### NON-PARTICIPATION IN SPORT BY BLACK LEARNERS WITH SPECIAL REFERENCE TO GENDER, GRADES, FAMILY INCOME AND HOME ENVIRONMENT

#### Sanelisiwe MCHUNU & Kobus LE ROUX

Department of Educational Studies, University of South Africa, Pretoria, Republic of South Africa

#### ABSTRACT

This study was aimed at finding reasons for non-participation in sport by black learners at secondary school level. According to the findings of this research, factors that have the most important influence on non-participation in sport by black secondary learners are (in order of importance), facilities, political factors, social factors, self-image, economic factors and health. In terms of facilities it has been revealed that black township schools do not have adequate equipment, properly organized recreational facilities, coaches for the different sport codes and upgraded as well as well-maintained sport fields. Cultural isolation of black players in sport surfaced as an important political factor for non-participation. Through this research it has also emerged that while gender and income do seem to have an influence on non-participation in sport, grades and home environment do not. The results indicate that income as a reason for non-participation in sport is significantly more important for learners from low-income families than for learners from average-income families.

**Key words:** Sport; Physical Education; Black learner; Secondary school level; Political factors; Self-image; Social factors; Gender; Motivation; Exercise.

#### INTRODUCTION

According to Potgieter (2003:182), among the non-traditional methods of preventing psychological problems, physical exercise is increasingly recommended for the maintenance and enhancement of mental health. It is generally accepted that there are many psychological benefits offered by regular exercise such as promoting feelings of well-being and self-efficacy. Much of modern sport involves learning to control emotions, disciplining the self and managing emotional lives (Coakley & Dunning, 2000:477). Sport experiences can enrich emotional development by cultivating capacities for care, self-worth, strength of will, good judgement, compassion, understanding, love and friendship. With so much research pointing to many benefits like healthy bodies producing healthy minds, sport boosting school spirit and participation in school sport increasing students' self-esteem, it is disconcerting to see many learners, especially at secondary school, being less interested or developing a negative attitude towards sport.

According to McComb (2004:9), "every person is born with athletic capability and every person is predestined to develop that physical potential". Even Abraham Maslow (1970), who was the foremost 20<sup>th</sup> century theorist concerning human motivation, recognized the fact of predestined physicality. If this is the case, then what are the influences propelling some people to undertake physical activity and what discourages others from doing so? Hill (2001:89) views motivation in sport as "the desire to engage and persist in sport, often despite disappointments, sacrifice and discouragements". Diamant (1991:17) avers that of a number of reasons why some individuals continue exercising for a significant portion of their lives, the post-exercise affective state or "feel better" phenomenon appears to be a primary one.

Research evidence supports the hypothesis that regular exercise promotes feelings of well-being and can serve as a positive coping strategy (Biddle *et al.*, 2000:4; Coakley & Dunning, 2000:408; Singer *et al.*, 2001:643; Kirkcaldy, 2002:544; Hagger & Chatzisarantis, 2005:10). It is also believed that sport participation teaches young people useful lessons applicable to social life (Bar-Or, 1995:353).

Crews and Landers (cited in Potgieter, 2003:184) also discovered that sport not only has physiological benefits but it contributes to our psychological health as well. They concluded that no matter what type of psychological or physiological instruments are used, people who are aerobically fit show a decreased psychosocial stress response. Brown and Siegel (cited in Potgieter, 2003:185) also found that children who exercise regularly (aerobically or anaerobically) and are exposed to high levels of stress in life are ill less frequently than their peers who rarely exercise but experience similar stressful conditions. Self-concept is also frequently posited as a mediating variable that facilitates the attainment of other desirable outcomes, such as increased exercise adherence or health-related physical fitness (Andersen, 2000:61).

Research done by Orlick (cited in Bar-Or, 1995:418) concluded that at times overemphasis placed on winning and a fear of failure predominantly influence some students' decision to withdraw from sport. Other reasons cited for the decline in sport participation are that sport is too demanding and time consuming; too much pressure; dislike for the coach; 'conflict of interests' as students want to try other non-sport activities and are 'not having fun' (Bar-Or, 1995:418). Orlick's findings are important in that they suggest that the structure and climate in which sports are held are inadequate in meeting the needs of students and this might have a bearing on non-participation.

