

Name: XXXXXXXXXX

Grade 1 C

Report November 2007

**Educators' Assessment:
Performance Key:**
1 = Not Achieved

This indicates that the Learner is experiencing difficulty with the concepts and needs help to achieve that particular outcome.

2 = Partially Achieved

This indicates that the Learner is working towards grade expectations, but has not yet required all the necessary skills for competency.

3 = Achieved

This indicates that the Learner is fulfilling the expectations of his/her grade level and has acquired the necessary skills.

4 = Outstanding

This indicates that the Learner is working at an advanced level, i.e. he/she has achieved grade expectations and has demonstrated the ability to work at a higher level.

| LITERACY | |
|---------------------------|---|
| | 2 |
| 1. Oral Communication | 2 |
| 2. Written Communication | 2 |
| 3. Reading | 2 |
| 4. Applied Spelling | 1 |
| 5. Thinking and Reasoning | 3 |

| NUMERACY | |
|----------------------|---|
| | 2 |
| 1. Counting | 3 |
| 2. Number Operations | 2 |
| 3. Data Handling | 1 |
| 4. Measurement | 2 |
| 5. Problem Solving | 1 |

| LIFE SKILLS | |
|---------------------------------------|---|
| | 1 |
| 1. Concentration | 2 |
| 2. Behaviour / Co-operation | 1 |
| 3. Responsibility | 2 |
| 4. Work Organisation | 1 |
| 5. Listening / Following instructions | 1 |
| 6. Letter / number formation | 1 |

| KDA – Motor Development | Competent | Gaining Confidence |
|-------------------------|-----------|--------------------|
| Swimming | √ | |
| Visual-motor memory | √ | |
| Forward Roll | √ | |

GENERAL COMMENT:

**Brian has not met the minimum requirements for Grade 2
He will need to repeat Grade 1 during 2008.**

DAYS ABSENT: _____

 SCHOOL RE-OPENS: **9th January 2008**

 EDUCATOR: *D. Pretorius*

 PRINCIPAL: *H. Pretorius*

PARTICIPANT QUESTIONNAIRE:

All information will be treated as confidential

**Physical activity, health and weight profiles
of children in South African schools and families**

Date: _____

Demographic profile of participant:

Gender: Male Female Age in years

If an educator: Number of children in your care _____

If a parent/guardian: Number of children (grade 1-3 only) in your family _____

Section A For educator use only

Personnel category (please underline):

Principal/Deputy/ HOD/ Educator/ LSEN/ Remedial Educator

Post level (please underline): 01/ 02/ 03/ 04

Subject Specialisation and experience of participant:

Indicate the highest qualification that you have obtained _____

Institution where you obtained your qualification _____

Year when qualification was obtained _____

How long have you been teaching _____

How long have you been in your current post _____

Are you studying at present _____

Subject/learning area specialisation _____

Instructions:

You will be asked to rate your knowledge with regard to the physical activity, health and weight profiles of children in your care at present.

Please fill in the required information in the space provided. Encircle the appropriate number where applicable. Please be as honest as possible.

| A Demographic information of the children in your care (grade 1 to 3 educator's only) | | | | |
|---|--|---|---|---|
| 1a | Current grade of the children in your care | 1 | 2 | 3 |
| b | Number of children in the grade | | | |
| c | Age of children | | | |
| 2 | How many of the children in your care grew up on a or in a: | | | |
| a | Farm | | | |
| b | Village | | | |
| c | Township | | | |
| 3 | If your previous answer was a, b or c at what average age did the children move to an urban area for the first time? | | | |

| B Lifestyle | | | | |
|--------------------|---|----|-------|--|
| 4 | Of all the children in your care how many do/don't attend an after care centre? | do | don't | |

| | | | | | |
|---|---|--------|-------|---------------|-------|
| 5 | If your previous answer was don't who takes responsibility for them after school? | parent | nanny | Family member | other |
|---|---|--------|-------|---------------|-------|

| | | | |
|----|---|-----|----|
| 6a | Do the majority of the children in your care belong to any social or recreational facility: | yes | no |
| | Please specify your previous answer e.g. scripture union, library, rangers, gym etc. | | |

| | | |
|---|---|--|
| 7 | How many hours of sleep (average) do the children in your care consume per night? | |
|---|---|--|

| | | |
|---|---|--|
| 8 | How many children in your care attended a nursery school? | |
|---|---|--|

| | | |
|---|---|--|
| 9 | Average amount of years spent there in years? | |
|---|---|--|

| C Nutritional/Dietary information | | | | |
|--|--|--|--|--|
|--|--|--|--|--|

| | | | | | |
|----|--|---|---|---|-----------------|
| 10 | How many full meals do the children in your care eat per day ? | 1 | 2 | 3 | More than three |
|----|--|---|---|---|-----------------|

| | | |
|----|---|--|
| 11 | How many children in your care eat breakfast every day? | |
|----|---|--|

| | | | | | | |
|----------------------------|---|------------------------|-------------|-------------------|--------------|-------|
| 12 | How often do the children eat the following types of food ? <u>If any answer is unknown to you, do not respond</u> | | | | | |
| | Number of times they eat the following types of food: | | | | | |
| Food Type | Every day | 2 or more times a week | Once a week | 2-3 times a month | Once a month | Never |
| Red meat | 6 | 5 | 4 | 3 | 2 | 1 |
| Poultry i.e. chicken | 6 | 5 | 4 | 3 | 2 | 1 |
| Fish | 6 | 5 | 4 | 3 | 2 | 1 |
| Pork | 6 | 5 | 4 | 3 | 2 | 1 |
| Deep fried food i.e. chips | 6 | 5 | 4 | 3 | 2 | 1 |
| Pap | 6 | 5 | 4 | 3 | 2 | 1 |
| Brown bread | 6 | 5 | 4 | 3 | 2 | 1 |
| White bread | 6 | 5 | 4 | 3 | 2 | 1 |
| Fruits and vegetables | 6 | 5 | 4 | 3 | 2 | 1 |
| Samp | 6 | 5 | 4 | 3 | 2 | 1 |
| Mielie Rice | 6 | 5 | 4 | 3 | 2 | 1 |
| Rice | 6 | 5 | 4 | 3 | 2 | 1 |
| Take Away food | 6 | 5 | 4 | 3 | 2 | 1 |
| 13 | Whilst in your care do the majority of children drink water during the school day? | | yes | no | | |

| | | | |
|----|--|-----|----|
| 14 | Average amount drunk? E.g. 250ml | | |
| 15 | Do the majority of children always eat enough food to fill his/her stomach? | yes | no |
| 16 | Are any of the children in your care a problem eater/ fussy/ refuses certain foods)? Please specify | yes | no |

| | | | | |
|----|---|------|---------|------|
| 17 | Please rate the children in your care's appetite in general | Good | Average | Poor |
|----|---|------|---------|------|

D Weight Profile

| | | | | |
|----|--|------|--------|------------|
| 18 | How many of the children in your care appear to be either: | Thin | Normal | Overweight |
|----|--|------|--------|------------|

