

# JOURNAL OF HUMAN KINETICS AND SPORTS SCIENCE (JOHKASS)

VOLUME 02, NUMBER 01, OCTOBER, 2017

## The Official Journal of the

**Department of Human Kinetics and Sports Science** 

University of Benin, Benin City, Nigeria



## JOURNAL OF HUMAN KINETICS AND SPORTS SCIENCE (JOHKASS)

VOLUME 02, NUMBER 1, OCTOBER, 2017

The Official Journal of the

Department of Human Kinetics and Sports Science University of Benin, Benin City, Nigeria

# JOURNAL OF HUMAN KINETICS AND SPORTS SCIENCE (JOHKASS)

#### **EDITORIAL TEAM**

Editor-in-Chief
Professor Elias Okey Agwubike (Ph. D)
Department of Human Kinetics and Sports Science
University of Benin, Benin City, Nigeria

#### Editor

Dr. (Mrs.) A. Efe-Aigbovo
Dept. of Human Kinetics & Sports Science
University of Benin, Benin City
Tel: +2348033663132

#### Managing Editor Mr. S. Ogbouma

Dept. of Human Kinetics & Sports Science University of Benin, Benin City Tel: +2348035023354

E-mail: solomon.ogbouma@uniben.edu

#### **Associate Editors**

Dr. S. M. Adodo Dept. of Human Kinetics & Sports Science University of Benin, Benin City

Dr. E.I. Agbonlahor Dept. of Human Kinetics & Sports Science University of Benin, Benin City

Consulting Editors
Professor O. G. Oshodin

University of Benin

Professor E.O. Ojeme University of Benin Professor V. C. Igbanugo University of Port-Harcourt

Professor V. I. Iyawe University of Port-Harcourt

Professor J. O. Okafor Nnamdi Azikiwe University, Awka

> Professor Grace Otinwa University of Lagos

Professor Larsun Emiola University of Ilorin

Professor G. O. Umeasiegbu Nnamdi Azikiwe University, Awka

> Professor I. Owie University of Benin

Professor J. F. Babalola University of Ibadan

Professor M.O. Mgbor University of Benin

Professor S.O. Aibueku University of Benin

Professor A. C. Ugwu University of Benin

Professor Yakasiah Musa Bayero University, Kano

### JOURNAL OF HUMAN KINETICS AND SPORTS SCIENCE (JOHKASS)

### Table of Contents

EXERCISE PARTICIPATION BEHAVIOUR REGULATION AND	
MUSCULOSKELETAL DISORDERS AMONG SELECTED LONG	
DISTANCE DRIVERS IN GHANA	_1
Moses Monday Omoniyi, Ph.D & Kyere Esther Oye	
SUBSTANCE USE RISK BEHAVIOURS OF SECONDARY SCHOOL TEACHERS IN ENUGU EDUCATION ZONE, ENUGU STATE, NIGERIA	11
Jude C. Enebechi, Ph. D & Prof. Chuks E Ezedum	
IMPROVING CARDIOVASCULAR EFFICIENCY IN	
INTELLECTUALLY DISABLED ADOLESCENTS THROUGH	
STRUCTURED EXERCISE TRAINING PROGRAMME	_20
Ogbouma, S. & Agwubike E. O.	
OPTIMIZING WORKERS' PERFORMANCE THROUGH RECREAT	ION
AND SPORTS	34
P. G. Akintunde (PH.D) & Ukpong, J. E. (Ph.D)	
FITNESS FOR LIFE: THE GOSPEL ACCORDING TO PHYSICAL EDUCATION	44
Toba David, Bamitale & Prof. Michael Olufemi Ajisafe	
INFORMATION TECHNOLOGY FOR SUSTAINABLE DEVELOPME	ENT
OF SPORT AND PHYSICAL EDUCATION IN SCHOOLS	
IN NIGERIA	53
Dr. Momoh D. M.; Dr. Adeuga, I. T. & Dr. Adedugbe, B. O.	
PHYSICAL EDUCATION EXPERIENCES OF SECONDARY SCHO	OOL
STUDENTS IN BENIN CITY	_61
Ojeyokan Patricia Ndudi (Ph. D)	

