



Exploring the correlation between self-evaluation and exercise intentions among Rivers Youths in Nigeria

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Abstract

This study explored the correlation between self-evaluation and exercise intentions among Rivers Youths in Nigeria. The study was carried out in Rivers State, one of the states in the southern part of Nigeria, situated in the Niger Delta region. The study design was a descriptive survey. The population comprised all youths in the three senatorial districts in the state. The sample size was 426 calculated using the Cochran formula with a non-compliance rate of 10%. A self-developed questionnaire was used for data collection with a retrieval rate of 95.5%. Data was analysed using mean and standard deviation to answer the research questions while the hypotheses were answered using PPMC at 0.05 alpha level of significance. Results showed that the mean age of respondents was 21.38 ± 3.36 years. There were more females (63.6%) than males (36.4%) in the study, the majority had attained tertiary education (69.8%), were single (84.8%), unemployed (57.5%), in the middle class (62.2%) and were Christians (87.0%). Intention to exercise was above average. Respondents with low self-esteem (40.7%), poor self-image (53.4%) and were rarely influenced by peers (45.5%) indicated that they were unlikely to exercise. There was a significant correlation between self-esteem ($r=0.357$; $p=0.000$), self-image ($r=0.558$; $p=0.000$), peer influence ($r=0.276$; $p=0.000$) and intention to exercise among youths in Rivers State. It was recommended that parents and guardians should model active lifestyles and create opportunities for family-based activities; in addition, Non-governmental organizations focused on youths should design programmes where influential youths are encouraged to spread the message of fitness and wellbeing among their peers leveraging peer influence for positive outcomes.

Keywords: Youths, Intention to Exercise, Self-Esteem, Self-Image, Peer Influence

Introduction

A healthy mind is an active mind and one of the things that promotes healthy living is routine exercise participation. Exercise is a planned, structured, repetitive and purposeful physical activity that is typically performed to improve or maintain physical fitness and overall health (National Centre for Health Statistics, 2017; Rooney et al., 2023). It is the engagement in specific movements or activities with the aim of promoting both physiological fitness of the entire skeletal musculature such as cardiorespiratory endurance, muscular strength, motor skills and body composition (Warburton & Bredin, 2019; Bull et al., 2020); and psychological wellbeing such as self-efficacy, self-perception and effective and cognitive abilities as demonstrated in emotional health, attention and concentration span, processing speed, cognitive functioning among others (Du et al., 2017). Some benefits derivable from regular exercise like reduction in anxiety, improvement in sleep, relaxation and cognition are immediate; however, other benefits like mitigation of cardiovascular diseases, hypertension, cancer and type-2 diabetes do accrue over long term exercise engagement (Mahindru et al., 2023).

Exercise is for everyone, regardless of age, gender, fitness level, or ability. It is an essential component of a healthy lifestyle and offers numerous benefits for individuals of all ages and backgrounds. Regular physical activity is crucial for the healthy growth and development of children and adolescents. Adults of all ages benefit from regular exercise to maintain overall health and well-being as it helps prevent chronic diseases such as heart disease, diabetes, and certain cancers, improves mental health and cognitive function, promotes weight management, and enhances quality of life. The term "youth" is commonly used to describe an individual in the transitional stage between childhood and adulthood, a period marked by physical, psychological and social development. The United Nations (2024) described youths as individuals within the age range of 15-24 years while the African Youth Charter (2013) described youths as individuals between the ages of 15-35 years. Youth is a critical stage

for the development of identity, autonomy and life skills; during this period, individuals experience significant changes that influence their future roles in society (Scales et al., 2015). Youth is an age category that usually engages in exercise and several factors influence their intention to exercise. One of these factors is self-esteem. Self-esteem refers to an individual's overall evaluation of their own worth and abilities (Orth & Robins, 2014); it is usually shaped by their experiences, personal achievements and how they view themselves in comparison to others. Individuals with higher levels of self-esteem are more likely to engage in health-promoting behaviours, including exercise (Sani et al., 2015) while individuals with low self-esteem may experience barriers to exercise participation, such as feelings of inadequacy, fear of failure, or negative body image (Tikac et al., 2022).