E Physical activity profile

| | | | |
|----|---|-----|----|
| 19 | Do the children participate in any organised physical activities: Please specify which activities e.g. netball, soccer, running, swimming, karate etc.? | yes | no |
|----|---|-----|----|

| | |
|-----|---|
| 19a | If your previous answer was "no", please answer the following question: |
|-----|---|

| | |
|----|--|
| 20 | Reasons for not participating: (tick appropriate box) |
|----|--|

| | | |
|-----|---|--|
| 20a | There are no facilities such as sports grounds or gym | |
|-----|---|--|

| | | |
|-----|---|--|
| 20b | There is no time: Please specify e.g. parents working etc. | |
|-----|---|--|

| | | |
|-----|--|--|
| 20c | No money to join the club or travel to the sports grounds or gym | |
|-----|--|--|

| | | | | | | |
|----------------------------|---|------------------------|-------------|-------------------|--------------|-------|
| 21a | How many times do they participate in the following sports or physical activities? | | | | | |
| | Number of times you participate in the following sports or activities | | | | | |
| Sport or Physical Activity | Every day | 2 or more times a week | Once a week | 2-3 times a month | Once a month | Never |
| Soccer | 6 | 5 | 4 | 3 | 2 | 1 |
| Cricket | 6 | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-------------------------|---|---|---|---|---|---|
| Athletics | 6 | 5 | 4 | 3 | 2 | 1 |
| Karate | 6 | 5 | 4 | 3 | 2 | 1 |
| Rugby | 6 | 5 | 4 | 3 | 2 | 1 |
| Basketball | 6 | 5 | 4 | 3 | 2 | 1 |
| Gymnasium activities | 6 | 5 | 4 | 3 | 2 | 1 |
| Swimming | 6 | 5 | 4 | 3 | 2 | 1 |
| Tennis | 6 | 5 | 4 | 3 | 2 | 1 |
| Others (please specify) | 6 | 5 | 4 | 3 | 2 | 1 |

21b For **how long** (average duration of sessions) do they participate in the following organised activities?

| Sport or Physical Activity | Time spent per session | | | | | |
|----------------------------|------------------------|---------------|----------------------|---------------------------|-------------------------|---------------------|
| | Less than 30 min | 30-59 minutes | 1hr – 1hr 29 minutes | 1 hr 30 min – 1 hr 59 min | 2 hrs – 2hrs 29 minutes | 2 hrs 30min – 3 hrs |
| Soccer | 1 | 2 | 3 | 4 | 5 | 6 |
| Cricket | 1 | 2 | 3 | 4 | 5 | 6 |
| Athletics | 1 | 2 | 3 | 4 | 5 | 6 |
| Karate | 1 | 2 | 3 | 4 | 5 | 6 |
| Rugby | 1 | 2 | 3 | 4 | 5 | 6 |
| Basketball | 1 | 2 | 3 | 4 | 5 | 6 |
| Gymnasium activities | 1 | 2 | 3 | 4 | 5 | 6 |
| Swimming | 1 | 2 | 3 | 4 | 5 | 6 |
| Tennis | 1 | 2 | 3 | 4 | 5 | 6 |
| Others (please specify) | 1 | 2 | 3 | 4 | 5 | 6 |

F Leisure time activities

What is the average amount of time that the children in your care spend per day doing the following? (E.g. 45 min, 1 hour, etc.)

| | Time spent per day |
|----|---|
| 22 | Playing with friends |
| 23 | Playing outdoors |
| 24 | Sitting down watching TV/DVD/Play station |
| 25 | Reading |
| 26 | Playing games with family members |

| G Transportation | | |
|---|------------------------|--------------------|
| <u>How many children in your care make use of the following transportation:</u> | | |
| | transportation | Time spent per day |
| 27 | By foot, walking | |
| 28 | Bicycle | |
| 29 | Motor car | |
| 30 | Taxi | |
| 31 | Bus | |
| 32 | Train | |
| 33 | Other (please specify) | |

| H Physical activities performed at home | | | | | | |
|--|--|-----------|--------------------------|-------------|--------------|-------|
| <u>How many times do the children do the following activities at home?</u> | | | | | | |
| <u>If any answer is unknown to you, do not respond</u> | | | | | | |
| | | Every day | 2 or more times per week | once a week | once a month | never |
| 34 | Gardening | 6 | 5 | 4 | 3 | 2 |
| 35 | Waste removal | 6 | 5 | 4 | 3 | 2 |
| 36 | Cleaning | 6 | 5 | 4 | 3 | 2 |
| 37 | Washing cars | 6 | 5 | 4 | 3 | 2 |
| 38 | Washing dishes | 6 | 5 | 4 | 3 | 2 |
| 39 | Setting the table | 6 | 5 | 4 | 3 | 2 |
| 40 | Carrying shopping bags | 6 | 5 | 4 | 3 | 2 |
| 41 | Packing up and tidying | 6 | 5 | 4 | 3 | 2 |
| 42 | Making beds | 6 | 5 | 4 | 3 | 2 |
| 43a | Average amount of time in minutes that they can perform the above mentioned activities | | | | | |
| 43b | Average amount of time spent doing physical activity with a parent/guardian | | | | | |

| I Health profile | | |
|--|-------------------------|------------|
| <u>How many children in your care suffer from the following:</u> | | |
| | | quantities |
| 44 | Headaches | |
| 45 | Migraine | |
| 46 | Stomach cramps | |
| 47 | Constipation | |
| 48 | Diarrhoea | |
| 49 | Irritable bowl syndrome | |

| | | |
|----|-----------------------------|--|
| 52 | Diabetes | |
| 53 | Often physically tired | |
| 54 | Difficulty in concentration | |
| 55 | Throat infections | |
| 56 | Chronic colds/flu | |
| 57 | Allergies (please specify) | |

J Family history

| | | | | | | |
|-------------------------|---|------------------------|-------------|-------------------|--------------|-------|
| 58 | Have any of their family members suffered from any of the following diseases? Encircle the appropriate box. <u>If any answer is unknown to you, do not respond.</u> | | | | | |
| | Every day | 2 or more times a week | Once a week | 2-3 times a month | Once a month | Never |
| Headache | 6 | 5 | 4 | 3 | 2 | 1 |
| Asthma | 6 | 5 | 4 | 3 | 2 | 1 |
| High Blood Pressure | 6 | 5 | 4 | 3 | 2 | 1 |
| Chest pain | 6 | 5 | 4 | 3 | 2 | 1 |
| Diabetes | 6 | 5 | 4 | 3 | 2 | 1 |
| Stroke | 6 | 5 | 4 | 3 | 2 | 1 |
| Lower back pain | 6 | 5 | 4 | 3 | 2 | 1 |
| Coronary Heart Disease | 6 | 5 | 4 | 3 | 2 | 1 |
| Cancer | 6 | 5 | 4 | 3 | 2 | 1 |
| Hypertension | 6 | 5 | 4 | 3 | 2 | 1 |
| Osteoarthritis | 6 | 5 | 4 | 3 | 2 | 1 |
| Osteoporosis | 6 | 5 | 4 | 3 | 2 | 1 |
| Weight related problems | 6 | 5 | 4 | 3 | 2 | 1 |
| Others (please specify) | 6 | 5 | 4 | 3 | 2 | 1 |

K Mental health profile

| | | | | | | |
|---|----------------------------|-------|--------|-----------|-------|--------|
| Do the children in your care show any of the following signs (please provide quantities): | | | | | | |
| | | Never | Rarely | Sometimes | Often | Always |
| 59 | Mentally tired | | | | | |
| 60 | Anxious or worried | | | | | |
| 61 | Depressed | | | | | |
| 62 | Find it difficult to relax | | | | | |
| 63 | Moody | | | | | |
| 64 | Emotional | | | | | |
| 65 | Temper tantrums | | | | | |
| 66 | Withdrawn | | | | | |
| 67 | Over sensitive | | | | | |
| 68 | Restless | | | | | |
| 69 | Overactive | | | | | |

| | | | | | | |
|----|------------------------------------|--|--|--|--|--|
| 70 | Excitable | | | | | |
| 71 | Overly serious or sad | | | | | |
| 72 | Daydreams | | | | | |
| 73 | Quarrelsome | | | | | |
| 74 | Finds it difficult to make friends | | | | | |
| 75 | Shy | | | | | |
| 76 | Fearful | | | | | |
| 77 | Often absent from school | | | | | |