Research evidence has also found that parental support is significantly associated with enjoyment in sport and with the importance players ascribe to their game. Singer *et al.* (2001:617) attest to this view and state that adults, peers and learners themselves shape the social context within which they play sport. Parents are primarily responsible for providing children with initial opportunities to play sport and helping to maintain their involvement in it. Research evidence also exists which points to the fact that parents have the potential to affect their children's withdrawal from sport (Singer *et al.*, 2001:617).

Peers, on the other hand, are extremely influential in terms of the adolescent's self-perceptions, feelings of belonging and identity as well as social status. Consequently,

adolescents may find themselves propelled to demonstrate athletic ability or to avoid demonstration of low ability in front of their peers.

Since little evidence exists about the reasons for non-participation in sport by black secondary school learners in the South African context, this study therefore focused on black secondary school learners per se.

#### METHOD OF RESEARCH

#### Selection of the sample

Black secondary school learners in Durban township schools, who did not participate in school sport, were the main population for this study. The subjects were selected using stratified random sampling in terms of age and gender. According to McMillan and Schumacher (2001:172), for stratified random sampling the population is divided into subgroups or strata from which samples are then drawn randomly either proportionally or non-proportionally. This is more efficient than simple random sampling as a smaller number of subjects would need to be used and it also allows the researcher to compare subgroup results. A total of 246 learners in Grades 9 to 12 from four schools participated in this study.

Gr 9 Gr 10 Gr 11 Gr 12 Total 27 24 Male 34 30 115 38 34 28 31 **Female** 131 246 Total 65 68 58 55

TABLE 1: DISTRIBUTION OF LEARNERS IN TERMS OF GENDER AND GRADE

#### The measuring instrument

Data were collected by means of a structured questionnaire with closed-form scaled items chosen for their objectivity and the fact that it would be very time consuming for the researcher to categorize many open-ended responses. According to McMillan and Schumacher (2001:261), scales are used extensively in questionnaires because "they allow fairly accurate assessments of beliefs or opinions". The questionnaire was selected for its suitability of being economical, has the same questions for all subjects and can ensure anonymity (McMillan & Schumacher, 2001:257).

The questionnaire was compiled in line with a literature search on factors affecting sport participation. The following factors emerged and were used as a basis for the development of the questionnaire (Mchunu, 2008):

- Economic factors, for example parents cannot afford a sport kit or taking part in sport costs a lot of money.
- Availability of facilities, for example schools do not have adequate equipment for sport or lack recreational facilities.

• Factors related to self-image, for example learners might not have enough confidence to compete or they are afraid to make mistakes in front of others.

- Political factors, for example black learners might feel they have little chance to be selected for national teams or that sport is still associated with the apartheid era.
- Health related factors influencing non-participation in sport, for example learners are on medication or have allergies.
- Social factors, for example a specific culture does not encourage sport or friends might think sport is for nerds.

Section A of the questionnaire was used to elicit important biographical information and the socioeconomic background of the learners, while section B formed the main part of the questionnaire. It consisted of closed questions to elicit information on the factors mentioned above. Between 10 and 15 items were created to represent each of the factors. The following are examples of the statements under each of the factors:

#### **Economic factors (for example financial ability)**

I have to do some chores at home after school as there is no maid.

My parents cannot afford the sport kit needed.

#### Availability of facilities (coaches, transport, type of sport offered etcetera)

At school, grounds are not well-maintained for sport participation.

Our school ground needs a security fence.

#### Factors related to self-image

Other learners laugh at you when you play sport.

Exercise makes me look sweaty.

The following 6-point Likert scale was used:

Disagree					Agree
1	2	3	4	5	6

Prior to the study, the questionnaire was pilot tested among a group of learners representative of the sample from one of the schools. This enabled the researcher to gauge the amount of time it would take learners to complete the questionnaire and what words they would have difficulty understanding. Minor adjustments and revisions were then made before finalizing the measuring instrument.

