequencies, and percentages. This was followed by looking at the relationship between the two objectives based on the independent and dependent variables. In this light, the data was analysed using the correlation coefficient. Therefore, the researcher used Pearson Product Moment correlation to analyse the relationship between isolated independent and dependent variables in this study.

Ethical Considerations

Several ethical measures were implemented to account for the age of the respondents in the study. These measures included obtaining consent from both the respondents and the authorities of the schools involved, obtaining a research permit from Nacosti, submitting a letter of introduction and the questionnaire to the school authorities, refraining from requesting any revealing information from the respondents and creating a new email specifically for the Google Form online data collection to ensure confidentiality.

Findings

The Level of the attitude of adolescents towards biological changes

This objective is intended to establish respondents' attitudes about their physical changes in terms of their satisfaction with their body weight, size, and shape. The table below presents the participants' responses regarding their body image acceptance. The participants were asked 29 questions (As shown in Appendix A) from the Multidimensional body self-relations questionnaire by Sandoz and Kelly to rate their satisfaction with body image. This questionnaire typically consists of items or statements related to body image, body dissatisfaction, and behavioural responses to body image concerns. It is measured using a BIAAQ linkage scale from 1 to 7. The scores are calculated by summing up the numbers, and each number brings out different meanings and points, such as the highest number showing signs of impairment (Sandoz et al., 2013).

Table 3

The level of attitudes toward biological changes

Rating	Range	Frequency	Percentage
Lower body image	74-100	19	19
Moderate body image	102-120	33	33
Higher body image	121-150	48	48

Table 3 presents responses from the adolescents' attitudes toward body image regarding weight, shape, and appearance, especially their capacity to accept and experience thoughts, attitudes, perceptions, and feelings about their bodies. The findings show that 81% have moderate to higher positive attitudes toward body image.

This indicates that most adolescents demonstrated greater positive perception and acceptance of an adolescent's body. Adolescents in Langata Sub-County with a higher body image tend to exhibit positive body image, positive body image appearance, and positive body-related behaviour such as emotions, thoughts, sensations and feelings. This means that most adolescents in this environment are generally satisfied with their body image.

The study corresponds to Czyz et al. (2016) on body size preferences for women and adolescent girls living in Africa, where most people preferred normal or overweight body sizes—indicating that they did not see many problems with their weight and size. Studies on young ladies and adolescent girls have shown a tendency to be underweight due to education, rural residency, health-related issues, psycho-social and sociocultural like spouse's choice, and social standing. This means their attitude about their body image depends on multiple factors.

The attitude of adolescents toward their Psychosocial changes

The study's second objective was to ascertain adolescents' attitudes about psychosocial changes in the Langata Sub-county. This objective uses the Body Image and Action questionnaire, though the items about psychosocial changes were modified and adapted to the original instrument. This was done to supplement the areas that were not captured in BIAAQ.

Table 4

Psychosocial Experiences

Rating	Range	Frequency	Percentage
Lower acceptance (psychosocial changes)	12-20	21	21
Moderate acceptance	21-29	48	48
Higher acceptance	30-39	31	31

Based on the respondent's responses about psychosocial changes in Table 4, 79% of adolescents demonstrated a positive attitude towards psychosocial changes and experiences ranging from moderate to higher positive attitude. According to Abdullayeva (2021), a positive attitude towards psychosocial experiences refers to an optimistic and adaptive mindset when encountering various social and psychological challenges during adolescence. This includes being open-minded, resilient, proactive in dealing with emotions and having a sense of identity and social connections. This also indicates that a positive attitude towards psychosocial experiences among the adolescents

in Langata Sub-County can promote emotional well-being, social competence, and personal growth during this crucial stage of development.

This is explained by the study of Zahodne et al. (2019), which says psychological and school factors like social support, emotional maturity, self-concept and educational factors play a greater role in the student's ability to vary his/her behaviour to maintain a harmonious relationship with the school environment and with his or herself.

