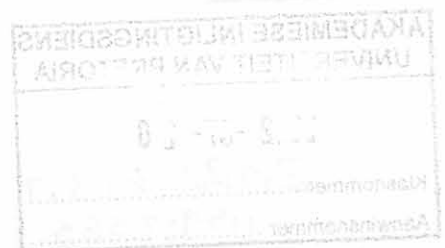


**GRACE, JEANNE MARTIN**

**IMPACT OF A WORKSITE PHYSICAL WELLNESS PROGRAMME  
ON SICK LEAVE, ABSENTEEISM AND HEALTH-RELATED  
FITNESS**

**MA (Biokinetics, Sport and Leisure Sciences) UP 2001**



**IMPACT OF A WORKSITE PHYSICAL WELLNESS  
PROGRAMME ON SICK LEAVE, ABSENTEEISM AND  
HEALTH-RELATED FITNESS**

by

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## **DEDICATION**

This dissertation is dedicated to my husband.

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**MY HEAVENLY FATHER:** For wisdom. With Him everything is possible.

## SYNOPSIS

<b>TITLE</b>	: Impact of a worksite physical wellness programme on absenteeism, sick leave and health-related fitness.
<b>CANDIDATE</b>	: J.M. Grace
<b>PROMOTOR</b>	: T.B.R. Jansen van Vuuren
<b>DEGREE</b>	: M.A. (HMS)

The impact of a physical wellness programme on absenteeism and sick leave in South African companies will remain uncertain until research has provided a firmer foundation than presently exists. We know what exercise does for individuals and that it is cost-effective, but we do not know how it affects the economy of the company or if worksite physical wellness programmes will have a positive impact on sick leave, absenteeism and health-related fitness.

The purpose of this stratified randomised controlled trial was to determine the impact of a worksite physical wellness programme on absenteeism, sick leave and health-related fitness.

Sixty-eight black African males (mean age 44,8 years) performing physical labour were used in the study, with subjects being stratified randomly assigned to either a control group (n=34) or an experimental group (n=34). The control group was requested to continue with their established lifestyles, while the experimental group participated in a 6-month physical wellness programme. It included the attending of one wellness

workshop, the following of a Biokinetic home exercise programme with a frequency and duration of at least three sessions of forty five minutes per week. Both groups were evaluated by means of a questionnaire and a clinical and physical evaluation before the intervention of the physical wellness programme and immediately thereafter. Sick leave and absenteeism data for both groups were recorded and compared before and during the intervention programme.

In general the physical wellness programme induced positive changes in all the parameters tested, with statistically significance ( $p \leq 0,05$ ) in three of the eight parameters.

More specifically, the experimental group showed statistically significant differences ( $p \leq 0,05$ ) in the **clinical and physical evaluation** for systolic blood pressure with the pre- and post test (**pre:**  $135 \pm 26,85$ ; **post:**  $127 \pm 19,94$ ) and in the pre- and post with hamstring and lower back flexibility (**pre:**  $32,8 \pm 9,10$ ; **post:**  $34,5 \pm 8,23$  ( $p \leq 0,001$ )).

The most important statistical significant change was with the pre- and post test of the **sick leave and absenteeism days** ( $p \leq 0,01$ ) of the experimental group (**pre:**  $6,3 \pm 15,35$ ; **post:**  $1,4 \pm 3,3$ ) compared to the control group (**pre:**  $4,9 \pm 5,7$ ; **post:**  $4,6 \pm 6,03$ ).

In conclusion, the results indicated that a worksite physical wellness programme where a home-based Biokinetic exercise programme was performed, and a wellness workshop addressing all the wellness dimensions was presented, had a positive impact on sick leave, absenteeism and health-related fitness. It is suggested that longer prospective studies are warranted to support this study, specifically the cost-effective analysis and cost-benefit analysis of a worksite physical wellness programme on sick leave and absenteeism. More research is needed to determine what needs to be done in order to help black African men to make the proposed health expected lifestyle changes that coincides with their unique culture. Finally, biokineticists have a contribution to make to the research area of worksite physical wellness programmes.

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**KEY WORDS:** WELLNESS; PHYSICAL WELLNESS; SICK LEAVE; ABSENTEEISM; BIOMECHANICS; LOW BACK PAIN; STRESS; HOME EXERCISE PROGRAMME; BLOOD PRESSURE; FITNESS; LOWER-BACK-HAMSTRING FLEXIBILITY; FAT PERCENTAGE.