L Academic performance

Please rate the average of the children in your care's current level of academic performance:

| | | |
|----|-----------------------------|--|
| 78 | Exceptional/outstanding | |
| 79 | Good | |
| 80 | Average | |
| 81 | Can perform better | |
| | Struggles to make the grade | |

M Motor skills profile

A Do the majority of children in your care come across as being: (tick appropriate box/es)

| | | |
|----|--|--|
| 82 | Poorly coordinated | |
| 83 | Clumsy (falls easily, bumps into things) | |
| 84 | Tires easily | |
| 85 | Little or no muscular endurance | |
| 86 | Can not keep up with general daily routine | |

B Do the majority of children in your care display problems with motor planning activities: (tick appropriate box/es)

| | | |
|----|---|--|
| 87 | tying shoe laces | |
| 88 | eating with a knife and fork | |
| 89 | working with buttons | |
| 90 | dressng | |
| 91 | Not able to follow instructions | |
| 92 | Not completing tasks | |
| 93 | Attached to parents | |
| 94 | Cannot play on his own, needs attention and control | |

C Please rate the children in your care with regards to:

| | | exceptional | good | average | poor |
|-----|--|-------------|------|---------|------|
| 95 | Ball skills | | | | |
| 96 | Balance | | | | |
| 97 | Swimming skills | | | | |
| 98 | Knowledge of left and right (directionality) | | | | |
| 99 | Bodily awareness (knowledge of body parts) | | | | |
| 100 | Skipping rhythmically, with a skipping rope | | | | |

| N | <u>Income bracket of parents:</u> <u>(gross monthly), please tick.</u> | |
|-----|---|--|
| 101 | R2000 to R4000 | |
| 102 | R6000 to R8000 | |
| 103 | R8000 to R 10000 | |
| 104 | R15000 to R20000 | |
| 105 | R25000 and more | |

Copyright CVD

PARTICIPANT POST-TEST (COURSE) QUESTIONNAIRE

Name: _____ **Date:** _____

Instructions

Read each sentence. Place a tick (✓) next to the number that shows how you rate your skills at the present moment (showing how you think and feel right now):

Use the following scale:

- 3 = Much need for improvement
- 2 = Moderate need for improvement
- 1 = Slight need for improvement
- 0 = No need for improvement

Put a question mark (?) rather than a rating by any skill which meaning is not clear to you

| KNOWLEDGE (theoretical and or practical understanding of the research topic) | | | | | |
|--|---|---|---|---|---|
| Knowledge rating on the urban challenges to health, food and nutrition security | | | | | |
| 1 | I can define and have a clear understanding of malnutrition/underweight in children | 0 | 1 | 2 | 3 |
| 2 | I can identify the primary causes of malnutrition/underweight in children | 0 | 1 | 2 | 3 |
| 3 | I can identify the primary indicators off malnutrition/underweight | 0 | 1 | 2 | 3 |
| 4 | I can identify the complications associated with being underweight | 0 | 1 | 2 | 3 |
| | Knowledge rating in dealing with individual, household and community factors affecting children's lifestyle and nutritious choices | 0 | 1 | 2 | 3 |
| 5 | I can identify most of the possible nutritious choices that can be made by children | 0 | 1 | 2 | 3 |
| 6 | I can compare healthy and poor dietary habits and the effect thereof on personal health in children and their communities | 0 | 1 | 2 | 3 |
| 7 | I have enough knowledge on basic nutrition principles | 0 | 1 | 2 | 3 |
| 8 | I have enough knowledge on the important role that food and nutrition programmes can play in support of underweight children | 0 | 1 | 2 | 3 |
| | Knowledge rating on preventative action and education in prevention of underweight in children | 0 | 1 | 2 | 3 |
| 9 | I have the knowledge to contribute in meaningful ways to: | 0 | 1 | 2 | 3 |
| 10 | Nutrition week | 0 | 1 | 2 | 3 |
| 11 | Monitoring lunch boxes | 0 | 1 | 2 | 3 |
| 12 | Monitoring the keeping of weight management journals | 0 | 1 | 2 | 3 |
| 13 | Monitoring tuck shop visits | 0 | 1 | 2 | 3 |
| 14 | Examine work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| | Knowledge rating on the importance of care giver well being | | | | |
| 15 | I understand Burn out and occupation fatigue syndrome | 0 | 1 | 2 | 3 |
| 16 | I can identify the symptoms of Burn out and occupation fatigue syndrome | 0 | 1 | 2 | 3 |
| 17 | I know of the measures that can be implemented in preventing Burn out and occupation fatigue syndrome | 0 | 1 | 2 | 3 |
| | Knowledge rating on the important role that exercise can play in support of underweight children | 0 | 1 | 2 | 3 |
| 18 | I have a clear understanding of exercise intervention as support to underweight children | 0 | 1 | 2 | 3 |
| | SKILL (Ability rating when performing complex activities related to the research topic) | 0 | 1 | 2 | 3 |
| 19 | I am confident when investigating personal hygiene executed by children | 0 | 1 | 2 | 3 |

| | | | | | |
|----|--|---|---|---|---|
| | and in their home environment | | | | |
| 20 | I can confidently execute investigative actions related to home and school environmental health in children and their families | 0 | 1 | 2 | 3 |
| 21 | I can contribute in meaningful ways to: | 0 | 1 | 2 | 3 |
| 22 | Nutrition week | 0 | 1 | 2 | 3 |
| 23 | Monitoring lunch boxes | 0 | 1 | 2 | 3 |
| 24 | Monitoring the keeping of weight management journals | 0 | 1 | 2 | 3 |
| 25 | Monitoring tuck shop visits | 0 | 1 | 2 | 3 |
| 26 | Examine work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| 27 | I am actively involved in movement programmes presented to underweight children/ in service programmes offered | 0 | 1 | 2 | 3 |
| | COMPETENCE (Responsibility rating when :) | 0 | 1 | 2 | 3 |
| 28 | Examining work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| 29 | Confidently presenting related nutrition concepts and measures to parents of underweight children | 0 | 1 | 2 | 3 |
| 30 | I know where I can go for help / guidance / counselling | 0 | 1 | 2 | 3 |

RESULTS OF THE COMPARISON OF PRE-TEST AND POST-TEST RESULTS WITHIN GROUPS OVER TIME

The following section looks at each group of children and compares their performance over time. As indicated earlier, Wilcoxon Signed Ranks tests were used to determine whether statistically significant changes occurred over time. The results of these analyses are presented in Figures 2-7.