The SAS computer program was used to analyse the data. The following steps were taken:

- By calculating the means and standard deviations of the different factors, those factors
  which contributed the most to non-participation in sport by black learners at secondary
  school level were determined.
- An item analysis of the different factors established which items correlated the best with a particular factor. In this way, a certain factor's specific contribution to nonparticipation in sport by black secondary school learners could be determined.

 Application of t-tests indicated whether there were significant differences between the reasons for non-participation with regard to gender, grade, family income and environment

#### RESULTS

### The most important factors contributing to non-participation in sport by black learners at secondary school level

In the light of the aim of this study previously discussed, the following six factors were identified as the reasons for black learners' non-participation in sport at secondary school level. They are facilities, self-image and economic, political, health and social factors. In order to determine the sequence of importance of the different factors, the mean and standard deviation for each of the factors were calculated. The results appear in table 2.

TABLE 2: MEAN AND STANDARD DEVIATION OF THE SIX FACTORS AFFECTING NON-PARTICPATION IN SPORT BY BLACK SECONDARY SCHOOL LEARNERS

VARIABLE	N	MEAN	STD DEV
Facilities	246	34.84	7.13
Political factor	246	28.18	6.54
Social factor	246	27.02	6.49
Self-image	246	26.32	6.54
Economic factor	246	22.07	6.73
Health	246	21.17	6.50

According to table 2, **facilities** seem to be the most important factor relating to non-participation in sport by black learners at secondary school level. This factor is followed by political, social, self-image and economic factors. The least important factor for non-participation in sport is **health.** 

Upon further analysis it was decided to consider the most important items that influence non-participation in sport by black secondary school learners. The top five items that correlate best with the total of each of the four most important factors were identified and are listed in order of importance (Note: Only five items and four factors were selected in order to comply with editorial requirements).

#### Item analysis of individual factors

#### **Facilities**

The items that correlate best with the total for the factor facilities are:

- Item 55 my school does not have adequate equipment for sport
- Item 58 there are no properly organized recreational activities in our area
- Item 38 my school does not have a coach for sport

• Item 42 – black schools generally have very poor and underdeveloped sporting facilities

• Item 29 – at school, grounds are not well maintained for sport participation

From the above it can be concluded that the factor facilities boil down to adequate equipment, properly organized recreational amenities, coaching as well as upgraded and well-maintained grounds. For sport managers and administrators wanting to improve sport participation at secondary school level, these are the vital areas to focus on.

#### Political factor

The items which correlate best with the total of the political factor are:

- Item 78 sport is being dominated by white administrators
- Item 27 black learners are politically conscientized to believe that education is more important than sport
- Item 52 black players are culturally alienated and isolated off the field
- Item 65 a black player has to be exceptionally good to merit the attention of coaches
- Item 63 it seems like a forced activity trying to make up for sins of the past

The most important items under the political factor are racial inequality in sport, cultural isolation of black players and bias of coaches. Learners also seem to feel that sport is forced on them to bridge political gaps that were created in the past.

#### Social factor

The items that correlate best with the total for social factors are:

- Item 64 my siblings do not like sport at all
- Item 44 my culture does not encourage sport participation
- Item 15 my community associates sport participation with drugs
- Item 57 my family think I am not good in any sport
- Item 59 my siblings always laugh at my sporting abilities

Family members seem to play a huge role when it comes to reasons given for non-participation in sport. If learners do not get adequate encouragement and motivation from their siblings, they seem not to be interested in participating in sport. Besides the family, culture and the community also influence whether learners will participate in sport or not. Different cultures and communities have different expectations from the activities of their members and learners might not participate in sport out of respect for or restrictions of cultural norms (Kirk *et al.*, 2006:770).

