

SPORT PARTICIPATION OF FEMALE UNIVERSITY STUDENTS

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ABSTRACT

There are numerous benefits associated with regular participation in sport or exercise. South African women have the highest overweight and obesity rate in sub-Saharan Africa. Black females constitute the highest percentage of South Africa's student population. University students exercise unhealthy lifestyle choices, including lack of physical activity. Reasons that lead to female students not participating in any form of physical activity or sport were investigated at the University of Zululand using a self-administered questionnaire. A non-random sample of 1004 of these students that did not participate in physical exercise or sport and 292 of those who did, were recruited from four faculties at the University. The main reasons for non-participation were: 'no time' (68%), transport problems (8%), club membership too expensive (6%) and poor facilities (5%). The main reasons given for participating were: 'to be fit' (81%), 'to fight boredom' (15%) and 'to earn money' (4%). The students indicated that safe access to sporting facilities and the poor state of university sporting facilities were deterrents to participation. The university management should address the constraints to promote greater participation.

Keywords: Female students; Physical activity; Sport participation; University of Zululand.

INTRODUCTION

Physical activity and exercise performed regularly has many physical and mental benefits for men and women (Warburton *et al.*, 2006; Haskell *et al.*, 2007; Janssen & LeBlanc, 2010; Garber *et al.*, 2011). Exercise is widely regarded as the cheapest medicine in the world (Sallis, 2009). Sedentary individuals are more susceptible to chronic illnesses as opposed to their physically active counterparts (McArdle *et al.*, 2010; Garber *et al.*, 2011; Powers & Howley, 2014). However, millions of people suffer from illnesses that could be prevented or ameliorated through regular physical activity (Bae *et al.*, 2012). Physical activity constitutes any bodily movement produced by the skeletal muscles that is enough to induce an increase in energy expenditure above basal metabolic levels, which includes exercise, sports and physical activities performed as part of daily living, occupation, leisure and active transportation (Caspersen *et al.*, 1985). On the other hand, exercise is a physical activity that is planned, structured, repetitive and has as a final or intermediate objective the improvement or maintenance of physical fitness (Caspersen *et al.*, 1985).

The White Paper on Sport and Recreation for the Republic of South Africa implores that, the United Nations' Inter-Agency Task Force Sport for Development and Peace definition of sport should be adopted since the country could be classified as developmental in nature (DSRSA, 2010:10) and that "all forms of physical activity that contribute to physical fitness, mental well-being and social interaction, such as play, recreation, organised or competitive sport, and indigenous sports and games". For the purposes of this study, this definition of sport was accepted. Burnett (in Gouws, 1997) identified a conceptual analysis and explanation of movement namely: (1) sport; (2) recreation (social sport such as recreation and other recreational activities); and (3) relaxation–leisure (activities that provide a cathartic effect).

The White Paper has since coined 'active recreation' for Category 2 activities (recreation) and 'passive recreation' for Category 3 activities (relaxation–leisure). The benefits of sport (Category 1) are both physical and mental; passive recreation (Category 2) is performed purely for fun and enjoyment; and active recreation (Category 3) has elements of competition, physical, mental and economic benefits and can be used as a stepping stone to formalised sport (DSRSA, 2010). The sub-categories of sport can be counted as elite (highly organised and competitive), mass participation (the lower strata of sports development continuum whose aim is to improve participation opportunities in sport and recreation), modified sport (adapted sport activities to introduce new participants and grassroots sport, similar to mass participation with a focus on disadvantaged and rural areas). Considering that these terms are used interchangeably, mass participation and grassroots sport are the lenses through which sport is viewed in this paper.