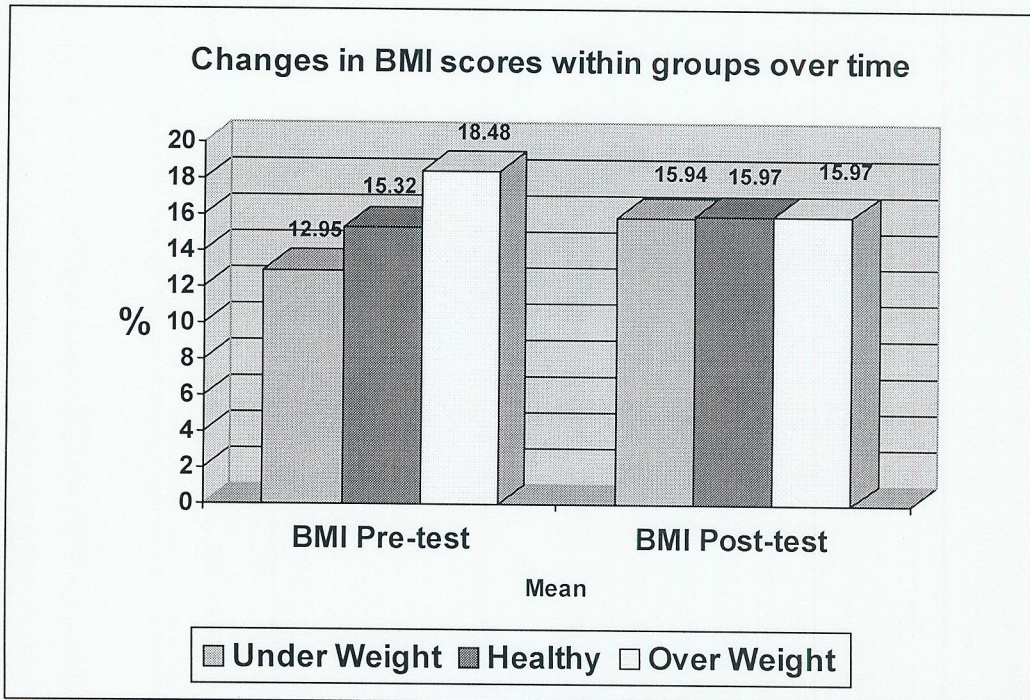


Figure 2:

The results in Figure 2 give an indication of the BMI scores of the three groups over time. Only two statistically significant changes occurred. The post-test scores of the Under weight groups were higher than the pre-test scores in the majority of cases. The opposite was true for the Over weight group where the majority of children had lower BMI scores during the post-test. No statistically significant changes took place in the BMI scores of the healthy group. These differences were significant at the 5% level of significance.

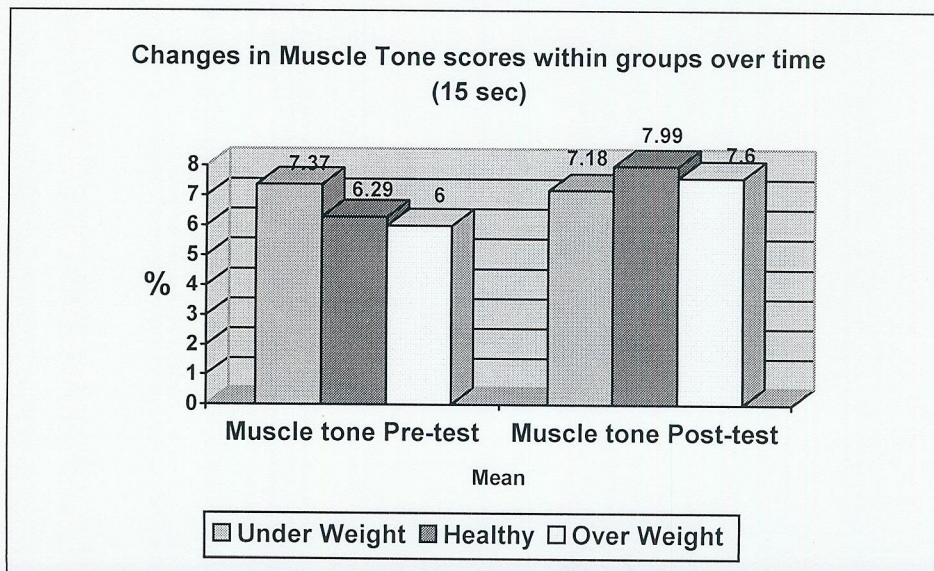


Figure 3:

Two statistically significant changes were detected in muscle tone scores. Both the Healthy and Over weight groups showed a significant increase in muscle tone scores. While the Healthy groups' change was significant at the 5% level, the Over weight groups' change was significant at the 10% level of significance. The Under weight group showed no statistically significant change in muscle tone scores.

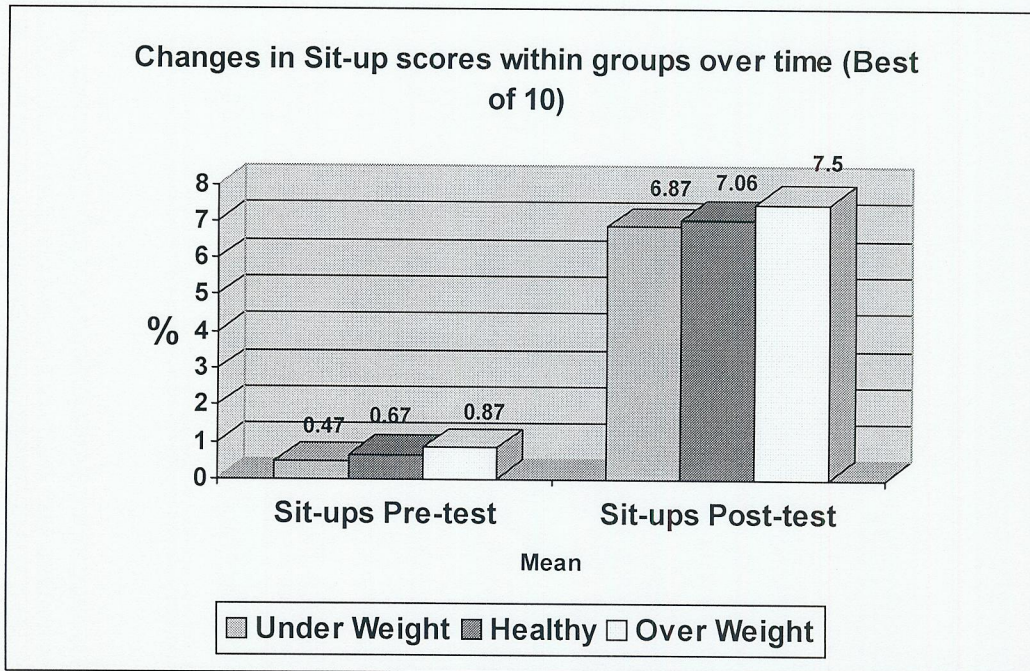


Figure 4:

All three groups showed a statistically significant increase in the number of sit-ups they were able to complete from pre-test to post-test (see figure 4). These differences were significant at the 5% level of significance.

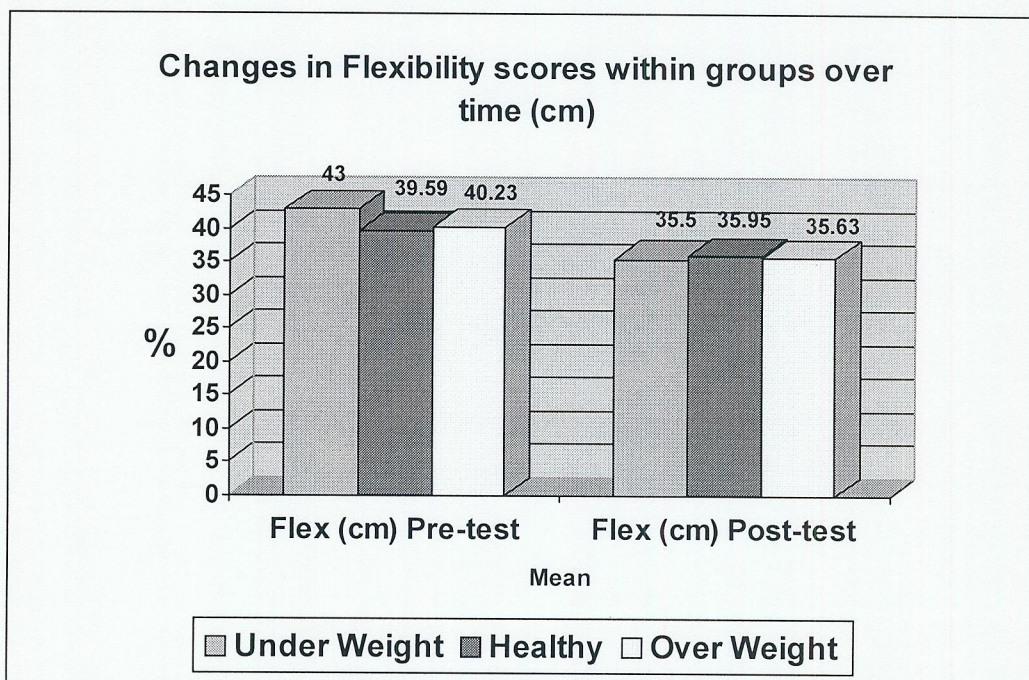


Figure 5:

All three groups showed a statistically significant decline in Flexibility scores over time. In the majority of cases, post-test scores were lower than pre-test scores. These differences were significant at the 5% level of significance.

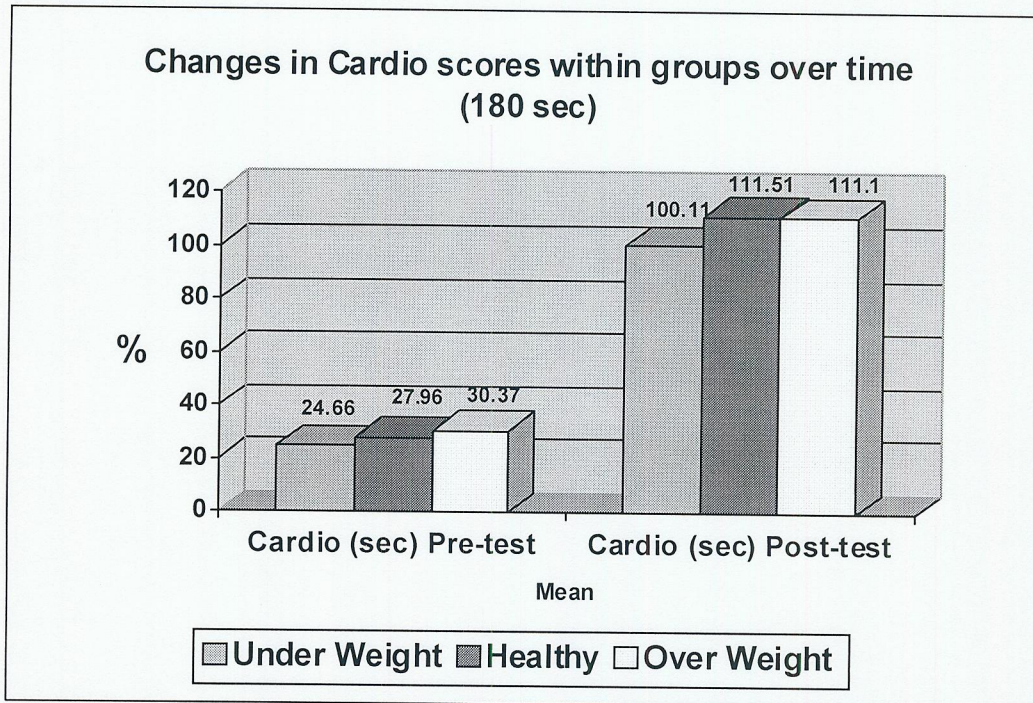


Figure 6:

The cardiovascular scores of all three groups increased significantly over time (see figure 6). These differences were significant at the 5% level of significance.

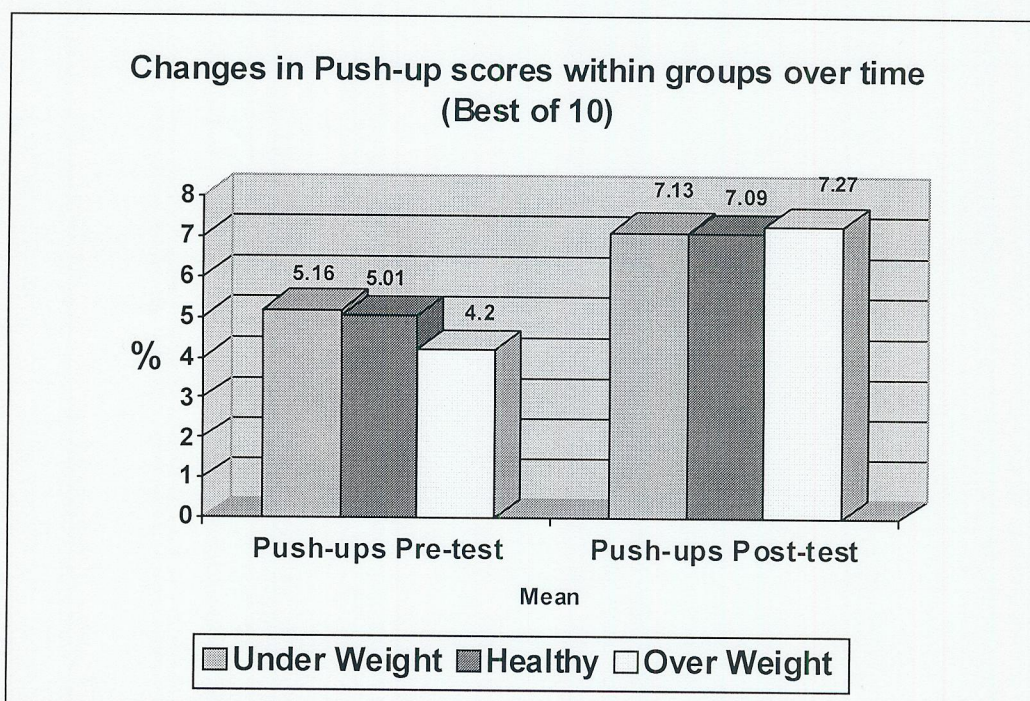


Figure 7:

Once again, the results in figure 7 indicate that all three groups showed an increase in the number of push-ups they could complete over time. These changes were significant at the 5% level of significance.

5. SUMMARY OF RESULTS

The current study consisted of three groups of children classified as Under weight, Healthy and Over Weight according to their BMI scores. In order to compare the performance of each group over time, their original classification was used to test progress, even if their BMI score during the post-test would reclassify them into a different group. This was done in order to ensure that the progress of the same group of children is compared from the pre- to the post-test. The sample consisted of 150 children classified as follows: 25.33% Under Weight, 54.67% Healthy and 20% Over Weight children.

The results of the analysis used to compare each groups performance over time can be summarised as follows. The BMI post-test scores of the Under weight groups were higher than the pre-test scores in the majority of cases. The opposite was true for the Over weight group where the majority of children had lower BMI scores during the post-test. No statistically significant changes took place in the BMI scores of the Healthy group.

Two statistically significant changes were detected in muscle tone scores. Both the Healthy and Over weight groups showed a significant increase in muscle tone scores, while the Under weight group showed no statistically significant change.

All three groups showed a statistically significant increase in the number of sit-ups and push-ups they were able to complete from pre-test to post-test.

All three groups showed a statistically significant decline in Flexibility scores over time. The cardiovascular scores of all three groups increased significantly over time.