#### Self-image

The items that correlate best with the total for self-image are:

- Item 74 my face is too important to me right now to get it sunburnt
- Item 22 I am too shy to make mistakes in front of others
- Item 66 I do not like publicity
- Item 72 I am not happy with my present weight
- Item 46 I fear failure

An analysis of the above items seems to indicate that learners who do not participate in sport are more concerned with how they present themselves to others. These learners seem to be too self-conscious about their looks and public image and do not want to be seen as failures by others. According to Merchant *et al.* (2007:196), restrictive and revealing sport kits may make some girls very aware of and sometimes embarrassed about their bodies as they are subjected to taunts and ridicule from insensitive and unsympathetic classmates and educators.

As a next step in the empirical investigation, an analysis was done to compare the responses of the candidates according to **gender**, **family income**, **grades and home environment**. This was done for each of the selected factors.

# Reasons for non-participation in sport by black secondary school learners according to gender

To determine whether the average reasons for non-participation in sport by black males differ from those of black females, the mean of each group was calculated and compared. The t-test was used to determine whether the two means differ significantly. The results appear in table 3.

TABLE 3: DIFFERENCE BETWEEN THE MEANS FOR NON-PARTICIPATION IN SPORT FOR BLACK MALES AND FEMALES

VARIABLE	GROUP	NO.	MEAN	S	Т	D.F.	P
FACILITIES	1=males	115	34.27	7.22	1.17	244	p > 0.05
	2=females	131	35.34	7.05			
POLITICAL	1	115	27.56	6.82	1.40	244	p > 0.05
FACTOR	2	131	28.73	6.26			
SOCIAL	1	115	25.93	6.33	2.49	244	p < 0.05
FACTOR	2	131	27.98	6.51			
SELF-IMAGE	1	115	24.48	6.02	4.27	244	p < 0.01
	2	131	27.93	6.57			

According to table 3, males and females do not differ significantly with regard to their reasons for non-participation in sport in terms of facilities and political factors (p>0.05). However, females consider their self-image as a significantly more important reason for non-participation in sport than males (p<0.01). Females also consider social reasons as significantly more important for non-participation in sport than males (p<0.05).

## Reasons for non-participation in sport by black secondary school learners according to family income

The subjects were divided into the following three groups on the basis of confidential information such as income, size of families and occupation, gained from the learners' files, and also from interviews held with the principals and teachers of the different schools:

Group 1: low income

Group 2: average income

Group 3: above-average income

The mean for each of the three groups was calculated for each of the four selected factors. In order to compare these averages, an analysis of variance was carried out.

TABLE 4: DIFFERENCE IN REASONS BETWEEN THE INCOME GROUPS FOR NON-PARTICIPATION IN SPORT WITH REGARD TO THE FACILITIES FACTOR

GROUP	N	MEAN	S
1= low income	53	35.94	6.42
2= average income	184	34.50	7.29
3= above- average income	9	35.33	7.95

F(2.243) = 0.86 p > 0.05

There is no significant difference between the means of the three groups regarding facilities as a reason to not participate in sport (p>0.05). This implies that learners from all three income groups ascribe the same importance to facilities as a reason for non-sport participation.

TABLE 5: DIFFERENCE IN REASONS BETWEEN THE INCOME GROUPS FOR NON-PARTICIPATION IN SPORT WITH REGARD TO THE POLITICAL FACTOR

GROUP	N	MEAN	S
1= low income	53	29.60	5.05
2= average income	184	27.70	6.95
3= above- average income	9	29.77	4.46

F(2.243) = 2.03 p > 0.05

There is no significant difference between the three groups with regard to the importance of political factors as a reason for non-participation in sport (p>0.05). This implies that learners from all three income groups ascribe the same importance to political factors as a reason for non-sport participation.

TABLE 6: DIFFERENCE IN REASONS BETWEEN THE INCOME GROUPS FOR NON-PARTICIPATION IN SPORT WITH REGARD TO THE SOCIAL FACTOR

GROUP	N	MEAN	S
1= low in come	53	28.94	6.38
2= average income	184	26.41	6.54
3= above- average income	9	28.33	3.70

F(2.243) = 3.37 p < 0.05

There is a significant difference between the three groups with regard to the importance of the social factor as a possible reason for non-participation in sport (p<0.05). In order to determine the groups between which this difference exists, t-values were calculated.