Behavioural and lifestyle choices that people make early in life, are likely to influence their health status in later years. Past studies have reported that university-aged students have a high risk of unhealthy lifestyles (Dawson *et al.*, 2007; Jackson *et al.*, 2009; Taylor *et al.*, 2009; Bloemhoff, 2010; Van Niekerk & Barnard, 2011; O'Brien *et al.*, 2014). Dawson *et al.* (2007) reported that Canadian male and female students exercised significantly different lifestyle choices thus resulting in different health outcomes. Males were reported to engage in riskier behaviours (alcohol abuse) than females, whereas women were found to have lower levels of participation in physical activity in particular. Similar patterns have also been reported in the South African context by Bloemhoff (2010), Burnett (2010) and Van Niekerk and Barnard (2011).

In the study of Burnett (2010), trends in sport participation were reviewed and included various universities across South Africa whilst the study of (Bloemhoff, 2010) and Van Niekerk and Barnard (2011) focused specifically on sport participation at the University of Free State and University of Stellenbosch respectively. There is consensus that universities' 'culture' may lead to many undesirable perceptions of health, lifestyle, physical activity and fitness among university-aged students (Dawson *et al.*, 2007; Bloemhoff, 2010; Van Niekerk & Barnard, 2011). Popular culture, newfound freedom and peer pressure that university students might be subjected to have been offered as reasons for this state of affairs (Seed *et al.*, 2004; Bell & Lee, 2005; Seed *et al.*, 2005; O'Brien *et al.*, 2014). In the study by Seed *et al.* (2004), for example, the influence of popular culture played a significant role in the desires of Black students to adopt a lean body image. This is in contrast to the 'ideal' African woman's body image.

Physical activity preferences differ in respect of race and gender (Bloemhoff, 2010). The notion of racial differences in patterns of physical activity has been reported by other researchers as well (McVeigh *et al.*, 2004; Suminski *et al.*, 2004). McVeigh *et al.* (2004) reported significant differences in patterns of activity in South African schools with white being more active than black children. Bloemhoff (2010) noted a similar percentage of white and black students that fell in the low category, black students that assumed a moderate level and a high percentage of white females who occupied the high category of participation in physical activity at the University of the Free State, which is a historically white institution. Overall, (Bloemhoff, 2010) found significantly higher levels of physical activity among black students compared to their white counterparts. He attributed this to equal living conditions, better infrastructure at the University of the Free State than in other universities. Nthangeni (2006) observed high levels of non-participation among black students at the Tshwane University of Technology (TUT) in Pretoria where gender distinction, as it relates to participation, was not noted. From the literature available, it is clear that there is a scarcity in evidence of research on sport participation at historically black universities accentuating the importance of this study.

PURPOSE OF THE STUDY

Data available on participation in sport and physical exercise tend to indicate differences in the level and type of involvement among men and women, suggesting that men are more prone to participation than women (Horne *et al.*, 1999; Bloemhoff, 2010; Burnett, 2010). Black students constitute 81% of the student population in all 23 South African universities. Of that percentage, black females constitute 58% (CHE, 2014a). Alarming, South Africa has the highest overweight and obesity rate for women in sub-Saharan Africa for ages 2–19 years, and the population aged 20 years and older with 7 out of 10 women having significantly more body fat than is deemed healthy. Of the 70% of overweight South African women, as high as 42% are obese (Ng *et al.*, 2014). There is a need to design health promotion programmes that target females, hence they are a focus in this study. No previous research on this subject has been undertaken in the predominantly isiZulu-speaking province of KwaZulu-Natal. It was considered that the different conditions, substandard infrastructure and poor socio-economic status found at historically black universities might yield different results from those reported elsewhere. Consequently, this paper is an attempt to investigate factors that promote and prevent sport participation among female students at the University of Zululand.

METHODOLOGY

Population and sampling

An exploratory survey research method was used for this study. Permission was sought from different lecturers to distribute the questionnaire before the start of lectures and practical sessions in laboratories. Two researchers visited the main library and strolled around the campus asking students to participate voluntarily. Students were also approached during their break times. The purpose and intent of the study was explained. The process of completing the questionnaires was supervised. Test subjects responded to the questionnaire after providing informed consent. A non-random sample size of 1004 students were recruited and formed the 'non-participants' group; 292 students made up the 'participants' group. When this study was conducted, the total student population at the university was 16 434 (DHET, 2014), according

to the Council on Higher Education (CHE) HEMIS database. The sample size represented 7.89% of the total student population.