PHYSICAL ACTIVITY AND SPORTS PROMOTION THROUGH
INFORMATION COMMUNICATION TECHNOLOGY (ICT) IN
SCHOOLS 73
Lawal Yazid Ibrahim Ph.D
APPLYING HUMANISTIC THERAPY TO SPORTS PSYCHOLOGY
PRACTICE IN NIGERIA: THE WAY FORWARD 88
Fidel O Okopi (Ph.D)
KNOWLEDGE AND ATTITUDE AS CORRELATES OF PRE-MARITAL
GENETIC SCREENING AMONG STUDENTS OF OSUN STATE
COLLEGE OF EDUCATION, ILA-ORANGUN, OSUN STATE,
NIGERIA 100
Oyedele, Akinsanmi Opeoluwa; Okundare, Ayobami Alade (Ph.D) & Lateef, K. O
(Ph.D)
GENDER DIFFERENCES ON FACTORS AFFECTING THE CHOICE OF
NURSING AS A CAREER AMONG SCIENCE ORIENTATED SENIOR
SECONDARY SCHOOL STUDENTS IN BENIN CITY, NIGERIA110
Oko-Ose J. N* & Bolaji-Osagie S
IMPACT OF 11 WEEKS STRUCTURED EXERCISE TRAINING
PROGRAMME ON THE MUSCULAR FITNESS OF ADOLESCENT
MALES WITH INTELLECTUAL DISABILITIES 122
Ogbouma, S. & Agwubike E. O.
MOTIVATION AS A PREDICTOR OF ACADEMIC ACHIEVEMENT
AND BEHAVIOUR MODIFICATIONS AMONG SENIOR SECONDARY
SCHOOL STUDENTS IN LAGOS STATE  Mercy, Onwuama <sup>1</sup> ,; Ajibola, Gbenga Samson <sup>2</sup> , & Fasoranti, Afolabi Joseph <sup>3</sup>
werey, Onwadina ,, Ajibola, Goenga Samson , & Lasorann, Ajolabi Soseph
DEMOGRAPHIC FACTORS PREDICTING PARTICIPATION IN
RECREATIONAL SPORTS AMONG ACADEMIC STAFF OF STATE-
OWNED HIGHER INSTITUTIONS IN SOUTH-WESTERN
NIGERIA 142
Idowu Iresanmi Balogun (Ph.D.) & Opeoluwa Akinsanmi Oyedele
COMPARING TEAM NIGERIA PERFORMANCE AT THE 2012 AND
2016 OLYMPIC AND PARALYMPIC GAMES155
Gbenga S. Ajibola & Habeeb L. Owolabi

EFFECT OF MENTAL IMAGERY TECHNIQUE ON SPORTS PERFORMANCE AMONG UNIVERSITY OF IBADAN TRACK AND	
FIELD ATTICETES	164
Joseph Rugai (Ph.D) & Kemebradikumo Y. Nathan	
POTENTIAL ECONOMIC IMPACT OF FACILITY	
COMMERCIALIZATION ON SPORTS AND ECONOMIC	
DEVELOPMENT OF KWARA STATE, NIGERIA	178
Aina, Michael Ghemisola; Obiyemi, O. O.; Ibraheem, T. O & Adebayo, B. S.	
PERCEIVED INFLUENCE OF POOR WASTE DISPOSAL AND	
MANAGEMENT PRACTICES ON THE HEALTH OF THE PEOPLE O	F
ILORIN SOUTH LOCAL GOVERNMENT	191
Abdulrasaq, Qazeem Onaolapo	
STRATEGIC PLANNING IN ACHIEVING THE GOALS OF NATIONAL SPORT POLICY AND VISION 2010 THROUGH MANAGEMENT INFORMATION SYSTEM (MIS)  Lawal Yazid Ibrahim Ph.D	AL _200
REMEDIATING THE HEALTH CHALLENGES OF THE AGED	_214
LIFESTYLE AS CORRELATES OF SEXUALLY TRANSMITTED INFECTIONS AMONG TEENAGERS OF SECONDARY SCHOOL IN OLORUNDA LOCAL GOVERNMENT OF OSUN STATE_  Akorede, Seun Nurudeen; Ologele, Ibrahim; Enyikwola, Rebecca. O & Nofiu Oluwatobi Daniel	_223
THE PLACE OF PHYSICAL THERAPY IN THE MANAGEMENT OF	230
CRITICALLY ILL PATIENTS	_250
E. Okhuahesuyi, M. Sc.; Adebisi I. Hammed, M. Sc. & Chigozie O. Obaseki	