A significant difference was found between group 1 and group 2 with t (244) > 2.41 (p<0.05). This implies that learners from low-income families consider social aspects to be a more important reason for not participating in sport than learners from average-income families. A possible explanation for this finding might be that families with a low income regard sport as an important socializing agent where children can make friends, while families with an average income do not.

TABLE 7: DIFFERENCE IN REASONS BETWEEN THE INCOME GROUPS FOR NON-PARTICIPATION IN SPORT WITH REGARD TO THE SELF-IMAGE FACTOR.

GROUP	N	MEAN	S
1= low income	53	27.79	5.25
2= average income	184	25.65	6.78
3=above- average income	9	31.44	5.05

F(2.243) = 5.24 p < 0.01

There is a significant difference between the reasons of the three groups for non-participation in sport with regard to self-image (p<0.01). In order to determine between which groups significant differences exist, t-values were calculated. A significant difference was found between group 2 and group 3 with t (244)>2.41 (p<0.05). This implies that for learners from families of above-average income, their self-image is a significantly more important factor for non-participation in sport compared to learners from families with an average income.

# Reasons for non-participation in sport by black secondary school learners according to grades

TABLE 8: DIFFERENCE IN REASONS BETWEEN GRADES FOR NON-PARTICIPATION IN SPORT WITH REGARD TO THE FACILITIES FACTOR

GRADE	N	MEAN	S
9	65	34.03	6.42
10	68	34.51	8.33
11	58	34.48	7.45
12	55	36.60	5.75

F(3.242) = 1.50 p > 0.05

There is no significant difference between learners in the different grades with regard to the importance of facilities as a possible reason for non-participation in sport (p>0.05).

TABLE 9: DIFFERENCE IN REASONS BETWEEN GRADES FOR NON-PARTICIPATION IN SPORT WITH REGARD TO THE POLITICAL FACTOR

GRADE	N	MEAN	S
9	65	29.41	6.38
10	68	28.17	6.88
11	58	26.56	6.53
12	55	28.45	6.13

F(3.242) = 2.00 p > 0.05

There is no significant difference between learners in the different grades with regard to the importance of the political factor as a possible reason for non-participation in sport (p>0.05).

TABLE 10: DIFFERENCE IN REASONS BETWEEN GRADES FOR NON-PARTICIPATION IN SPORT WITH REGARD TO THE SOCIAL FACTOR

GRADE	N	MEAN	S
9	65	27.61	6.48
10	68	26.98	6.18
11	58	26.72	6.43
12	55	26.70	7.05

F(3.242) = 0.26 p > 0.05

There is no significant difference between learners in the different grades with regard to the importance of the social factor as a possible reason for non-participation in sport (p>0.05).

TABLE 11: DIFFERENCE IN REASONS BETWEEN GRADES FOR NON - PARTICIPATION IN SPORT WITH REGARD TO THE SELF-IMAGE FACTOR

GRADE	N	MEAN	S	
9	65	27.15	5.57	
10	68	27.14	6.97	
11	58	25.84	7.09	
12	55	24.83	6.31	

F(3.242) = 1.78 p > 0.05

There is no significant difference between learners in the different grades with regard to the importance of self-image as a possible reason for non-participation in sport (p>0.05).

### Reasons for non-participation in sport by black secondary school learners according to home environment

The subjects were divided into the following three groups:

Group 1 – urban

Group 2 – township

Group 3 – rural

TABLE 12. DIFFERENCE IN REASONS FOR NON-SPORT PARTICIPATION WITH REGARD TO THE FACILITIES FACTOR, TAKING HOME ENVIRONMENT IN CONSIDERATION

GROUP	N	MEAN	S
1= urban	27	33.74	8.29
2= township	196	35.02	6.94
3= rural	22	35.04	7.40

F(2.242) = 0.39 p > 0.05

There is no significant difference between the three groups with regard to the importance of facilities as a possible reason for non-participation in sport (p>0.05).

