

PSYCHOSOCIAL AND PHYSICAL BENEFITS OF EXERCISE AMONG RURAL SECONDARY SCHOOL STUDENTS

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Abstract

The purpose of this study was to examine the benefits of physical exercise among secondary school students. Participants in the study were 251 students (120 boys and 131 girls) attending three public secondary schools in the Hlanganani rural area of South Africa. A validated questionnaire was used to collect data. Results of this study indicated that students exercised to be with their friends, to be physically attractive and compete with others. The findings of this study have practical implications for promoting participation in physical activity among students in rural schools. In an effort to promote physical activity participation, schools should be provided with quality sports infrastructure and funding so that they can implement school sport programmes. Finally, the teaching of physical education should be emphasised in schools as it is the cornerstone for children's involvement in physical activity.

Keywords: Exercise, physical activity, health, sports, students

1. Introduction

The American College of Sports Medicine (ACSM) (1998) define exercise as a planned, structured, and repetitive bodily movement done to improve or maintain one or more components of physical fitness. The benefits of physical exercise are well documented in literature. In fact there is increasing evidence which suggests that exercise promotes mental as well as physical well-being (Raedeke, 2007).

According to Dubbert (2002) and Dhurup (2012), participation in physical exercise improves muscle strength, sense of relaxation, academic performance, appearance and self esteem, endurance, strength and balance; releases tension, reduces aggression, frustration and anger, reduces obesity, controls pain, maintains healthy joints, builds stronger bone mass as well as helps students to cope with stress. Additionally, physical exercise increases energy levels, boosts the immune system, and improves functional status and the quality of life of individuals (Bouchard, Shephard & Stephens, 1994; Daskapn, Tuzen & Eker, 2006; Insel & Roth, 2006).

Another study by Arora, Stoner and Arora (2006) reported that physical exercise is associated with reduced risk of heart disease, body fats, and cholesterol levels. The authors further contended that physical exercise regulates sugar levels thereby reducing the risk of developing diabetes. The benefits of physical exercise are further highlighted by Nolan, Sandada and Surujlal (2011) who reported that physical exercise participation prevents heart attacks, lowers blood pressure, improves functioning of cardiovascular system, decreases stress and tension and increases mental alertness. The importance of physical exercise is also reinforced by the ACSM (1998) and Henderson and Ainsworth (2003) who reported that

exercise is associated with feeling good, maintains a healthy lifestyle and improves insulin sensitivity and glucose tolerance.

Although several studies (e.g. Tumusiime & Frantz, 2006; Nolan, Sandada & Surujlal, 2011; Dhurup, 2012) have examined the benefits of exercise among university students in South Africa; very few studies have assessed the benefits of exercise among secondary school students, particularly in rural areas. Therefore, it is the intention of this study to fill a gap in the literature by examining the beneficial effects of physical exercise among secondary schools in the Hlanganani rural area of South Africa. It is envisaged that the results of this study could assist policy makers, and health and fitness practitioners to implement and design physical activity programmes.

2. Methodology

2.1 Sample

Participants were 251 (120 boys and 131 girls) students attending three public secondary schools in the Hlanganani rural area in South Africa. The mean age of the participants was 18.50 ± 2.374 years.

2.2 Research instrument

The questionnaire developed by Tumusiime and Frantz (2006) was used to collect data. A self-administered questionnaire comprised 12 close ended items which were scored on a 4-point Likert scale ranging from 1 (Strongly disagree), 2 (Disagree), 3 (Agree) and 4 (Strongly agree). The instrument had two sections. Sections A comprised of questions which sought information on the participants' demographic profile (age, gender), while section B elicited benefits of exercise. A Cronbach Alpha of 0.732 was obtained for the entire questionnaire, which was adjudged to be above the benchmark level of 0.70 as recommended by Nunally (1978).

2.3 Ethical consideration

This study was approved by the Department of Education at Vhembe district, Thohoyandou and the Hlanganani circuit office, in the Hlanganani rural area, Limpopo Province (Number: 14/7/R). Prior to data collection, signed informed consents were obtained from all students who participated in the study. All participants were informed that participation was voluntary and were assured of anonymity and the confidentiality of their responses. The students were also informed that they could withdraw from the study at any time without giving any explanation.

2.4 Data collection procedure

Supervised data collection was undertaken by trained fieldworkers who were school teachers. To avoid disruption of school lessons, the questionnaires were administered after school hours. It took the learners approximately 5-10 minutes to fill the questionnaires.

2.5 Data analysis

The data were captured and analysed using the Statistical Package for Social Sciences (SPSS) version 22. Descriptive statistics such as means and standard deviations were used to analyse data. The significance level was set at 0.05.