Female students who lived a sedentary lifestyle were randomly invited to participate as non-participants, whereas those who were involved in any of the 22 sporting codes offered at the University of Zululand were invited to become participants. Before any 'non-participant' student was handed a questionnaire, they were asked if they engaged in any form of sport either on campus or outside. Only those that provided a 'no' answer were allowed to participate. To be categorised as a participant, the American College of Sport Medicine guidelines on participation in regular cardiorespiratory exercises at least five days a week of moderate exercise, or at least three days a week of vigorous exercise, or a combination of moderate and vigorous exercise on at least 3–5 days a week, for 150 minutes were used (Garber *et al.*, 2011). As the 'participants' group consisted of all sportswomen enlisted for any of the 22 sport codes as players at the university, additional permission was requested from the head of the Sports Bureau. The researchers visited the training sessions of the different sport codes at the university in the afternoons and personally met with the subjects. Moreover, the researchers verified attendance of minimum training sessions (three per week) with the coaches. Both groups of students were drawn from all four faculties, and ranged from first to fifth year students.

Questionnaire

A quantitative research design was followed for this study. Students were handed a self-administered questionnaire that was developed by the Department of Leisure Management at the Tshwane University of Technology and given an option of responding to the questionnaire in either isiZulu or English. The researchers personally administered the questionnaires with the help of two research assistants whose duties were limited to distributing the questionnaires, collecting, checking if they were completed fully and collected them at the end of the session. The Cronbach Alpha reliability test was performed on the questionnaires to test for internal consistency. The non-participants' questionnaire had a Cronbach Alpha reliability value of 0.82 (0.87 if corrected) whereas the participants' questionnaire data had a value of 0.42. The questionnaire sought information assigned to three main sections: (1) demographics; (2) the reasons for and against sport participation at the university and the students' opinions of measures that could be taken to improve the situation; and (3) students' attitudes/perceptions of sport participation. The second section consisted of 20 items to test factors that could either promote or prevent sport participation at the university. Participants were expected to make a cross next to the possible option that best described how they felt about that item.

Ethical clearance

Ethical clearance was obtained from the Faculty of Science and Agriculture Ethics Committee (+27 (0) 35 902 6741).

Statistical analysis and interpretation of data

Quantitative analysis was performed on the data using SPSS (IBM, 2013). The frequency procedure was used to establish the count and percentage of specific response categories for questions with nominal response categories (for example, 'Do you feel that the current sport

infrastructure and facilities are up to international standards?') with the options, 1=Yes, 2=No, 3=Uncertain). Thereafter, frequency tables were compiled.

RESULTS

The demographic information concerning the participants is provided in Table 1.

Table 1. DEMOGRAPHICS OF NON-PARTICIPANTS AND PARTICIPANTS

Variable	Categories	Non-participants		Participants	
		n	%	n	%
Age (yr)	16–18	86	9	62	21
	19–25	635	63	172	59
	26–30	160	16	58	20
	31–40	123	12		
Race	Black	978	97	284	97
	White	9	1	2	1
	Indian	7	1	2	1
	Coloured	9	1	4	1
Faculty	Education	251	25	77	26
	Commerce & Law	251	25	79	27
	Arts	251	25	70	24
	Science	251	25	66	23
Year	First	349	35	108	37
	Second	173	17	79	27
	Third	219	22	68	23
	Fourth	253	25	34	12
	Fifth	10	1	3	1