Frequencies

Frequency Tables of BMI status at the beginning and end of the experiment

BMI Recoded Pre-test

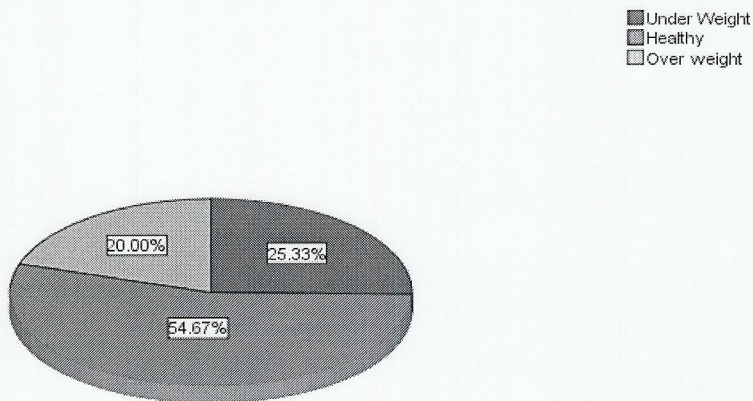
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | Under Weight | 38 | 25.3 | 25.3 | 25.3 |
| | Healthy | 82 | 54.7 | 54.7 | 80.0 |
| | Over weight | 30 | 20.0 | 20.0 | 100.0 |
| | Total | 150 | 100.0 | 100.0 | |

BMI recoded Post-test

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | Under Weight | 23 | 15.3 | 15.3 | 15.3 |
| | Healthy | 91 | 60.7 | 60.7 | 76.0 |
| | Over weight | 36 | 24.0 | 24.0 | 100.0 |
| | Total | 150 | 100.0 | 100.0 | |

Pie Chart

BMI Recoded Pre-test



Frequencies

Frequency Tables of BMI status at the beginning and end of the experiment

BMI Recoded Pre-test

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | Under Weight | 38 | 25.3 | 25.3 | 25.3 |
| | Healthy | 82 | 54.7 | 54.7 | 80.0 |
| | Over weight | 30 | 20.0 | 20.0 | 100.0 |
| | Total | 150 | 100.0 | 100.0 | |

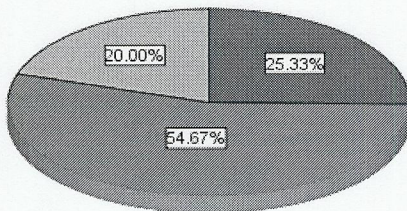
BMI recoded Post-test

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | Under Weight | 23 | 15.3 | 15.3 | 15.3 |
| | Healthy | 91 | 60.7 | 60.7 | 76.0 |
| | Over weight | 36 | 24.0 | 24.0 | 100.0 |
| | Total | 150 | 100.0 | 100.0 | |

Pie Chart

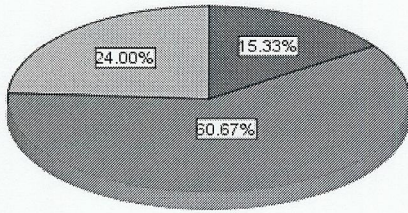
BMI Recoded Pre-test

■ Under Weight
 ■ Healthy
 ■ Over weight



BMI recoded Post-test

■ Under Weight
■ Healthy
■ Over weight



Non-Parametric Tests to test for statistically significant changes over time within each group

Descriptive Statistics

| BMI Recoded Pre-test | N | Mean | Std. Deviation | Minimum | Maximum |
|------------------------|----|--------|----------------|---------|---------|
| Under Weight | | | | | |
| BMI Pre-test | 38 | 12.95 | 0.65 | 11.68 | 13.97 |
| Muscle tone Pre-test | 38 | 7.37 | 3.19 | 0.00 | 10.00 |
| Sit-ups Pre-test | 38 | 0.47 | 1.39 | 0.00 | 7.00 |
| Flex (cm) Pre-test | 38 | 43.00 | 8.68 | 20.00 | 63.00 |
| Cardio (sec) Pre-test | 38 | 24.66 | 9.06 | 6.00 | 43.00 |
| Push-ups Pre-test | 38 | 5.16 | 1.87 | 1.00 | 8.00 |
| BMI Post-test | 38 | 15.94 | 1.87 | 12.53 | 21.18 |
| Muscle tone Post-test | 38 | 7.18 | 2.64 | 2.00 | 15.00 |
| Sit-ups Post-test | 38 | 6.87 | 3.15 | 1.00 | 10.00 |
| Flex (cm) Post-test | 38 | 35.50 | 5.14 | 26.00 | 46.00 |
| Cardio (sec) Post-test | 38 | 100.11 | 32.25 | 10.00 | 180.00 |
| Push-ups Post-test | 38 | 7.13 | 2.72 | 1.00 | 10.00 |
| Healthy | | | | | |
| BMI Pre-test | 82 | 15.32 | 0.81 | 14.04 | 16.94 |
| Muscle tone Pre-test | 82 | 6.29 | 4.19 | 0.00 | 12.00 |
| Sit-ups Pre-test | 82 | 0.67 | 1.84 | 0.00 | 8.00 |
| Flex (cm) Pre-test | 82 | 39.59 | 6.43 | 23.00 | 57.00 |
| Cardio (sec) Pre-test | 82 | 27.96 | 10.80 | 6.00 | 56.00 |
| Push-ups Pre-test | 82 | 5.01 | 2.11 | 1.00 | 8.00 |
| BMI Post-test | 82 | 15.97 | 2.52 | 12.76 | 26.16 |
| Muscle tone Post-test | 82 | 7.99 | 3.38 | 2.00 | 15.00 |
| Sit-ups Post-test | 82 | 7.06 | 3.14 | 1.00 | 10.00 |
| Flex (cm) Post-test | 82 | 35.95 | 6.10 | 22.00 | 54.00 |
| Cardio (sec) Post-test | 82 | 111.51 | 32.18 | 10.00 | 180.00 |
| Push-ups Post-test | 82 | 7.09 | 2.75 | 1.00 | 10.00 |
| Over weight | | | | | |
| BMI Pre-test | 30 | 18.48 | 1.45 | 17.00 | 24.63 |
| Muscle tone Pre-test | 30 | 6.00 | 4.67 | 0.00 | 10.00 |
| Sit-ups Pre-test | 30 | 0.87 | 1.76 | 0.00 | 6.00 |
| Flex (cm) Pre-test | 30 | 40.23 | 8.72 | 21.00 | 60.00 |
| Cardio (sec) Pre-test | 30 | 30.37 | 10.78 | 10.00 | 58.00 |
| Push-ups Pre-test | 30 | 4.20 | 1.56 | 1.00 | 7.00 |
| BMI Post-test | 30 | 15.97 | 2.41 | 12.31 | 25.26 |
| Muscle tone Post-test | 30 | 7.60 | 3.16 | 2.00 | 15.00 |
| Sit-ups Post-test | 30 | 7.50 | 2.83 | 1.00 | 10.00 |
| Flex (cm) Post-test | 30 | 35.63 | 5.39 | 22.00 | 48.00 |
| Cardio (sec) Post-test | 30 | 111.10 | 30.31 | 50.00 | 190.00 |
| Push-ups Post-test | 30 | 7.27 | 2.85 | 2.00 | 10.00 |