TABLE 13: DIFFERENCE IN REASONS FOR NON-SPORT PARTICIPATION WITH REGARD TO THE POLITICAL FACTOR, TAKING HOME ENVIRONMENT IN CONSIDERATION

GROUP	N	MEAN	S
1= urban	27	28.55	7.07
2= township	196	28.13	6.49
3= rural	22	28.68	6.32

F(2.242) = 0.11 p > 0.05

There is no significant difference between the three groups with regard to the importance of the political factor as a possible reason for non-participation in sport (p>0.05).

TABLE 14: DIFFERENCE IN REASONS FOR NON-SPORT PARTICIPATION WITH REGARD TO THE SOCIAL FACTOR, TAKING HOME ENVIRONMENT IN CONSIDERATION

GROUP	N	MEAN	S
1= urban	27	27.92	6.58
2= township	196	26.96	6.58
3= rural	22	26.77	5.74

F(2.242) = 0.28 p > 0.05

There is no significant difference between the three groups with regard to the importance of the social factor as a possible reason for non-participation in sport (p>0.05).

TABLE 15: DIFFERENCE IN REASONS FOR NON-SPORT PARTICIPATION WITH REGARD TO THE SELF-IMAGE FACTOR, TAKING HOME ENVIRONMENT IN CONSIDERATION

GROUP	N	MEAN	S
1= urban	27	33.74	8.29
2= township	196	35.02	6.94
3= rural	22	35.04	7.40

F(2.242) = 1.29 p > 0.05

There is no significant difference between the three groups with regard to the importance of self-image as a possible reason for non-participation in sport (p>0.05).

#### **DISCUSSION**

According to this study, the following factors were identified (in order of importance) as the reasons for black learners' non-participation in sport at secondary school level: facilities, political factors, social factors, self-image, economic factors and health.

The results of this study correspond with those reported in the literature. According to Goldsmith (2003:152), lack of proper facilities conducive to athletic participation, economic reasons such as lack of proper sport kit, political factors, health related factors, factors related to self-image and social factors contribute to non-participation in sport at school level. It appears that the factors that militate against black learners participating in sport dovetail and merge into each other. The political environment that creates a social underclass results in a set of learners that have a poor self-image and self-esteem and who lack the stimulus to go for it, to be ambitious and to pit themselves against others, or to set themselves high goals (Goldsmith, 2003). These qualities of self-image, self-esteem, internal stimulus, ambition and setting of high goals are just as essential to participating in sport as they are the result of it.

To comply with editorial requirements, only the first four most important factors were included in the statistical analysis. The responses of the respondents to these factors were compared according to **gender**, **family income**, **grades and home environment**.

**Gender:** Males and females do not differ significantly with regard to their reasons for non-participation in sport in terms of facilities and political factors. However, females consider their self-image as a significantly more important reason for non-participation in sport than males. This seems to be a period when females are exploring their identities and struggling with the changes in their bodies and changing sexuality. The role of self-image may provide a reason for the decline in sport participation as shown by Guillet *et al.* (2000:420). Girls are more concerned with the way they present themselves to society. The image of slimness that is promoted in the media seems to be more appealing to females than the bulging muscles appreciated by males (Klomsten *et al.*, 2005:625-636). Females also consider social reasons as significantly more important for non-participation in sport than males.

Family income: Families were classified according to low-income, average income and above-average income. It was found that learners from low-income families consider social aspects to be a significant more important reason for not participating in sport than learners from average-income families. A possible explanation for this finding might be that families with a low income regard sport as an important socializing agent where children can make friends, while families with an average income do not. It was also found that learners from families of above-average income, regard self-image as a significantly more important factor for non-participation in sport, compared to learners from families with an average income. Self-image is usually an important factor for people from the higher income groups (Mchunu, 2008).

**Grades:** No significant differences were found between the reasons for non-sport participation by black secondary school learners in the different grades with regard to facilities, the political factor, the social factor and the self-image. One cannot say, for example, that black secondary school learners in grade 11 differ significantly from learners in grade 10 with regard to reasons for non-participation in sport.

**Home environment:** The type of home environment does not seem to be an important factor to non-participation in sport. Learners from urban, rural or township home backgrounds do not differ significantly with regard to their reasons for non-participation in sport.