# PERCEIVED INFLUENCE OF POOR WASTE DISPOSAL AND MANAGEMENT PRACTICES ON THE HEALTH OF THE PEOPLE OF ILORIN SOUTH LOCAL GOVERNMENT

Abdulrasaq, Qazeem Onaolapo

Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin.

Corresponding author: kc\_brass@yahoo.com abdulrasaq.qo@unilorin.edu.ng +2347034541382

#### Abstract

The study investigated perceived influence of poor waste disposal and management practices on the health of the people of Ilorin South Local Government. Specifically the study sought to find whether improper disposal and management of waste has any influence on the health of the people and the environment. The study employed a descriptive research design of survey type. The population for the study comprised of all the residents of Ilorin South Local Government Area of Kwara State and social workers of Kwara State Environmental Protection Agency. A sample of 380 respondents was selected for the study using purposive and simple random sampling techniques. A validated questionnaire from related experts was used to collect data from the respondents. The instrument was subjected to a reliability test using Spearman Brown Rank Order which yielded a correlation coefficient of 0.78r. The completed questionnaires were collected, sorted, coded and analyzed using the inferential statistics of chi-square ( $\chi^2$ ) at 0.05 alpha level. The findings revealed that improper disposal and management of waste has a significant influence on health and the environment. It was recommended among others that people of Ilorin South Local Government Area should be encouraged to desist from the improper disposal of waste by educating them on the negative influence of improper disposal of waste on their health and the environment.

Keywords: waste, improper disposal, improper management, health

#### Introduction

Waste according to UNICEF (2006) is defined as organic and inorganic material produced by households, commercial and industrial establishments, which

has no economic value to the owner. This was corroborated by Chukwuemeka, Ugwu and Igwegbe (2012) who stated that wastes are useless, unwanted and discarded materials. For an individual to be willing to get rid of something, such a thing must have no value or he/she is no longer want to be in possession of the item. Waste could be from different source which includes domestic, industrial and hospitals.

According to Rushton (2016), the generation of waste and the collection, processing, transport and disposal of waste are important for both the health of the public and aesthetic and environmental reasons. Waste is anything discarded by an individual, household or organization. As a result waste is a complex mixture of different substances, only some of which are intrinsically hazardous to health. Fitzpatrick, Ray and Parkinson (2003) emphasized that poor waste disposal practices are responsible for a significant proportion of the world's infectious disease burden. Urban waste management is drawing increasing attention, as it can easily be observed that too much garbage is lying uncollected in the streets, on road verges, in gutters and at waste collection points causing inconvenience, environmental pollution, and posing a public health risk in the environment.

Disposal of refuse without proper supervision often mounts damage on the environment and ultimately to the human body system. Osibogun (2015) opined that improperly disposed refuse has both direct and indirect health effects. The direct health effects arise from excessive breeding of vermin and agents of disease such as rats, flies and mosquitoes. Rats are known to transmit diseases such as leptospirosis, lassa fever and some other haemorrhaging fevers, salmonellosis, and plague. Oshibogun noted that flies are implicated in transmission of diarrhoeal diseases such as shigellosis while mosquitoes are well known for transmission of malaria. Apart from infectious diseases, improper disposal of refuse will also result to leachate and contamination of ground water and this can result in poisoning of bore holes. The author further explains that leachate is the liquid that forms as water trickles through contaminated areas. It is a very harmful mixture of chemicals that may result in hazardous substances entering surface water, groundwater or soil. The improper disposed refuse also cause injuries e.g from broken bottles, rusted metal objects etc resulting in cuts and slippery constituents resulting in falls.