Wilcoxon Signed Ranks Test

Ranks

| BMI Recoded Pre-test | | | N | Mean Rank | Ranks |
|----------------------|--|-----------------|-----------------|-----------|---------|
| Under Weight | BMI Post-test - BMI Pre-test | Negative Ranks | 1 ^a | 8.00 | 8.00 |
| | | Positive Ranks | 37 ^b | 19.81 | 733.00 |
| | | Ties | 0 ^c | | |
| | | Total | 38 | | |
| | Muscle tone Post-test - Muscle tone Pre-test | Negative Ranks | 19 ^d | 15.05 | 286.00 |
| | | Positive Ranks | 13 ^e | 18.62 | 242.00 |
| | | Ties | 6 ^f | | |
| | | Total | 38 | | |
| | Sit-ups Post-test - Sit-ups Pre-test | Negative Ranks | 1 ^g | 3.00 | 3.00 |
| | | Positive Ranks | 37 ^h | 19.95 | 738.00 |
| | | Ties | 0 ⁱ | | |
| | | Total | 38 | | |
| | Flex (cm) Post-test - Flex (cm) Pre-test | Negative Ranks | 30 ^j | 20.58 | 617.50 |
| | | Positive Ranks | 7 ^k | 12.21 | 85.50 |
| | | Ties | 1 ^l | | |
| | | Total | 38 | | |
| | Cardio (sec) Post-test - Cardio (sec) Pre-test | Negative Ranks | 1 ^m | 1.00 | 1.00 |
| | | Positive Ranks | 37 ⁿ | 20.00 | 740.00 |
| | | Ties | 0 ^o | | |
| | | Total | 38 | | |
| | Push-ups Post-test - Push-ups Pre-test | Negative Ranks | 9 ^p | 13.78 | 124.00 |
| Positive Ranks | | 25 ^q | 18.84 | 471.00 | |
| Ties | | 4 ^r | | | |
| Total | | 38 | | | |
| Healthy | BMI Post-test - BMI Pre-test | Negative Ranks | 39 ^a | 34.95 | 1363.00 |
| | | Positive Ranks | 43 ^b | 47.44 | 2040.00 |
| | | Ties | 0 ^c | | |
| | | Total | 82 | | |
| | Muscle tone Post-test - Muscle tone Pre-test | Negative Ranks | 28 ^d | 31.38 | 878.50 |
| | | Positive Ranks | 47 ^e | 41.95 | 1971.50 |
| | | Ties | 7 ^f | | |
| | | Total | 82 | | |
| | Sit-ups Post-test - Sit-ups Pre-test | Negative Ranks | 4 ^g | 14.00 | 56.00 |
| | | Positive Ranks | 76 ^h | 41.89 | 3184.00 |
| | | Ties | 2 ⁱ | | |
| | | Total | 82 | | |
| | Flex (cm) Post-test - Flex (cm) Pre-test | Negative Ranks | 56 ^j | 42.75 | 2394.00 |
| | | Positive Ranks | 23 ^k | 33.30 | 766.00 |
| | | Ties | 3 ^l | | |
| | | Total | 82 | | |
| | Cardio (sec) Post-test - Cardio (sec) Pre-test | Negative Ranks | 1 ^m | 3.00 | 3.00 |
| | | Positive Ranks | 81 ⁿ | 41.98 | 3400.00 |
| | | Ties | 0 ^o | | |
| | | Total | 82 | | |
| | Push-ups Post-test - Push-ups Pre-test | Negative Ranks | 20 ^p | 29.53 | 590.50 |
| Positive Ranks | | 57 ^q | 42.32 | 2412.50 | |
| Ties | | 5 ^r | | | |
| Total | | 82 | | | |

| | | | | | |
|-------------|--|----------------|-----------------|-------|--------|
| Over weight | BMI Post-test - BMI Pre-test | Negative Ranks | 26 ^a | 16.15 | 420.00 |
| | | Positive Ranks | 4 ^b | 11.25 | 45.00 |
| | | Ties | 0 ^c | | |
| | | Total | 30 | | |
| | Muscle tone Post-test - Muscle tone Pre-test | Negative Ranks | 11 ^d | 10.32 | 113.50 |
| | | Positive Ranks | 16 ^e | 16.53 | 264.50 |
| | | Ties | 3 ^f | | |
| | | Total | 30 | | |
| | Sit-ups Post-test - Sit-ups Pre-test | Negative Ranks | 0 ^g | .00 | .00 |
| | | Positive Ranks | 30 ^h | 15.50 | 465.00 |
| | | Ties | 0 ⁱ | | |
| | | Total | 30 | | |
| | Flex (cm) Post-test - Flex (cm) Pre-test | Negative Ranks | 17 ^j | 18.12 | 308.00 |
| | | Positive Ranks | 11 ^k | 8.91 | 98.00 |
| | | Ties | 2 ^l | | |
| | | Total | 30 | | |
| | Cardio (sec) Post-test - Cardio (sec) Pre-test | Negative Ranks | 0 ^m | .00 | .00 |
| | | Positive Ranks | 30 ⁿ | 15.50 | 465.00 |
| | | Ties | 0 ^o | | |
| | | Total | 30 | | |
| | Push-ups Post-test - Push-ups Pre-test | Negative Ranks | 4 ^p | 10.00 | 40.00 |
| | | Positive Ranks | 25 ^q | 15.80 | 395.00 |
| | | Ties | 1 ^r | | |
| | | Total | 30 | | |

- a. BMI Post-test < BMI Pre-test
 b. BMI Post-test > BMI Pre-test
 c. BMI Post-test = BMI Pre-test
 d. Muscle tone Post-test < Muscle tone Pre-test
 e. Muscle tone Post-test > Muscle tone Pre-test
 f. Muscle tone Post-test = Muscle tone Pre-test
 g. Sit-ups Post-test < Sit-ups Pre-test
 h. Sit-ups Post-test > Sit-ups Pre-test
 i. Sit-ups Post-test = Sit-ups Pre-test
 j. Flex (cm) Post-test < Flex (cm) Pre-test
 k. Flex (cm) Post-test > Flex (cm) Pre-test
 l. Flex (cm) Post-test = Flex (cm) Pre-test
 m. Cardio (sec) Post-test < Cardio (sec) Pre-test
 n. Cardio (sec) Post-test > Cardio (sec) Pre-test
 o. Cardio (sec) Post-test = Cardio (sec) Pre-test
 p. Push-ups Post-test < Push-ups Pre-test
 q. Push-ups Post-test > Push-ups Pre-test

Test Statistics^c

| | | BMI Post-test - BMI Pre-test | Muscle tone Post-test - Muscle tone Pre-test | Sit-ups Post-test - Sit-ups Pre-test | Flex (cm) Post-test - Flex (cm) Pre-test | Cardio (sec) Post-test - Cardio (sec) Pre-test | Push-ups Post-test - Push-ups Pre-test |
|----------------------|------------------------|------------------------------|--|--------------------------------------|--|--|--|
| BMI Recoded Pre-test | | | | | | | |
| Under Weight | Z | -5.257 ^a | -.415 ^b | -5.350 ^a | -4.015 ^b | -5.359 ^a | -2.974 ^a |
| | Asymp. Sig. (2-tailed) | .000 | .678 | .000 | .000 | .000 | .003 |
| Healthy | Z | -1.565 ^a | -2.899 ^a | -7.546 ^a | -3.982 ^b | -7.852 ^a | -4.639 ^a |
| | Asymp. Sig. (2-tailed) | .118 | .004 | .000 | .000 | .000 | .000 |
| Over weight | Z | -3.857 ^b | -1.821 ^a | -4.799 ^a | -2.393 ^b | -4.783 ^a | -3.849 ^a |
| | Asymp. Sig. (2-tailed) | .000 | .069 | .000 | .017 | .000 | .000 |

- a. Based on negative ranks.
 b. Based on positive ranks.
 c. Wilcoxon Signed Ranks Test

