CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

It is a fact that sick leave and absenteeism impose huge financial burdens on companies (Gettman, 1986). Due to this, more and more companies have come to realise the importance of physical wellness programmes in the workplace. Overseas companies are reporting that their investments in physical fitness and wellness programmes for their employees have not only resulted in helping to improve the health of their employees, but the return on their investment had been as increase in productivity and a decrease in medical costs, due to less sick leave and absenteeism. Studies by Linden, 1969, Cox et al., 1981; Baun et al., 1986; support this. Berry (1981) goes further by stating that it is imperative for companies to conduct physical wellness programmes at the workplace. The significant benefits to a company conducting programmes conducive to improving health are a decrease in health care costs, reduction in absenteeism, reduction in turnover of employees, increase in employee productivity, an increase in employee coping capability and an increase in employee fitness. Such benefits are necessary to affecting overall reduction in the complex and escalating health care bill for companies.

Out of the abovementioned it is clear that the benefits and advantages of overseas companies conducting physical wellness programmes are abundant. Unfortunately existing research is limited by the fact that to date no attempt has been made to analyse the impact of a worksite physical wellness programme on absenteeism and sick leave in any South African company. This is supported by Dreyer (1996) who revealed that to date there is no concrete empirical evidence that corporate based wellness programmes show a cost-benefit to South African companies due to lower medical costs imposed by sick leave and absenteeism. The closest you will get to South African studies similar to the findings done overseas are a study by Strydom et al. (1985). They studied the effect of a 24-week training programme on some physical, physiological and biochemical

parameters among executives in the South African motor industry. Dreyer and Strydom (1992) evaluated in their study the physically, physiologically and personally experienced advantages of an executive fitness programme. Significant improvements ($p \leq 0,05$) occurred in systolic and diastolic blood pressure, abdominal strength, sit-and-reach flexibility and percentage body fat. Some employees perceived benefits that could have an influence on the company's productivity and health care costs, while 41,6% indicated that their job performance and attitude towards their work improved. Forty-four percent of the employees felt that they could manage work pressure and stress better and 79,4% of the executives also felt that such a programme was cost effective for the company. The abovementioned study indicated that an executive fitness programme may have a positive effect on health-related fitness. When literature is studied one is led to ask whether or not, and to what extent a physical wellness programme would have an impact on absenteeism and sick leave among black African men.

The subjects that participated in this study were 68 black African males performing physical labour. The subjects were stratified randomly assigned to either a control group or an experimental group. The controls were matched in age, gender and occupation. The experimental group was exposed to a 6-month intervention programme (physical wellness programme), while the control group subjects were requested to continue with their present lifestyles. A pre-evaluation as well as a post-evaluation took place to determine the extent of change produced by the physical wellness programme, compared to that of the control group (see Study design - 3.3). The evaluation commenced with an initial health education session and the completion of a medical and health habits questionnaire (see appendix B) that led into the physical evaluation, which consisted out of the following:

(i) Clinical and physical data
(ii) Medical and health habits questionnaire
(iii) Sick leave and absenteeism data

The specific tests carried out under each of these evaluations are discussed under Procedures (3.2) in Chapter 3.

To recapitulate, the scope of research undertaken was delimited to an experimental epidemiological study. The study was directed primarily towards understanding the impact of a physical wellness programme on sick leave and absenteeism in black African men. The secondary aim focused on whether a physical wellness programme would have a positive effect on health-related fitness. After the intervention of the 6-month physical wellness programme, and in the light of the results discussed in Chapter 4, the conclusions and recommendations are presented accordingly:

The positive change produced by the implementation of the 6-month worksite physical wellness programme was significant ($p \leq 0,05$) compared to the control group in most parameters tested. Statistically significant differences were apparent in the systolic blood pressure ($p \leq 0,05$) and hamstring and lower back flexibility ($p \leq 0,001$) during the **clinical and physical evaluation**. Although positive changes occurred in fat percentage and fitness, these changes were not significant ($p \geq 0,05$).

Although the response to all three questions in the **medical and health habits questionnaire** indicated a positive change, these changes were not significant in terms of Stress ($p \geq 0,05$), Lower back pain ($p \geq 0,05$) and Personal computer stress ($p \geq 0,05$).

Finally, in the **sick leave and absenteeism days** the parameters indicated statistically significant changes ($p \leq 0,01$).