These negative self-perceptions can undermine motivation and contribute to a lack of intention to exercise. Perception of one's body image is one factor that can influence the intention to exercise. Young people who perceive their bodies positively are more likely to engage in physical activity as a means of enhancing their health, fitness, and overall well-being (Tylka & Homan, 2015). Positive body image is characterized by acceptance, appreciation, and respect for one's body, regardless of size or shape (Cash & Smolak, 2011). These individuals are motivated to exercise for intrinsic reasons, such as enjoyment, stress relief, and personal fulfilment. Conversely, youths who are dissatisfied with their bodies may perceive exercise as a means of achieving unrealistic beauty ideals or correcting perceived flaws (Tiggemann & Zaccardo, 2015). This external motivation, driven by a desire to change one's appearance, may lead to unhealthy exercise behaviours or disordered eating patterns (Christoph et al., 2021; Morris et al., 2022). The influence of peers plays a significant role in the decision-making of youths including their intention to exercise. Adolescents and youths often seek approval and validation from their peers, and their exercise behaviours may be influenced by social norms, peer pressure, and social support within their peer groups. Adolescents and youths who perceive exercise as a socially valued behaviour and receive encouragement from their peers are more likely to have higher exercise intentions and participation rates (Jago et al., 2013). Conversely, negative peer influence, such as peer pressure to engage in sedentary behaviours or skip exercise sessions, can undermine exercise intention among youths (Prinstein et al., 2001). These adolescents and youths may feel pressured to conform to unhealthy norms or behaviours within their peer groups, leading to decreased motivation and intention to exercise. The benefits of exercise are many and varied; however, the intention alone does not guarantee action; it is just the first step towards actually exercising. Turning intention into action often requires planning, motivation, and overcoming obstacles or barriers that may arise thus exploring factors that may militate against action may play key roles in turning intention into action, especially among youths.

Statement of the Problem

The insufficient levels of physical activity among youths present a multifaceted public health challenge, with ramifications for both current and future well-being. Despite the known benefits of regular exercise, including reduced risk of chronic diseases, improved mental health, and enhanced overall quality of life, many young individuals fail to engage in adequate levels of physical activity. A deeper understanding of the determinants influencing exercise intention among youths is imperative to develop targeted interventions that effectively promote a physically active lifestyle in this population. A critical area requiring exploration is the intricate interplay between body image, self-esteem, peer influence, and exercise intention among youths. Adolescence is a period marked by significant physical and psychological changes, during which body image concerns and fluctuations in self-esteem are prevalent. Moreover, adolescents are highly susceptible to peer influence, as they navigate social relationships and seek validation from their peers. However, the extent to which these factors collectively shape exercise intention remains inadequately understood. Existing research has predominantly examined individual factors such as body image or self-esteem in isolation, neglecting the potential synergistic effects of peer dynamics on exercise behaviours among youths. This study therefore seeks to explore self-evaluation and the intention to exercise using youths in Rivers State as a case study.

Research Questions

1. What is the level of intention to exercise among youths in Rivers State?
2. What is the correlation between self-esteem and intention to exercise among youths in Rivers State?
3. What is the correlation between self-image and intention to exercise among youths in Rivers State?
4. What is the correlation between peer pressure and intention to exercise among youths in Rivers State?

Hypotheses

1. There is no significant correlation between self-esteem and intention to exercise among youths in Rivers State.
2. There is no significant correlation between self-image and intention to exercise among youths in Rivers State.

3. There is no significant correlation between peer influence and intention to exercise among youths in Rivers State.

Methodology

The study was carried out in Rivers State. Rivers State is one of the states in the southern part of Nigeria, situated in the Niger Delta region. The study design is the descriptive survey design, the study population comprised all youths in the three senatorial districts in the state. The sample size was calculated using the Cochran formula to obtain a sample size of 384; after adjusting for a non-compliance rate of 10%, the total was 426 for ease of distribution. Multi-stage sampling procedure was used to distribute the sample. A self-developed questionnaire with a reliability coefficient of 0.797 for intention to exercise; 0.801 for self-esteem, 0.871 for self-image and 0.774 for peer influence was used for data collection. The retrieval rate was 95.5%. Data was analysed using mean and standard deviation to answer the research questions while the hypotheses were answered using PPMC at 0.05 alpha level of significance.