Rushton (2016) affirmed that when talking about concerns of the effects waste can have on the health of people, there are two categories of utmost concern; the people living close to the waste site and the workers. There is a large workforce employed in waste collection, sorting and disposal. Workers may be exposed to the same potential hazards as the general population, although the amount of exposure and risk may differ. Rushton (2016) opined that most of the studies of communities living near incinerators have assessed exposure using some measure of distance from the site or an estimate of areas at most risk from emissions. Little evidence has been found for an association between modern waste incinerators and

reproductive or developmental effects. In addition, there is little evidence of increased prevalence of respiratory illness near incinerators, using either self-reported symptoms or physiological measures.

Giusti, (2009) affirmed that health issues are associated with every step of the handling, treatment and disposal of waste, both directly (via recovery and recycling activities or other occupations in the waste management industry, by exposure to hazardous substances in the waste or to emissions from incinerators and landfill sites, vermin, odours and noise) or indirectly (e.g. via ingestion of contaminated water, soil and food).

#### Statement of the Problem

The researcher has observed that though it is inevitable to generate waste, the proper disposal and management of waste has become a great challenge among the People of Ilorin South Local Government Area. The site for various collection points for waste presents an eyesore when wastes are not collected in time. It can be observed that waste pile up at the side of the road, on road verges and even in public collection bins provided by the Government.

The researcher has also observed that even the waste that are collected by private firms that deals with the collection and disposal of waste from different households that pay for such services sometimes pile up in front of various households and emit foul stench when they are not collected in time. The researcher has also observed that there are no proper separation of waste (biodegradable and non-biodegradable), they are just lumped and dumped together and carried to various waste deposition sites. Non-biodegradable wastes like nylon and plastics consequently become a breeding house for mosquitoes when they hold water after rainfall. This is one of the reasons why it has been difficult to completely eradicate or reduce the rate of occurrence of malaria fever among the populace.

Poorly disposed waste from domestic sources serve as a breeding ground for rodents and other vermin which can transmit diseases to people. This is the reason why it has been reported that typhoid fever is a problem in Nigeria. The effects of improper waste disposal and management includes soil contamination, air pollution, can threaten marine life and it can also contaminate groundwater among others.

#### Purpose of the Study

The purpose of the study is to find out:

- 1. The different types of disposal and management methods of wastes in the study area
- 2. The influence of the different forms of waste disposal and management on health and environment

#### Research Questions

- 1. Will improper disposal of waste have any influence on the health of the people of Nigeria?
- 2. Will improper management of waste have any influence on the health of the people of Nigeria?
- 3. Will improper disposal and management of waste have any influence on the environment?

#### Methodology

The study employed a descriptive research design of survey type. The population for this study comprised of all the residents in Ilorin South Local Government Area of Kwara State which according to the National Population Commission (2006) is 209,251 residents among which included 2,000 social workers of Kwara State Waste and Environmental Protection Agency (KWEPA). According to the Research Advisor (2006), for a population of 10,000 and above a sample of 380 is sufficient enough to represent the entire population at a level of confidence of 95% and a margin of error of 5% which is 2.66%. Therefore, a sample of 380 respondents was selected for the study with 2.6% (52 respondents) of the 380 respondents selected from the social workers. Purposive sampling technique was used to select places with visible features of poor waste disposal by going round the study area and documenting places with such features. Simple random sampling technique of fish bowl method was used to select 50% of the documented areas. Purposive sampling technique was used to select shops and house owners around the selected places. A validated questionnaire from related experts was used to collect data from the respondents. The instrument was subjected to a reliability test using Spearman Brown Rank Order which yielded a correlation coefficient of 0.78r. The completed questionnaires were collected, sorted, coded and analyzed using the inferential statistics of chi-square ( $\chi^2$ ) at 0.05 alpha level.

#### RESULTS

Ho1: Improper disposal of waste will not significantly influence the health of the people of Ilorin South Local Government Area, Kwara State.