Due to the significant positive changes in the clinical/physical data and in the sick leave/absenteeism data, the two hypotheses of this study can thus be accepted. It is also significant to note that there was a definite decrease in sick leave and absenteeism, which are surely the most important economical indicator for South African companies implementing worksite physical wellness programmes. This study supports similar findings by other authors (Linden, 1969, Cox et al., 1981, Shepard, 1982, Song, 1982,

Baun et al., 1986, Blair et al., 1986, Cole, 1987; Warner, 1990;) who found a reduction in sick leave and absenteeism due to the impact of a worksite physical wellness programme. This study further supports findings by Gettman (1986) that less sick leave and absenteeism resulting in lower financial expenses with a positive effect on company's entire health bill. This study also supports the work of Dreyer and Strydom (1992) who found that an onsite fitness programme had a positive effect on health-related fitness.

The setting in which the physical wellness programme was performed was significant. As mentioned in the study, the employees' personal circumstances only allowed them to partake in "home-based" type exercises after working hours. This in itself made the programme very cost-effective, because the employees did not have to pay membership fees at an exercise club and the company did not lose money due to the fact that the exercises were performed after working hours. The company was saved the expenses of establishing and maintaining a fully equipped gym. The fact that no external reinforcements, like incentives were used for motivational purposes made the programme even more cost-effective. This is supported by Danielson and Danielson (1979), two behavioural psychologists who argued that after some unspecified period, the rewards of exercise became internalised, and it is was consequently no longer necessary to provide external reinforcements in order to sustain participation. Biokineticists consider exercises as the cornerstone of their treatment using a Biokinetic practice setting where exercises are performed under direct supervision of a Biokineticist. It is therefore significant that a "home-based" exercise programme had a positive impact on people's health-related fitness. Using the latest information available, this study is the first controlled study using a "home-based" exercise programme evaluating the impact of a physical wellness programme on absenteeism, sick leave and health-related fitness. This study serves to confirm that medical care is not a substitute for self-care, rather it is a supplement to self-care, a complement, that collectively we as a society erroneously chose to elevate to the status of alternative. The further execution of the physical wellness programme was also practical and cost effective, making use of the onsite multidisciplinary team members (Medical practitioner, Occupational health nurse, Psychologist, Wellness practitioner and Biokineticist). It is further significant to note the

evaluation methods used in the study. Field tests were used to determine the employee's physical and health status. No expensive evaluation equipment was used.

The whole execution of the physical wellness programme in this study is thus functional and obtainable for the Biokineticist who needs some guidelines in the implementation of an onsite physical wellness programme.

Although the hypotheses of this study have been successfully completed, it would be presumptuous to expect that these are the only justifiable hypotheses and that this study cannot be improved upon. The following recommendations are thus made to expand on the knowledge on the impact of a worksite physical wellness programme on absenteeism, sick leave and health-related fitness.

- Although the 6–month period was significant, the belief is held that more significant results can be obtained over longer periods. According to Lusk (1997), the evaluation period should be long enough to reasonably expect change in behaviour or biological measures, with periodic measures to document effects and recidivism. Much more information is needed regarding interventions necessary to maintain the desired effects.

- To achieve the most benefit, multiple-focused health promotion programmes should be offered, as several studies reported carryover effects on change in a specific behaviour from participation in programmes directed toward changing behaviour.

- To add to the previous point, although no studies of integrated physical wellness programmes and occupational health and safety programmes were reported, there is rationale to support their synergistic effects, and they should be affected and evaluated.

- Few programmes determine their foci based upon assessment of the needs of their employee group. Programmes should be based on the characteristics and interests of the recipients, as the programmes will be better received and achieve greater success.

- More research is needed to determine what needs to be done in order to help black African men to make the necessary health expected lifestyle changes that coincides with their unique culture.

- A sound, comprehensive assessment of workplace physical wellness programme economics considering all of the economic parameters involved in sick leave and absenteeism, including health care costs, life insurance, short- and long-term disability, workers' compensation, sick leave and absenteeism pay, turnover, productivity and pensions need to be researched. Is the intervention programme "profitable," a "bottom line" success?

- To add to the previous point, the implications in later years, as well as in the near term, should be evaluated for all of these variables.

- The cost-effective analysis and cost-benefit analysis of a worksite physical wellness programme need to be researched.

- Futhermore, research is needed to determine the effect of a physical wellness programme on intangibles, including such items as employee morale, company image and the inherent value of better employee health for example the value to employees themselves and to society, beyond the contributions to the economic concerns listed first.

- Further research is needed concerning the success of physical wellness programmes that leads to an older workforce, one that, simply by virtue of its age, is likely to experience the infirmities associated with greater age. This in turn can translate into higher eventual health care costs and disability payments. The success of wellness

programmes in increasing life expectancy may lead to more workers living well into retirement; thereby increasing companies' pension obligations.

- Biokineticists have a contribution to make to the research area of onsite physical wellness programmes and could increase their involvement by linking with occupational health nurses practising in the worksite to conduct studies in wellness programmes.