Non-participants: n=1004

Participants: n=292

Out of a possible 22 sports codes offered at the university, only 19 were represented in the study (Table 2). The 292 subjects, who formed the participants group, participated in dance aerobics (25%), with soccer (9%), cricket (7%), netball (6%) athletics and tennis (6%) enjoying some popularity as the top six activities at the university. In Nthangeni *et al.* (2009) study, the top six sporting codes were (1) hockey; (2) netball; (3) soccer; (4) rugby, (5) basketball and (6) athletics and ballroom dancing. The number of participants documented reflects the questionnaires that were completed properly and returned to the researchers. Participants who missed regular training or were not present at the training session when the questionnaire was handed out were excluded. Admittedly, some team sports, such as hockey reflect five players, who are not even enough to constitute a university team. However, the rest of the team members were absent from the training session when the researchers visited the training session. Since

the research was conducted closer to university examinations, the researchers found it difficult to follow up on the missing members, since the students immediately left for home.

Table 2. FEMALE SPORT CODES AT UNIVERSITY OF ZULULAND

Sport	n	%
Aerobics	75	26
Athletics	18	6
Basketball	14	5
Body building	13	4
Cricket	19	7
Dance	13	4
Golf	13	4
Hockey	5	2
Karate	7	2
Netball	17	6
Rugby	10	3
Soccer	25	9
Softball	6	2
Squash	6	2
Swimming	12	4
Table tennis	8	3
Taekwondo	6	2
Tennis	17	6
Volleyball	8	3

Reasons for non-participation and participation in physical activity or sport are presented in Table 3. The main reasons for participating were stated: to be fit (81%), to earn money (4%) and to fight boredom (15%). Most participants (73%) stated that the preferred time to participate in sport at the university is 17h00–19h00, whereas non-participants' views varied from the 36%, who considered 17h00–19h00 to be acceptable to the 31% who preferred a Saturday afternoon as an alternative and suitable time.

Table 3. NON-PARTICIPATION AND PARTICIPATION IN SPORT

Non-participants			Participants		
Reason	n	%	Reason	n	%
'No time'	686	68	To be fit	236	81
Transport problems	92	9	To earn money	12	4
Poor coaching staff	41	4	Fight boredom	44	15
Poor facilities	47	5			
Poor management of sport	24	2			
Club membership	56	6			
expensive					
Other	58	6			

The main reasons for not participating were given as 'no time' (68%), transport problems (9%), club membership being too expensive (6%) and poor facilities (5%). Most participants (71%) stated that the university does not have adequate facilities for sport, whereas among the non-participants, feelings were roughly equally divided between those who considered them adequate (38%) or inadequate (41%).

Table 4. ACCOMMODATION OF NON-PARTICIPANTS AND PARTICIPANTS IN UNIVERSITY RESIDENCES

Response	Non-participants		Participants	
	n	%	n	%
Yes	834	83	217	74
No	86	9	75	26
Uncertain	84	8	–	–

The majority of participants (70%) and non-participants (74%) declared that they felt unsafe pursuing sport at the university compared to participants (30%) and non-participants (26%) who did not. The majority of the students (74%) indicated that staying in university residences gives more opportunity to participate in sport, whereas among the non-participants the majority (82%) asserted the same sentiment. The remaining students were equally divided between those who did not agree (8%) or were uncertain (8%) (Table 4). When the study was completed, 56% (n=567) of the non-participants and 63% (n= 83) of the participants were accommodated at university residences. In contrast, 44% (n=437) of the non-participants and 37% (n= 109) of the participants were accommodated privately outside the university.

Most participants (43%) intimated that the sporting activities on offer are inadequate, with the rest about equally divided between those who considered them adequate (23%) or were uncertain on this point (34%). The non-participants' stance was in sharp contrast, with most (61%) intimating that they are adequate compared to those who felt they were not (11%) or were uncertain on the matter. A majority of subjects (72%) considered that there is no awareness of the different sport activities offered at the university, whereas a much smaller number (28%) felt that there is awareness.