Table 1: Chi-square analysis investigating the influence of improper disposal of waste on health among the people of Ilorin South Local Government Area, Kwara State.

S/N	Items	SA	A	D	SD	Cal. χ² value	Df	Critical value	Decision
1	Improper disposal of waste can pollute the source of drinking water thereby causing water borne diseases	102	272	4	2				
2	7771	306	61	10	3				
3	When wastes are not properly disposed, they can collect water thereby breeding mosquitoes that can cause malaria	247	97	22	14	327.0	9	16.92	Rejected
4.	Improper disposal of waste can pollute the air which can consequently cause respiratory tract infections	311	63	2	4	•		•	

From the table above, it can be observed that the calculated chi-square value of 327.0 is greater than the critical value of 16.92 with a degree of freedom of 9 at 0.05 alpha level of significance. Therefore the null hypothesis that says that improper disposal of waste will not significantly influence the health of the people was rejected. This implies that poor drainage management and waterways dumping contributes to the incidence of flooding in Ilorin South Local Government Area of Kwara State.

Ho2: Improper management of waste will not significantly influence the health of the people of Ilorin South Local Government Area, Kwara State.

**Table 2**: Chi-square analysis investigating the influence of improper management of waste on the health of the people of Ilorin South Local Government Area, Kwara State.

S/N	Items	SA	A	D	SD	Cal. χ <sup>2</sup> value	df	Critical value	Decision
1	Unavailability of protective equipments by the waste management personnel can make them susceptible to air borne diseases	210	163	2	5				
2	Lack of enough disposal van can make the waste management personnel exposed to too much of waste than they need to be	285	92	3	0	242.1	9	16.92	Rejected
3	Poor condition of waste disposal van makes the waste management personnel sit on the waste in the vans which have an effect on their health	280	86	11	3				
4.	Citing dumpsites close residential areas can transmit diseases like cholera to the residents	252	122	5	1	officant rewill		level of temperature in the im-	

The table above revealed the calculated chi-square value of 236.9 which is greater than the critical value of 16.92 with a degree of freedom of 9 at .05 alpha level of significance. Therefore the null hypothesis which states that improper management of waste will not significantly influence the health of the people of Ilorin South Local Government Area was rejected. This implies that the blockage of drainage and waterways which affect the free flow of waste water and run off water from rain contributes to the incidence of erosion in Ilorin South Local Government Area of Kwara State.

Ho3: Improper disposal and management of waste will not significantly influence the environment in Ilorin South Local Government Area, Kwara State.

Table 3:
Chi-square analysis investigating the influence of improper disposal and management of waste on the environment in Ilorin South Local Government Area, Kwara State.

S/N	Equity Items Service	SA	A	D	SD	Cal. χ <sup>2</sup> value	Df	Critical value	Decision
1	Improper waste disposal can lead to environmental degradation	326	46	2	6				
2	Improper waste disposal and management ccan lead to erosion	247	130	3	0				
3	Improper waste disposal and management can cause flooding	170	197	6	7	194.5	9	16.92	Rejected
4	Improper waste disposal of waste in water can affect the biotic life	273	86	9	12				

The table above revealed that the calculated chi-square value of 194.5 at a degree of freedom of 9 is greater than the critical value of 16.92 at .05 alpha level of significance. Therefore the null hypothesis which stated that improper waste disposal and management will not significantly influence the environment degradation in Ilorin South Local Government Area was rejected. This implies that improper waste disposal and management contributes to the degradation on the environment in Ilorin South Local Government Area of Kwara State

#### **Discussion of Findings**

Hypothesis one which stated that improper disposal of waste will not significantly influence the health of the people of Ilorin South Local Government Area of Kwara State was rejected because the calculated chi-square value was greater than the critical value. This implies that improper disposal of waste have a significant influence on the health of the people of Ilorin South Local Government Area of Kwara State. This finding is in line with the submission of Fitzpatrick, Ray and Parkinson (2003) who emphasized that poor waste disposal practices are responsible for a significant proportion of the world's infectious disease. When waste materials are not disposed off properly, they can serve as a breeding ground

for vermin and disease causing organisms. The finding is also corroborated by the findings of Osibogun (2015) who opined that improperly disposed refuse leads to excessive breeding of vermin and agents of diseases such as rats that transmits diseases such as leptospirosis, lassa fever and some other haemorrhaging fevers, salmonellosis, and plague; flies that transmits diarrheal diseases such as shigellosis; and mosquitoes that transmit malaria.