Levels of Self-esteem

The Rosenberg self-esteem scale was used to measure general self-esteem (SE) (Rosenberg, 1965). In Table 6, the 10-item scale consisted of global statements to which respondents indicated agreement to the items on a 4-point scale, ranging from 1= “strongly disagree” to 4= “strongly agree”. This analysis uses the score range between 10 and 40 to rate the individual respondent’s level of self-esteem. However, emphasis was laid on the scores registered in percentage per item. Some of the statements were positive, such as, “On the whole, I am satisfied with myself,” while others were negative, “At times, I am no good at all.” The positive items were reversed scored for consistency with the negative statements. Low self-esteem responses are “disagree or strongly disagree” on items 1, 3,4,7,10, and ‘strongly agree’ or ‘agree’ on items 2, 5, 6, 8, 9. The table below presents the respondents' scores on the self-esteem level in percentages.

Table 6

Level of Self-esteem on Items

Rating	Range	Frequency	Percentage
Very high	30-40	5	5
High	26-29	26	26
Moderate	21-25	52	52
Low	10-20	17	17
Total	40	100	100

Table 6 shows that most respondents expressed high self-esteem ranging from moderate to very high in their responses by strongly agreeing and agreeing to the statements. the levels of self-esteem among the adolescents of Langata Sub-County are classified as follows: Low self-esteem with the lowest score, indicating feelings of incompetence, inadequacy, and difficulty facing challenges; Moderate level, signifying fluctuation between feelings of approval and rejection; and the last two levels which are high and very high: indicating self-judgment of value, confidence and competence, self-confidence, self-awareness, sense of Identity, self-worth, positive attitude, self-acceptance, self-respect, self-knowledge, and sense of relationship

This also indicates that most adolescents could recognise their strengths and ability to do many things. This paralleled the observation by Okpalanwe (2023), in which she argued that teenagers who do not struggle with self-concept can recognise their strengths and weaknesses. In cases where they are struggling with self-awareness because the adolescent stage can be confusing or difficult, they do not go through without experiencing tension and anxiety, which may affect their self-esteem. This also corresponds to a study by Chinawa et al. (2015) conducted in Nigeria to determine the self-esteem pattern among adolescents and associated factors, which stated that self-esteem had been neglected among adolescents in paediatrics. The study found that adolescents in Enugu and Abakiliki have high levels of self-esteem, although this may be exaggerated given the need for further research in this area.

The Relationship Between Attitude towards Biopsychosocial Changes and Level of Self-esteem

The fourth objective sought to establish the relationship between adolescents' attitudes toward biopsychosocial changes and self-esteem in Maono Education Langata Sub County in Nairobi. The inferential analysis was investigated using the Pearson product-moment correlation. To find out the relationship, the scores of attitudes to biopsychological changes were summed and correlated with the scores for self-esteem. A null hypothesis of the variables, which was stated thus H01: there is no significant relationship between the attitudes toward biopsychosocial changes in adolescents and the level of their self-esteem, was tested.

Table 7

Correlations of Attitude Towards Biopsychosocial Changes and Self-esteem of Adolescents

	BIOPSYCO	SELF-ESTEEM
Pearson Correlation	1	.045
BIOPSYCO Sig. (2-tailed)		.657
N	100	100
Pearson Correlation	.045	1
SELFESTMSig. (2-tailed)	.657	
N	100	100

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

Table 6 shows the relationship between the attitude towards biopsychosocial changes in adolescents and their level of self-esteem. The correlation coefficient (r) is 0.045, indicating a weak positive correlation between the two variables since the value is close to zero. The p -value (p) 0657 is more than the conventional alpha 0.05. A p -value of 0.657 means no statistical significance exists between the attitude to biopsychosocial changes and the rise in self-esteem. Consequently, the null hypothesis is maintained. This suggests that the rise in self-esteem is caused by other variables such as education, culture, family background, economic status, and gender.

The null Hypothesis, H_{01} , predicted that the attitude towards biopsychosocial changes has no significant relationship with adolescents' self-esteem in Maono Education Centre Langata Sub-County in Nairobi- Kenya. However, the P -value of 0.657, which was more than the significant level of 0.05, showed that attitudes towards biopsychosocial changes in adolescents do not strongly influence their self-esteem. These findings have given rise to another conceptual framework other than the previous one.