Table 5. ATTITUDES TOWARDS FINANCIAL AND OTHER SUPPORT

Types of support	Non-participants		Participants	
	n	%	n	%
Bursary	543	54	174	60
New equipment	153	15	67	23
Subsidy for membership	151	15	13	4
Free accommodation	130	13	38	13
Other	27	3		

The students differed on the kind of support prefer as motivation to increase sport participation. Most participants (60%) favoured the award of a bursary towards university studies, provision of new equipment (23%), subsidy for sports club membership (4%) or free accommodation in the university residences (13%). The feelings of non-participants reveal roughly the same sentiments: with most subjects (54%) recommending a bursary, new equipment (15%), subsidy for membership (13%) or free accommodation (13%) (Table 5).

DISCUSSION

The main reason given for no or low participation in sport by female students (68% of the subgroup) was that they had ‘no time’. The specifics of what was meant by this term were not investigated. However, studies in psychology point to lack of willpower. The importance of willpower in achieving a change in behaviour has been demonstrated by various authors. Oaten and Cheng (2006) assessed willpower after assigning volunteers to an 8-week programme of physical exercise and found that those who had completed the tasks fared better than controls on measures of self-control. Moffitt *et al.* (2011) conducted a longitudinal study of 1000 participants from birth to the age of 32 and found that of the individuals in the cohort, who had better physical and mental health, most had greater self-control. There were fewer students who had substance abuse problems and criminal records.

The same could be applicable to our students. Lack of willpower could be the main reason behind ‘lack of time’. There is a common perception that when school-leavers enrol at institutions of higher education, they struggle to cope with the transition from the demands of high school work to those imposed by tertiary institutions. The relatively high number of first year female students, who do not participate in physical activity and sport as a result of ‘lack of time’, struggle to adapt to the learning standards at the university. One in 10 participants indicated that indulging in physical activity or sport interferes with their academic work. Better planning of daily schedules could make time available to engage in extramural activities. The results of our study are in line with those of previous investigators who reported ‘lack of time’ as a limiting factor to sport participation among university students (Nthangeni *et al.*, 2009; Lovell *et al.*, 2010; Halforty, 2012; Hashim *et al.*, 2012; Chung *et al.*, 2013; Halforty & Radder, 2015).

The main motive for engaging in physical activity or sport indicated by most students (81%) was ‘to be fit’. Fitness, particularly when health-related (in respect of muscle strength, muscle endurance, flexibility, cardio-respiratory endurance and body composition), is linked to improved ‘health benefits’. Lovell *et al.* (2010) and Nthangeni *et al.* (2009) found that ‘to be fit’ ranked highest as a motivator for participation in sport.

Safety is a major concern affecting students’ engagement in sport at the university. The university operates a 24-hour protection service. However, 44% (n=437) of non-participants and 37% (n=109) of participants are accommodated in private residences just outside the university campus, so the involvement of protection services is limited. Safety should be a major concern for students given that 36% of non-participants and 73% of active sportswomen indicated 17:00–19:00 as their preferred time to participate in sport. The safety of students,

who are often harassed, threatened and victims of thuggery is a serious challenge (PMG, 2011). Bureaucracy, which dictates limited access control on university premises by virtue of it being on tribal land, could contribute to the state of affairs. It is a common sight at the university sports fields to see the cows owned by locals freely grazing (PMG, 2011). Funding to secure the periphery of the university is limited and inadequate, and added to this is the high rate of vandalism of university property by criminal elements.

To this end, the university received funding from the Department of Higher Education and Training (DHET) to initiate the infrastructure renewal programme with money to be set aside to make the campus safer (PMG, 2012; CHE, 2014b.). The infrastructure allocation from the DHET to the University of Zululand amounted to 480 million for the period 2010–2014 (Zuma, 2014). Unless the institution addresses the safety concerns of students, participation in sport will always be less than it could be. Safety was first concern highlighted by Nthangeni *et al.* (2009) in the urban setting of Tshwane University of Technology (TUT) in Pretoria, which appears to be a uniquely South African problem. In studies conducted with United Kingdom (Lovell *et al.*, 2010), United States (Hashim *et al.*, 2012), Chinese (Chung *et al.*, 2013) and Spanish (Martínez-Lemos *et al.*, 2014) students, safety did not feature as a barrier to participation in sport.