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## SINOPSIS

<b>TITEL</b>	: Die invloed van 'n werkgerigte fisieke welstand program op siekverlof, afwesigheid en gesondheidverwante fiksheid.
<b>KANDIDAAT</b>	: J.M. Grace
<b>PROMOTOR</b>	: T.B.R. Jansen van Vuuren
<b>GRAAD</b>	: M.A. (MBK)

Die impak van 'n fisieke welstand program op siekverlof en afwesigheid in Suid-Afrikaanse maatskappye sal onduidelik bly tensy navorsing 'n beter basis ter ondersteuning bied as wat reeds bestaan. Ons weet wat oefening vir die individu doen en dat dit koste-effektief is, maar ons weet nie tot watter mate dit die ekonomie van 'n maatskappy affekteer nie en of 'n werkgerigte fisiek welstand program wel 'n positiewe invloed op siekverlof, afwesigheid en gesondheidverwante fiksheid het.

Die doel van die eksperimentele epidemiologiese studie was om die impak van 'n werkgerigte fisieke welstand program op siekverlof, afwesigheid en gesondheidverwante fiksheid te bepaal.

Agt-en-sestig swart mans (gemiddelde ouderdom 44,8 jaar) wat fisieke werk verrig, is in die studie gebruik. Die proefpersone is gestratifiseerd ewekansig toegewys aan of 'n kontrole groep (n=34) of 'n eksperimentele groep (n=34). Die kontrolegroep is gevra om voort te gaan met hulle huidige lewenstyl, terwyl die eksperimentele groep aan 'n



sesmaande fisieke welstand program deelgeneem het. Dit het die bywoning van 'n welstand werkswinkel ingesluit sowel as die deelname aan 'n Biokinetika tuisprogram met 'n frekwensie en tydsduur van ten minste 3 sessies van 45 minute per week. Beide groepe is geevalueer deur middel van 'n vraelys sowel as 'n kliniese en fisieke evaluasie voor en na afloop van die fisieke welstand program. Siekverlof en afwesigheid data van beide groepe is voor en tydens die intervensie program vergelyk.

In die algemeen het die fisieke welstand program 'n positiewe verandering in al die parameters wat getoets is te weeg gebring, met statisties beduidende ( $p \leq 0,05$ ) veranderinge in 3 van die 8 parameters.

Meer spesifiek het die eksperimentele groep statisties beduidende verandering ( $p \leq 0,05$ ) getoon in die sistoliese bloeddruk (**voor:**  $135 \pm 26,85$ ; **na:**  $127 \pm 19,94$ ) en lae-rug-hampese soepelheid (**voor:**  $32,8 \pm 9,10$ ; **na:**  $34,5 \pm 8,23$  ( $p \leq 0,001$ ) met die **kliniese en fisieke evaluasie**.

Die mees belangrikste statisties beduidende veskil was met die voor- en na toets in die **siekverlof en afwesigheid dae** ( $p \leq 0,01$ ) van die eksperimentele groep (**voor:**  $6,3 \pm 15,35$ ; **na:**  $1,4 \pm 3,3$ ) in vergelyking met die kontrole groep (**voor:**  $4,9 \pm 5,7$ ; **na:**  $4,6 \pm 6,03$ ).

Samevattend kan verklaar word dat die resultate daarop dui dat 'n werkgerigte fisieke welstand program waar daar aan 'n Biokinetika tuisprogram deelgeneem is, en 'n welstand werkswinkel aangebied is wat al die welstand dimensies aangespreek het, 'n positiewe impak op siekverlof, afwesigheid en gesondheidverwante fiksheid gehad het. Daar word voorgestel dat langer prospektiewe studies onderneem moet word om die studie te ondersteun, en meer spesifiek die koste effektiewe- en koste voordeel analise van 'n werkgerigte fisieke welstand program op sekverlof en afwesigheid te bepaal. Meer navorsing is nodig om vas te stel wat gedoen moet word om swart mans te help om die voorgestelde gesondheid verwante lewenstyl veranderinge te weeg te bring wat in

ooreenstemming met hulle unieke kultuur is. Ten slotte, Biokinetici het 'n bydrae om te maak in die area van werkverwante fisieke welstand programme.

---

**SLEUTELWOORDE:** WELSTAND; FISIEKE WELSTAND; SIEKVERLOF; AFWESIGHEID; BIODINAMIEK; LAE RUGPYN; SPANNING; TUISPROGRAM; BLOEDDRUK; FIKSHEID; LAE-RUG-HAMPESE SOEPELHEID; VET PERSENTASIE.

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