The result contradicted the research findings of Davison & McCabe (2006), adolescents who have a poor body image are more likely to experience anxiety and lower self-esteem than those who have a good body image. The findings confirmed the study by Ummet (2014) that showed satisfaction with the need for autonomy and relatedness strongly predicted adolescent self-esteem. This portrayed that psychosocial changes in adolescents strongly relate to their self-esteem; however, these findings do not reflect the reality of Maono Education Centre Langata in Nairobi-Kenya

The findings on the relationship between biopsychosocial changes and self-esteem did not confirm the findings from the study carried out by Christiana (2016) that showed that there was a high rate of body dissatisfaction, with 79% of girls saying they were not happy with how they looked and a

substantial negative connection between body dissatisfaction and self-esteem ($r(158) = -0.36$, $p < .0005$). Between BMI and body dissatisfaction, she discovered a reliable and statistically significant connection ($r(158) = 0.56$, $p < .0005$).

From the analysis in Table 6, the correlation coefficient between the attitude towards biopsychosocial changes in adolescents and the level of self-esteem is perfect. However, the P-value shows a weak positive significant relationship. This discloses that as the independent variables increase, the dependent variable (self-esteem) also increases slowly. That explains why the majority of the respondents fall between moderate levels of self-esteem.

Review of the Conceptual Framework.