Results

Table 1: Sociodemographic Characteristics of Respondents

Variable	Description	Frequency	Percent
Age	≤ 20	178	43.7
	21-30	221	54.3
	≥ 31	8	2.0
	Mean/SD		21.38±3.36
Gender	Male	148	36.4
	Female	259	63.6
Educational attainment	Primary	11	2.7
	Secondary	112	27.5
	Tertiary	284	69.8
Marital status	Single	345	84.8
	Married	62	15.2
Employment status	Unemployed	234	57.5
	Self-employed	139	34.2
	Civil Servant	34	8.4
Socio-economic status	Poor	40	9.8
	Lower Class	75	18.4
	Middle Class	253	62.2
	Upper Class	39	9.6
Religion	Christianity	354	87.0
	Islam	23	5.7
	Traditional Worship	30	7.4

Table 1 shows the sociodemographic characteristics of the respondents. The mean age was 21.38±3.36 years. There were more females (63.6%) than males (36.4%) that participated in the study. For the educational attainment of the respondents, 69.8% had attained tertiary education while only 2.7% had only primary school education. The majority (84.8%) of the respondents were single while the rest (15.2%) were married. The majority (57.5%) were unemployed while 34.2% and 8.4% were self-employed and Civil servants respectively. The majority (62.2%) indicated that they belonged to the middle class while 9.8% indicated that they were poor. Christianity was a major religion (87.0%) practised in the study area compared to Traditional Worship and Islam which were both less than one-tenth of the sampled population.

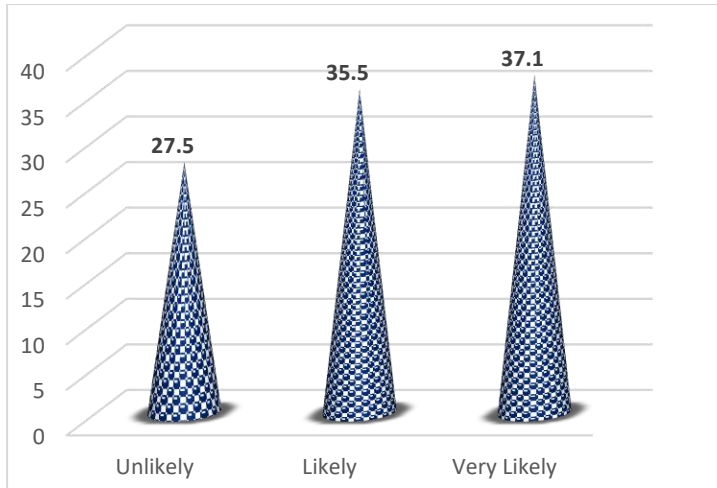


Figure 1: Level of intention to exercise among youths in Rivers State

Figure 1 shows the level of intention to exercise among youths in Rivers State. The result showed that more than one-third indicated that they were like to exercise while more than one-quarter (27.5%) indicated that they were not likely to exercise.

Table 2: Correlation between Self-esteem and intention to exercise among youths in Rivers State

Self-esteem	Level of Intention to Exercise					
	Unlikely		Likely		Very Likely	
	Freq	%	Freq	%	Freq	%
Low	66	40.7	56	34.6	40	24.7
High	15	12.9	64	55.2	37	31.9
Very High	31	24.0	24	18.6	74	57.4
Total	112	27.5	114	35.4	151	37.1

Source: Field Survey, 2024

Table 2 shows the correlation between self-esteem and the intention to exercise among youths in Rivers State. The categorization of self-esteem was estimated using the mean and standard deviation of the aggregated self-esteem scores. Respondents with scores below the mean were categorised as low, those with scores between mean plus standard deviation were categorised as high while those with scores above mean plus standard deviation were categorised as very high. The result showed that respondents with low self-esteem (40.7%) indicated that they were unlikely to exercise, more than half (55.2%) of the respondents with high self-esteem indicated that they were likely to exercise while more than half (57.4%) of the respondents with very high self-esteem indicated that they were very likely to exercise.