3. Results

Table 1 illustrates that the most likely benefits of exercise among students were “Exercise allows me contact with my friends” (M=2.29, SD=1.033), “Exercise helps me to do something attractive with other people” (M=2.07, SD=.902), “Exercise helps me to be competitive” (M=1.98, SD=.890), “Exercise helps me to become more physically attractive to others” (M=1.92, SD=.866) and “Exercise helps me to lose weight” (M=1.89, SD=.998).

Table 1: Perceptions of exercise among secondary school students

Variable	Boys		Girls		All		
	M	SD	M	SD	M	SD	t-value
Exercise helps me to reduce stress	1.68	.745	1.80	.673	1.74	.707	-1.321
Exercise improves my self-esteem	1.66	.786	1.80	.769	1.72	.777	-1.484
Exercise helps me to increase my energy level	1.55	.778	1.69	.680	1.62	.727	-1.526
Exercise helps me to become strong	1.47	.579	1.55	.693	1.50	.639	-1.032
Exercise improves my cardiovascular fitness	1.69	.742	1.72	.726	1.71	.736	-.279
Exercise allows me contact with my friends	2.27	1.027	2.33	1.032	2.29	1.033	-.415
Exercise helps me to stay in shape	1.86	.919	1.76	.773	1.80	.847	.888
I have fun when I exercise	1.92	.944	1.72	.729	1.81	.838	1.955*
Exercise helps me to be competitive	1.94	.901	2.05	.885	1.98	.890	-.923
Exercise helps me to do something attractive with other people	2.13	.953	2.02	.841	2.07	.902	.971
Exercise helps me to become more physically attractive to others	1.92	.904	1.95	.874	1.92	.866	-.262
Exercise helps me to lose weight	2.18	1.092	1.62	.811	1.89	.998	4.692*

* Significant at $p < 0.05$

In terms of gender, the most important benefits of exercise among boys were “Exercise allows me contact with my friends” (M=2.27, SD=1.027), “Exercise helps me lose weight” (M=2.18, SD=1.092) and “Exercise helps me to do something attractive with other people” (M=2.13, SD=.953); whereas among girls were “Exercise allows me contact with my friends” (M=2.33, SD=1.032), “Exercise helps me to be competitive” (M=2.05, SD=.885) and “Exercise helps me to do something attractive with other people” (M=2.02, SD=.841). T-test was used to examine differences between boys and girls and significant differences were found regarding the following: “I have fun when I exercise” ($t=1.955$, $p < .05$) and “Exercise helps me to lose weight” ($t=4.692$, $p < .05$).

4. Discussion

The purpose of this study was to examine the benefits of physical exercise among secondary school students. The current study found "exercise allows me contact with my friends", "exercise helps me to do something attractive with other people", "exercise helps me to be competitive", and "exercise helps me to become more physically attractive to others" as the most important benefits of physical exercise. The results of this study are somewhat different from those of previous studies. For example, a study conducted by Deflandre, Antonin and Lorant (2004) reported "to become physically fit" and "to have energy" as the most cited benefits of participating in physical activity. Another study by Lennox, Pienaar and Coetzee (2017) indicated that to "stay in good health" and "to feel well and to have energy" were identified as the most important benefits of participating in physical activity. Additionally, Shirinde, Monyeki, Pienaar and Toriola (2012) reported "to stay in good health", "to feel well" and "to have energy" as the major benefits of participating in physical activity. It should be noted that the reason why the current study failed to concur with those of previous studies could be attributed to the fact that this study was conducted in a rural area. The findings of this study further indicated that, overall, students perceived the benefits of exercise as of little importance (based on the mean levels). Perhaps this finding may be explained in the light of the belief that 'rural work' (i.e. sweeping the yard, fetching water from the river, manual harvesting, herding the cattle, chopping wood, etc.) provides sufficient physical activity so that it is not necessary to pursue physical activity during leisure hours (2011). Another possible explanation could be due to the fact that most of the public schools in rural areas lack sport facilities and equipment which restricts students' participation in sport and physical activity. Furthermore, rural residents also have less access to healthcare professionals who can potentially provide support and encouragement for participation in physical activity (2011). Finally, the absence of physical education in the South African school curriculum should not be overlooked. According to Tergerson and King (2002), physical education is an ideal forum to encourage and motivate students to participate in physical activity.

5. Conclusion

The results of this study found "exercise allows me contact with my friends", "exercise helps me to do something attractive with other people", "exercise helps me to be competitive", and "exercise helps me to become more physically attractive to others" as the most important benefits of physical activity participation. Based on the results of this study, several recommendations are made. The re-introduction of physical education in South African schools will serve as a tool to promote physical activity participation in schools. Additionally, parents should also encourage their children to participate in physical activity. Finally, successful athletes and/or role models should be invited to schools to motivate students to participate in physical activity.

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