Figure 4

Reconstructed conceptual framework

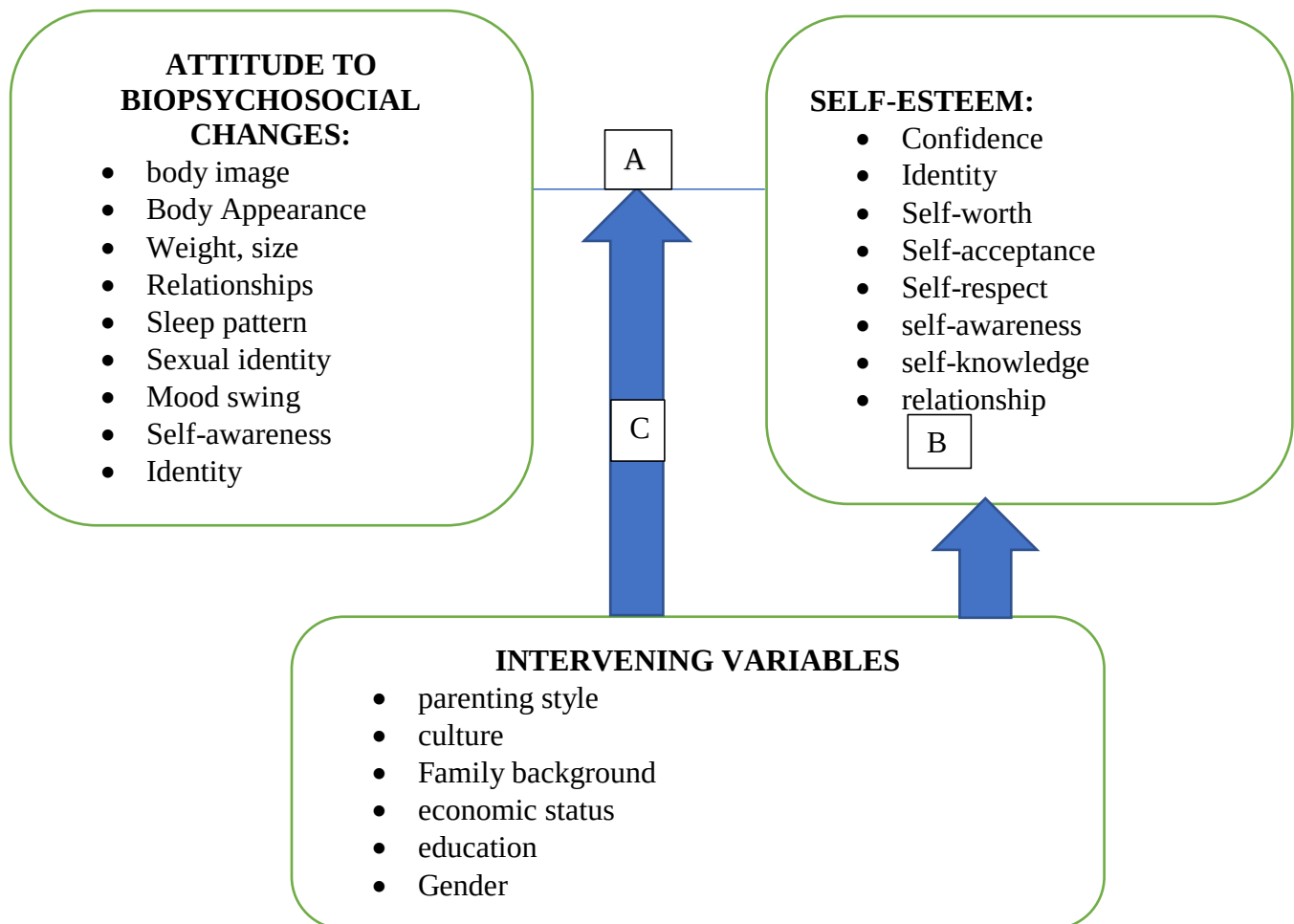


Figure 4 shows a reconstruction of the conceptual framework of the attitude of adolescents towards biopsychosocial changes and their level of self-esteem in Langata Sub-County. This presents a very weak or very low relationship. This means that what makes adolescents' attitudes

to biopsychosocial changes high and self-esteem high is not due to the relationship between the two of them as was conceptualised. The two arrows A and B on the figure show that the intervening variables such as parenting style, culture, family, gender, education and economic status might have impacted a rise in the attitude towards biopsychosocial changes and a rise in self-esteem as well. The findings also deviate from the theories by Carl Rogers and Eric Erickson, who said that the environment and the psychosocial experiences during puberty influence their self-esteem tremendously. This is not to say there is no relationship, but it does not have a strong and significant influence because of other factors.

Conclusion

It was hypothesised that there would be no significant difference between the attitude towards biopsychosocial changes in adolescents and the level of self-esteem in Maono Education Center Langata Sub-County, Nairobi; the Pearson correlation analysis indicated a positive weak relationship, which shows no significant relationship between the variables. The study's findings demonstrated that the null hypothesis was maintained due to the presence of no statistically significant relationship attributed to attitude towards biopsychosocial changes and their level of self-esteem. Another inference drawn from the research findings portrayed that intervening variables significantly influenced adolescents' attitudes towards the experiences of biopsychosocial changes and their level of self-esteem.

Recommendation

The study observed that the self-esteem of the respondents in Langata Sub-county, nevertheless, could be maintained and continue to enhance towards becoming higher since more than half of them demonstrate moderate self-esteem; consequently, the following were recommended:

I. The Government

The government plays an important role in society, especially in mental health. Since more than half of the respondents demonstrated moderate self-esteem and positive attitudes to their experiences of adolescence, they can continue to enhance their mental well-being through the use of psychologists and counsellors not only for Government schools but also for private secondary schools to assist pupils in resolving issues that paraprofessionals are unable to handle to continue enhancing the level of self-esteem and keep maintaining and growing in self-esteem.

2. School Authorities

The school administration has the potential to continue sensitising positive influences on students' self-esteem by implementing various measures, although very few have demonstrated low self-esteem. Factors contributing to students' self-esteem, such as mental health awareness, self-image, and self-care, can be addressed through psychoeducation programs within the school. This can be achieved by developing a structured program for all staff members to address issues related to self-esteem and self-care. Furthermore, the administration can foster relationships through effective communication and reinforce the promotion of child rights, safeguarding, and protection policies

3. Teachers

How teachers carry out their professional responsibilities within and outside the classroom can bolster or diminish students' self-esteem. Therefore, teachers in school must have professional and healthy relationships with students in this locality to ameliorate their level of esteem from moderate to higher. It will also require that teachers create an atmosphere where students learn to respect, value and support one another, especially during lessons.

4. Parents and Caregivers

Some reviewed literature found that parenting style is important in enhancing self-esteem in adolescents through parent-child relationships, healthy communication, good models, focusing on strengths, and encouraging healthy friendships. Despite positive attitudes toward their body image and a rise in self-esteem, parents need seminars that focus on parenting and parental styles aimed at enhancing children's self-esteem could be arranged for parents.

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