Table 3: Correlation between Self-image and intention to exercise among youths in Rivers State

Self-image	Level of Intention to Exercise					
	Unlikely		Likely		Very Likely	
	Freq	%	Freq	%	Freq	%
Poor	79	53.4	61	41.2	8	5.4
Good	15	16.0	43	45.7	36	38.3
Very Good	18	10.9	40	24.2	107	64.8
Total	112	27.5	144	35.4	151	37.1

Source: Field Survey, 2024

Table 3 shows the correlation between self-image and the intention to exercise among youths in Rivers State. The categorization of self-image was estimated using the mean and standard deviation of the aggregated self-image scores. Respondents with scores below the mean were categorised as poor, those with scores between mean plus standard deviation was categorised as good while those with scores above mean plus standard deviation were categorised as very good. The result showed that more than half (53.4%) of the respondents with poor self-image indicated that they were unlikely to exercise, about half (45.7%) of the respondents with good self-image indicated that they were likely to exercise while more than half (64.8%) of the respondents with very good self-image indicated that they were very likely to exercise.

Table 4: Correlation between Peer pressure and intention to exercise among youths in Rivers State

Peer influence	Level of Intension to Exercise					
	Unlikely		Likely		Very Likely	
	Freq	%	Freq	%	Freq	%
Rarely	65	45.5	53	37.1	25	17.5
Sometimes	32	28.1	46	36.8	40	35.1
Always	15	10.0	49	32.7	86	57.3
Total	112	27.5	144	35.4	151	37.1

Source: Field Survey, 2024

Table 4 shows the correlation between peer pressure and the intention to exercise among youths in Rivers State. The categorization of peer influence was estimated using the mean and standard deviation of the aggregated peer influence scores. Respondents with scores below the mean were categorised as rarely, those with scores between mean plus standard deviation were categorised as sometimes while those with scores above mean plus standard deviation were categorised as always. The result showed that less than half (45.5%) of the respondents who were rarely influenced by peers indicated that they were unlikely to exercise, 36.8% of the respondents who were sometimes influenced by peers indicated that they were likely to exercise while more than half (57.3%) of the respondents who were always influenced by peers indicated that they were very likely to exercise.

Hypothesis 1: There is no significant correlation between self-esteem and intention to exercise among youths in Rivers State.

Table 5: PPMC between self-esteem and intention to exercise among youths

Correlations		Intention to exercise	Decision
Self-esteem	Pearson Correlation (r)	0.357**	Significant
	Sig. (2-tailed)	0.000	
	N	407	

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

Table 5 presents the summary of Pearson's Product Moment Correlation (PPMC) between self-esteem and intention to exercise among youths in Rivers State. The result showed that there is a significant correlation ($r=0.357$; $p=0.000$) between self-esteem and intention to exercise among youths in Rivers State.

Hypothesis 2: There is no significant correlation between self-image and intention to exercise among youths in Rivers State.

Table 6: PPMC between self-image and intention to exercise among youths

Correlations		Intention to exercise	Decision
Self-image	Pearson Correlation (r)	0.558**	Significant
	Sig. (2-tailed)	0.000	
	N	407	

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

Table 6 presents the summary of Pearson's Product Moment Correlation (PPMC) between self-image and intention to exercise among youths in Rivers State. The result showed that there is a significant correlation ($r=0.558$; $p=0.000$) between self-image and intention to exercise among youths in Rivers State.

Hypothesis 3: There is no significant correlation between peer influence and intention to exercise among youths in Rivers State.

Table 7: PPMC between peer influence and intention to exercise among youths

Correlations		Intention to exercise	Decision
Peer influence	Pearson Correlation (r)	0.276**	Significant
	Sig. (2-tailed)	0.000	
	N	407	

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

Table 7 presents the summary of Pearson's Product Moment Correlation (PPMC) between self-image and intention to exercise among youths in Rivers State. The result showed that there is a significant correlation ($r=0.276$; $p=0.000$) between self-image and intention to exercise among youths in Rivers State.