The results of this study contradict those of Nthangeni *et al.* (2009). The students at TUT have access to well-maintained facilities of international standard, frequently used by professional teams (Feyenoord, 2001), whereas the facilities at the University of Zululand were considered inadequate by 41% of non-participants and 71% of participants. Historically black universities in South Africa do not have a track record of world-class sporting facilities compared to historically white institutions. Education was used as an instrument of subjugation during apartheid (Zuma, 2014). What are bread-and-butter issues at historically black universities do not include the maintenance of facilities, such as being able to afford the expense of watering sports fields. Moreover, maintaining these facilities is done on an ad hoc basis where only small budgets are set aside for this important task (PMG, 2012). The other reality at the university is financial mismanagement with a recent incident being the disappearance of 11 million from university coffers (Macupe, 2015). There is no full-time maintenance department thus part-time service providers perform this task, which can lead to months of delays when facilities are neglected (Mnyasane, 2014). The results of the current study are in line with those of previous investigations (Lovell *et al.*, 2010; Halforty, 2012; Hashim *et al.*, 2012; Chung *et al.*, 2013; Martínez-Lemos *et al.*, 2014; Halforty & Radder, 2015) where ‘facilities’ or ‘overcrowded facilities’ are listed as noted barriers to participation in sport.

The study on sporting activities and awareness of programmes offered at the University of Zululand presents confusing results. Whereas a majority of students (72%) indicate limited awareness of the sports available, 61% of the non-participants, compared to 23% of participants, said that these activities were adequately offered. This could indicate a gap in the information shared by Sport and Recreation, the body responsible for encouraging participation. Since non-partakers do not have to deal with the challenges faced by participants on a daily basis, there seems to be no comprehension of the scope of activities on offer. The result is that they do not know what is and what is not available.

A study bursary, new equipment and subsidy for membership ranked relatively high as initiatives that should be implemented to promote participation in sport. The likely reasons are that the students of the University of Zululand are likely to come from poor backgrounds. Nationally, the majority of students at historically black universities use the Government's National Student Financial Aid Scheme to pay for university fees. In 2012, the scheme supported 382 172 students (NSFAS, 2013). It makes sense that a study bursary would rank high in terms of initiatives that would entice female students to take up sport. Currently, the University of Zululand gives no incentives to any students to participate in sport. Nthangeni *et al.* (2009) reported similar results for TUT.

The data of the participants had a Cronbach Alpha reliability value of 0.42, which is considered unacceptable in social research (the ideal is 0.70–0.80 and above) (Cronbach, 1951). There are inherent limitations with the generalisability (the extent to which the research findings can be applied to other external settings) of the data of the participants in this study. However; the researchers are of the opinion that the results of the participants should be accepted as they are. The anomaly of the data can be explained in a number of ways.

Firstly, when dealing with psychological constructs (for example, attitude), values below 0.70 in Cronbach Alpha can be expected because of the diversity of attitude as a construct (Kline, 1998). Secondly, the researchers did not use summated scores of attitude; rather, all of the 10 individual items were measuring attitude as a construct independently. Individual items can be unreliable, they cannot discriminate among fine degrees of an attribute. They lack precision and scope in that they cannot fully represent a complex theoretical concept (Gliem & Gliem, 2003). To deal with this problem, researchers often run a factor analysis, which measures the association between an item and a factor (list of items that belong together) (Parsian & Dunning, 2009). A factor analysis was not applied for this study. Thirdly, Gadermann *et al.* (2012) argue that when using ordinal scales, an ordinal alpha, which is a conceptually equivalent statistical tool based on polychoric correlation matrix rather than Pearson covariance matrix of the Cronbach Alpha, is a superior tool to measure the reliability of data. The greatest problem with Pearson covariance matrix is that it assumes that the data is continuous, which results in the underestimation of the true relationship in cases where the distribution of observed responses is skewed, as is the case in this research. Nevertheless, the participants' data (with identified limitations) is a first account of the attitudes of female students towards participation in sports in a historically-black higher institution in a rural setting. The results, as they stand, could be used to inform future research within similar settings. Full psychometric standardisation of this scale, including factor analysis, is a task for future studies.