#### **SUMMARY**

The results suggest that most black learners get discouraged from participating in sport because of a lack of well-maintained and accessible facilities. Most schools in the townships do not have their own sport fields and equipment for use by learners. If any grounds are available, they are often subject to neglect or vandalism, as most of the schools cannot afford a security fence. From the literature studied, the subject of facilities is hardly ever canvassed, especially with regard to black township schools. It is a significant factor since it is one that is easier to rectify than others.

In terms of the political factor as a reason for non-participation in sport, it has surfaced that there are perceptions of cultural isolation of black players in sport. Learners also indicated that some of the reasons they do not participate in sport are racial inequality and the bias exhibited by coaches. Through this research it has also emerged that while gender and income do seem to have an influence on non-participation in sport, grades and home environment do not. The results indicate that income as a reason for non-participation in sport is more important for learners from low-income families than for learners from average-income families. Low-income families seem to have pressing priorities other than sport and there is not enough income to take care of sporting expenses.

#### REFERENCES

ANDERSEN, M.B. (2000). Doing sport psychology. Melbourne: Human Kinetics.

BAR-OR, O. (1995). The child and adolescent athlete. Cambridge, MA: Blackwell Science.

BIDDLE, S.J.H.; FOX, K.R. & BOUTCHER, S.H. (2000). *Physical activity and psychological wellbeing*. London: Routledge.

- COAKLEY, J. & DUNNING, E. (2000). Handbook of sports studies. London: Sage.
- DIAMANT, L. (1991). Psychology of sports, exercise, and fitness social and personal issues. New York, NY: Hemisphere.
- GOLDSMITH, P.A. (2003). Race relations and racial patterns in sports participation. *Sociology of Sport Journal*, 20(2): 147-171.
- GUILLET, E.; SARRAZIN, P. & FONTAYNE, P. (2000). If it contradicts my gender role I'll stop. European Review of Applied Psychology, 50(4): 417-421.
- HAGGER, M. & CHATZISARANTIS, N. (2005). Social psychology of exercise and sport. New York, NY: Open University Press.
- HILL, K.L. (2001). Frameworks for sport psychologists. Champaign, IL: Human Kinetics.
- KIRK, D.; MACDONALD, D. & O'SULLIVAN, M. (2006). The handbook of physical education. London: Sage.
- KIRKCALDY, B.D. (2002). The relationship between physical activity and self-image and problem behaviour among adolescents. *Social Psychiatry and Psychiatric Epidemiology*, 37(11): 544-550.
- KLOMSTEN, A.T.; MARSH, H.W. & SKAALVIK, E.M. (2005). Adolescents' perceptions of masculine and feminine values in sport and physical education. *Sex Roles*, 52(9-10): 625-636.
- MASLOW, A.H. (1970). Motivation and personality. New York, NY: Harper & Row.
- McCOMB, D.G. (2004). Sports in world history. New York, NY: Routledge.
- MCHUNU, S.J.A. (2008). Reasons for non-participation in sport by black learners at secondary school level. Unpublished MEd thesis. Pretoria: Unisa.
- McMILLAN, J.H. & SCHUMACHER, S. (2001). Research in education. New York, NY: Longman.
- MERCHANT, J.; GRIFFIN, B.L. & CHARNOCK, A. (2007). Sport and physical activity: The role of health promotion. New York, NY: Palgrave Macmillan.
- POTGIETER, J.R. (2003). Sport psychology: Theory and practice. Stellenbosch: Institute for Sport Science, Stellenbosch University.
- SINGER, R.; HAUSENBLAS, H. & JANELLE, C.M. (2001). *Handbook of sport psychology*. New York, NY: John Wiley & Sons.

Prof. J.G. le Roux: Department Educational Studies, University of South Africa, PO Box 392, Unisa 0003, Republic of South Africa. Tel.: +27 (0)12 345 4019 (h), +27 (0)12 429 4655 (w), Fax: +27 (0)12 429 4919, E-mail: lrouxjg@unisa.ac.za

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