Discussion

The mean age of the participants in the study was 21.38 years with a standard deviation of ± 3.36 years and there were more females than males who participated in the study. The age range reflects the age variation of the population; the fact that there were more women than men who participated in the study may be because of a higher willingness among females to participate in the study. A significant proportion of the respondents had tertiary education while in contrast, less than one-tenth of the population had only primary education; implying that the study population was relatively well educated, though the sample was skewed towards higher education. The majority of the respondents were single while a smaller portion was married, this finding is not surprising as marriage rates tend to increase with age. According to Bloome and Ang, (2020), many are delaying getting married till much older years as more people are cohabiting rather than getting married. More than half of the respondents were unemployed while a significant proportion were either self-employed or Civil servants respectively and the majority considered themselves to be part of the middle class while less than 10% identified as poor. The high number of unemployed respondents in the study could be due to the age of the participants as younger adults particularly those in school or recently out of school are more likely to be unemployed or self-employed (Ross & Svajlenka, 2016). Furthermore, the finding that the majority considered themselves middle class suggests that many of the participants perceive themselves to be economically stable despite their employment status. Only a small fraction indicated that they were poor which indicates that only a few in this population face severe financial hardships. This finding could imply that the respondents (mostly females) have other sources of income or they may be dependents living with parents and guardians hence they may not really face financial hardship because their parents/guardians take responsibility for many of their necessities. Muennig et al., (2017) averred that the cost of living in households that were multigenerational (that is with parents and grandparents) resulted in a much lower cost of living as the individuals living together shared resources such as the cost of food, utilities and rent. Christianity was the predominant religion in the study area with Traditional Worship and Islam being less common (both less than one-tenth of the population). This distribution reflects the broader religious demographic in Rivers State.

Self-esteem refers to an individual's overall evaluation of their own worth (Orth & Robins, 2014); it is usually shaped by their experiences, personal achievements and how they view themselves in comparison to others. In this study, a significant proportion of the respondents indicated varying likelihoods to exercise based on their self-esteem levels. Those with low self-esteem were less likely to exercise while more than half of the respondents with high self-esteem stated that they were likely to exercise and those with very high self-esteem showed a very high likelihood of exercising. Furthermore, there was a significant correlation between self-esteem and the intention to exercise. This finding indicates how negative self-perception can hinder engagement in physical activities and suggests that individuals with greater self-worth and positive self-regard may feel more inclined to maintain their health through exercise. This finding give credence to the study of Hou et al. (2022) who observed that exercise intention was positively related to coping plans and action plans which in turn paved the way to performing the action of exercise. In the present study, self-image was shown to play a role in exercise intentions. Over half of the respondents with poor self-image were unlikely to exercise while about half of the respondents with good self-image were more inclined to exercise. Furthermore, there was a significant correlation between self-image and the intention to exercise. These findings align with the view that psychological barriers may prevent individuals with a negative view of themselves from participating in exercise (Mills et al., 2022; Zartaloudi et al., 2023). Whereas, individuals with a more favourable perception of their physical appearance or abilities are more likely to be physically active (Zartaloudi et al., 2023).

Peer influence is a powerful social force, particularly during adolescence and youth as young people are more likely to conform to the norms, preferences and actions of their peers in an effort to gain acceptance or avoid rejection (Havewala et al., 2021). In this study, respondents who were rarely influenced by their peers indicated that they were unlikely to exercise while those that were always influenced by their peers were very likely to exercise. There was a significant correlation between peer pressure and the intention to exercise. The findings from this study suggest that lack of peer motivation or social isolation could reduce exercise intention. The fact that many in the study who were always influenced by peers stated that they were very likely to exercise suggests that strong peer influence could substantially increase the likelihood of exercise among youths in the study area.

Conclusion

Based on the findings of the study, it was concluded that it was concluded the level of intention to exercise among youths in Rivers State was above average. There was a significant correlation between self-esteem, self-image, peer influence and intention to exercise among youths in Rivers State.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Parents and guardians should model active lifestyles and create opportunities for family-based activities. This can strengthen family bonds while positively influencing youth intentions.
2. Non-governmental organizations focused on youths should design programmes where influential youths are encouraged to spread the message of fitness and wellbeing among their peers leveraging peer influence for positive outcomes.
3. Schools and educational institutions should integrate mandatory, enjoyable physical activities and sports programmes that encourage regular participation, making exercise a part of the youth culture.
4. Local Governments should develop and implement targeted campaigns that raise awareness about the benefits of exercise and its impact on physical and mental well-being, specifically aimed at youths in Rivers State.

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