CONCLUSION AND RECOMMENDATIONS

While female students at the University of Zululand are willing to participate in sport, safety concerns, poor infrastructure and a lack of university residences limit their involvement. The following recommendations can be expected to increase levels of participation. The university management needs to invest in infrastructure, such as sport facilities, residences and to ensure a safe environment for the students. In 2012, the parliamentary monitoring group observed that the University had an infrastructure backlog that would have required R750 million to clear.

As stated earlier, the DHET made a massive investment in the University. The University also added R50.8 million out of its own resources towards the infrastructure renewal programme (PMG, 2012). Money needs to be directed to intended university infrastructural projects. The University must tighten its financial management systems to avoid fraud and corruption.

The Student Services Department has as its mission, “to seek to effectively and efficiently provide the integrated services that are aimed at creating learning environment underpinned by safety, good health and wellness” (UNIZULU, 2016b:online). To this end, the University has launched an employee wellness programme managed by Human Capital Management called, ‘Mpilonhle’, which literally means ‘good health’ (UNIZULU, 2015) and a student wellness programme called ‘First Things First’ (UNIZULU, 2016a). The hallmarks of both programmes are health screenings and staging a ‘Wellness Day’ towards the end of the year. While both initiatives could be considered progressive steps towards promoting the wellness of both staff and students, the researchers feel the focus of the two programmes fall short from being considered integrated. While for staff, the programme covers physical, psychological, financial problems and sporting activities, the researchers are of the view that one-off initiatives in a year are inadequate to inculcate the idea of a physically active personnel.

There is a common misconceptions that a Wellness Day with a 45-minute group training class that ignores principles of training, such as progression and overload, will entice people to start exercising. The programme for the students has a strong focus on infectious diseases, such as tuberculosis, sexually transmitted diseases, HIV/AIDS and primary prevention in the form of male circumcision, yet indications are that lifestyle diseases poses as much a danger in this group (Haase *et al.*, 2004; Ng *et al.*, 2014). The researchers are in no way suggesting that there is no value in doing health screenings for infectious diseases, however, it is worth noting that not all wellness dimensions are represented in either the employee or the students wellness programmes. This points to the notion that a revamp is needed.

The University appointed a Sports Council Committee as part of its array of management support structures. Members of the Sports Committee Council in terms of the 2016 general prospectus include the chairperson (who has a tourism background), the Dean of students, the Head of sports and recreation, a representative from the Faculty of Education, two additional members, as well as the chairperson of All Sports Council (a federation of students’ sport codes at the University). The committee was meant to meet three times for the 2016 academic year. Another Student Services Committee, for example, the Senate HIV/AIDS Committee, is constituted differently. The members include the Deputy Vice-Chancellor for research and innovation, the dean of students, a representative from the Department of Psychology, the head of campus Health Centre, a member from Academic Planning and Quality, a representative from the Student Representative Council, a union representative, a member from the Faculty of Arts (social sciences and humanities) and two additional members. The Committee meets four times, that is once a term.

The researchers are of the opinion that the University needs to rectify this anomaly in the composition of the Sports Committee Council. While the Sports Committee Council is not a senate committee, it is unacceptable that a representative from the Department of Psychology, a representative from the Student Representative Council, a representative from Physical

Planning and Works, a representative from Protective Services Department and the Head of Campus Health are missing. What is even more puzzling is the absence of the safety, health and environmental representative from both committees. If the Student Services Department wants to provide integrated services to students, a revamp of the Sports Committee Council through an amendment of the university statute, if necessary, would have to be presented to the University Senate and ultimately the University Council.