Hypothesis two which stated that improper management of waste will not significantly influence the health of the people of Ilorin South Local Government Area was rejected because the calculated chi-square value is greater than the critical value. This implies that improper management of waste has a significant influence on the health of the people of Ilorin South Local Government Area of Kwara State. This finding is in line with the findings of Giusti, (2009) who affirmed that health issues are associated with every step of the handling, treatment and disposal of waste, both directly (via recovery and recycling activities or other occupations in the waste management industry, by exposure to hazardous substances in the waste or to emissions from incinerators and landfill sites, vermin, odours and noise) or indirectly (e.g. via ingestion of contaminated water, soil and food).

Hypothesis three which stated that improper disposal and management of waste will not significantly influence the environment in Ilorin South Local Government Area was rejected because the calculated chi-square value is greater than the critical value. This implies that improper disposal and management of waste has a significant influence on the environment in Ilorin South Local Government Area of Kwara State. This finding is in line with Fitzpatrick, Ray and Parkinson (2003) who revealed that poor waste disposal and management practices are responsible for environmental pollution, and posing a public health risk in the environment.

#### Conclusion

Based on the findings of the study, it was concluded that:

- 1. Improper disposal of waste has a significant influence on the health of the people of Ilorin South Local Government Area of Kwara State.
- 2. Improper management of waste has a significant influence on the health of the people of Ilorin South Local Government Area of Kwara State.
- 3. Improper disposal and management of waste has a significant influence on the environment in Ilorin South Local Government Area of Kwara State.

#### Recommendations

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

1. The people of Ilorin South Local Government Area should be encouraged to desist from the improper disposal of waste by educating them on the negative influence of improper disposal of waste on their health.

- 2. Personnel handling waste as a form of waste management should be enlightened on the influence of improper handling of waste on their health.
- 3. The people of Ilorin South Local Government Area should be educated on the influence of poor waste disposal and management on the environment so that they can live in a conduscive and safe environment.

#### References

- Chukwuemeka, E., Ugwu, J. & Igwegbe, D. (2012). Management and Development: Implications of Solid Waste Management in Nigeria. *Asian Journal of Business Management*, 4(4):352-358. ISSN: 2041-8752
- Fitzpatrick, M., Ray, N., & Parkinson, T. (2003). East Africa. Victoria, Australia: Lonely planet, 6<sup>th</sup> edition, ISSN 1740591313, 9781740591317. Pg 112-129.
- Giusti, L. (2009). A Review of Waste Management Practices and their Impact on Human Health. *Journal of Waste Management*. 29, 2227-2239. doi:10.1016/j.wasman.2009.03.028
- Kenya Project Organization, (2012). Sample Size Determination Using Krejcie and Morgan Table. Retrieved from http://www.kenpro.org/sample-size-determination-using-krejcie-and-morgan-table on 02/11/2015
- National Population Commission, (2006). Nigeria 2006 census figures. Retrieved from http://www.nigeriamasterweb.com/Nigeria06CensusFigs.html on 12/08/2015.
- Osibogun, A. (2015). How *Improper waste disposal damages health. Retrived from* http://www.vanguardngr.com/2015/08/how-improper-waste-disposal-damages-health/ on 06/08/2016.
- Research Advisors, (2006). Method for determining sample size of a population. Retrieved from http://research-advisors.com on 02/08/2015
- Rushton, L. (2016). Health Hazards and waste management, British Medical Bulletin 68(1): 183-197. http://bmb.oxfordjournals.org/content/68/1/183 .full, accessed 1/08/16
- UNICEF., (2006). Solid and Liquid Waste Management in Rural Areas. A Technical Note, 2006.