The main campus of the University is rural-based and draws the majority of its students from rural communities, who still value their culture and traditions (CHE, 2014b). There is a need to make provision for cultural learning and cultural activities suitable for students from various cultural backgrounds. While the rural context is acknowledged by the University's activities, such as enhancing local agricultural development and assistance of cooperative local governance and traditional affairs, there is little evidence of such synergy in the sphere of sporting activities. Te Ava and Rubie-Davies (2016), report that females (girls) value physical education that includes cultural activities more than males (boys). Cultural activities have been shown to help students to become confident and increase participation in physical education (Sleeter, 2005). In the study of Te Ava and Rubie-Davies (2016), cultural activities, such as music, drumming and dancing enhanced the desire of female students to participate in physical education.

Small and Thornhill (2008), investigated girls' attitudes towards participation and skill learning in physical education and reported that while boys valued the Western style of physical education and other contact sports that demonstrated prowess and masculinity in a competitive set-up, girls favoured physical education activities which promoted cooperation and team work. There is no reason to assume that the same impact could not be achieved in the South African context. Though these studies investigated the provision of the educational process that occurred in the school set-up, they hold great value in understanding the preferences of females in terms of sport participation. Such observations have been made by Burnett *et al.* (2004) in what she terms, 'hegemonic masculinity', in competitive sport at the expense of 'Cinderella' sports.

A number of researchers (Burnett, 2001a; Burnett & Hollander, 2004; Burnett *et al.*, 2004; Roux, 2006; Edwards, 2007; Nxumalo, 2011; Mawere, 2012) have called for the inclusion of Indigenous Knowledge Systems in the physical education (sport) curriculum to achieve psychomotor, cognitive, affective and social benefits for the participants taking into consideration unique African and South African methodologies and contexts. Burnett (2002), Edwards and Fox (2005), Roux *et al.* (2007) propose the use of dance as means to deal with physical ailments. The researchers are of the opinion that sports and recreation in conjunction with Student Services and the Centre for Creative Arts at the University could promote sport participation among female students by introducing sport or recreational Zulu dancing, such as *ukugqumushela* (competition between groom and brides parties), *indlamu* (team dance performed with the accompaniment of drums and whistles), *ingoma* (dance without the drum accompaniment), *isizingili* (dance with drums and whistles), *ukhwaxa* (a dance whereby the knee is drawn into the armpit before the foot stamps the ground), *isikhuze* (dance accompanied by many drums and intricate polyrhythmic patterns) and *gumboot dancing* (Ngema, 2007).

The movements in *isikhuze* for example, comprises movements of the shields above the head, around the torso and various directions in a single file or split into two files. While participants of *isikhuze* were traditionally males, mixed teams are becoming a norm nowadays (Ngema, 2007).

Student Services and Sports and Recreation need to channel funds towards marketing sports codes that are offered at the University because they are under-prescribed. Annually, Sports and Recreation stage a sports day at which neighbouring universities, such as Mangosuthu University of Technology, Durban University of Technology and the University of KwaZulu-Natal visit the University to compete with male and female teams. Except for the female soccer team, netball, karate, volleyball and dance aerobics, the other sports codes do not enjoy the same popularity with the university students. Sports and Recreation also need to expand the list of female sport codes and offer recreational activities, because these type of activities motivate female students to participate and be physically active (Te Ava & Rubie-Davies, 2016).

Assuming broad agreement that the majority of University of Zululand students are from poor backgrounds and depend on the National Students Financial Aid Scheme to study (PMG, 2012), Sports and Recreation needs to consider offering sport scholarships at the University for exceptional female athletes, as is common in North America. This strategy might motivate students, who are participating in active recreation (Category 2) and passive recreation (Category 3), to elevate themselves to the first category of competitive sport.

Students should be encouraged to make use of Sports and Recreation on campus. More active co-operation by this office and greater involvement of the Department of Sports Science and Biokinetics will enable students to set realistic exercise goals, design a reasonable time schedule and explore other types of physical activities under the supervision of qualified personnel.

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