PARTICIPANT POST-TEST (COURSE) QUESTIONNAIRE

Name: _____ **Date:** _____

Instructions

Read each sentence. Place a tick (✓) next to the number that shows how you rate your skills at the present moment (showing how you think and feel right now):

Use the following scale:

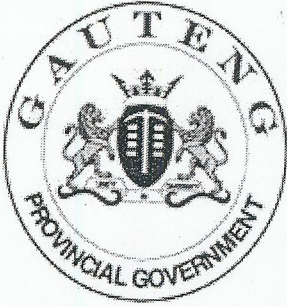
- 3 = Much need for improvement
- 2 = Moderate need for improvement
- 1 = Slight need for improvement
- 0 = No need for improvement

Put a question mark (?) rather than a rating by any skill which meaning is not clear to you

| KNOWLEDGE (theoretical and or practical understanding of the research topic) | | | | | |
|--|---|---|---|---|---|
| Knowledge rating on the urban challenges to health, food and nutrition security | | | | | |
| 1 | I can define and have a clear understanding of malnutrition/underweight in children | 0 | 1 | 2 | 3 |
| 2 | I can identify the primary causes of malnutrition/underweight in children | 0 | 1 | 2 | 3 |
| 3 | I can identify the primary indicators off malnutrition/underweight | 0 | 1 | 2 | 3 |
| 4 | I can identify the complications associated with being underweight | 0 | 1 | 2 | 3 |
| | Knowledge rating in dealing with individual, household and community factors affecting children's lifestyle and nutritious choices | 0 | 1 | 2 | 3 |
| 5 | I can identify most of the possible nutritious choices that can be made by children | 0 | 1 | 2 | 3 |
| 6 | I can compare healthy and poor dietary habits and the effect thereof on personal health in children and their communities | 0 | 1 | 2 | 3 |
| 7 | I have enough knowledge on basic nutrition principles | 0 | 1 | 2 | 3 |
| 8 | I have enough knowledge on the important role that food and nutrition programmes can play in support of underweight children | 0 | 1 | 2 | 3 |
| | Knowledge rating on preventative action and education in prevention of underweight in children | 0 | 1 | 2 | 3 |
| 9 | I have the knowledge to contribute in meaningful ways to: | 0 | 1 | 2 | 3 |
| 10 | Nutrition week | 0 | 1 | 2 | 3 |
| 11 | Monitoring lunch boxes | 0 | 1 | 2 | 3 |
| 12 | Monitoring the keeping of weight management journals | 0 | 1 | 2 | 3 |
| 13 | Monitoring tuck shop visits | 0 | 1 | 2 | 3 |
| 14 | Examine work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| | Knowledge rating on the importance of care giver well being | | | | |
| 15 | I understand Burn out and occupation fatigue syndrome | 0 | 1 | 2 | 3 |
| 16 | I can identify the symptoms of Burn out and occupation fatigue syndrome | 0 | 1 | 2 | 3 |
| 17 | I know of the measures that can be implemented in preventing Burn out and occupation fatigue syndrome | 0 | 1 | 2 | 3 |
| | Knowledge rating on the important role that exercise can play in support of underweight children | 0 | 1 | 2 | 3 |
| 18 | I have a clear understanding of exercise intervention as support to underweight children | 0 | 1 | 2 | 3 |
| | SKILL (Ability rating when performing complex activities related to the research topic) | 0 | 1 | 2 | 3 |
| 19 | I am confident when investigating personal hygiene executed by children | 0 | 1 | 2 | 3 |

| | | | | | |
|----|--|---|---|---|---|
| | and in their home environment | | | | |
| 20 | I can confidently execute investigative actions related to home and school environmental health in children and their families | 0 | 1 | 2 | 3 |
| 21 | I can contribute in meaningful ways to: | 0 | 1 | 2 | 3 |
| 22 | Nutrition week | 0 | 1 | 2 | 3 |
| 23 | Monitoring lunch boxes | 0 | 1 | 2 | 3 |
| 24 | Monitoring the keeping of weight management journals | 0 | 1 | 2 | 3 |
| 25 | Monitoring tuck shop visits | 0 | 1 | 2 | 3 |
| 26 | Examine work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| 27 | I am actively involved in movement programmes presented to underweight children/ in service programmes offered | 0 | 1 | 2 | 3 |
| | COMPETENCE (Responsibility rating when :) | 0 | 1 | 2 | 3 |
| 28 | Examining work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| 29 | Confidently presenting related nutrition concepts and measures to parents of underweight children | 0 | 1 | 2 | 3 |
| 30 | I know where I can go for help / guidance / counselling | 0 | 1 | 2 | 3 |

| | | | | | |
|----|--|---|---|---|---|
| | and in their home environment | | | | |
| 20 | I can confidently execute investigative actions related to home and school environmental health in children and their families | 0 | 1 | 2 | 3 |
| 21 | I can contribute in meaningful ways to: | 0 | 1 | 2 | 3 |
| 22 | Nutrition week | 0 | 1 | 2 | 3 |
| 23 | Monitoring lunch boxes | 0 | 1 | 2 | 3 |
| 24 | Monitoring the keeping of weight management journals | 0 | 1 | 2 | 3 |
| 25 | Monitoring tuck shop visits | 0 | 1 | 2 | 3 |
| 26 | Examine work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| 27 | I am actively involved in movement programmes presented to underweight children/ in service programmes offered | 0 | 1 | 2 | 3 |
| | COMPETENCE (Responsibility rating when :) | 0 | 1 | 2 | 3 |
| 28 | Examining work sheets on relevant nutritional concepts | 0 | 1 | 2 | 3 |
| 29 | Confidently presenting related nutrition concepts and measures to parents of underweight children | 0 | 1 | 2 | 3 |
| 30 | I know where I can go for help / guidance / counselling | 0 | 1 | 2 | 3 |



UMnyango WezeMfundo
Department of Education

Lefapha la Thu
Departement van Onderw

Enquiries Shadrack Phele MIRMSA

Enquiries Shadrack P

(011) 355 0285

10 September 2007

Mrs Van Dorsten Carin

93 Concerto Park

Pierre Van Ryneveld

0102

Dear Mrs Van Dorsten Carin

APPROVAL TO CONDUCT ACADEMIC RESEARCH

The Gauteng Department of Education hereby grants permission to conduct research institutions as per application.

Topic of research: "A training programme for caregivers of underweight children in South A Schools".

Degree: M.A. (Physical) education

Name of university: University of Pretoria

Upon completion of the research project the researcher is obliged to furnish the Department with the research report (electronic or hard copy).

Wish you success in your academic pursuit.

Sincerely,

pp Shadrack Phele MIRMSA

TOM WASPE

CHIEF INFORMATION OFFICER

Gauteng Department of Education

Office of the DDG:IS & KM (CIO)

Room 1807, 111 Commissioner Street, Johannesburg, 2001
2000

P.O.Box 7710, Johannesl

Tel: (011) 355-1514/1507 Fax: (011) 355-0734/0833 E-mail: tomw@gpg.gov.za or
elridar@gpg.gov.za



CONSENT FORM – Care giver

Dear

Currently I am an enrolled student at The University of Pretoria. I am conducting a study on *underweight children in South African schools*. The research will assist me in understanding the risk factors associated with being an underweight child; and in formulating possible preventative measures, as to possibly help these children. .

The intervention process in this study will require some time and effort on your side. You will have to complete a questionnaire and participate in a training program of one hour, over a two week period (approximately 10 hours). After combining all the answers, I hope to learn more about the life style of school going children in South Africa. This will be very helpful as to make useful recommendations to the relevant authorities and organisations with regard to underweight children in our schools.

Please understand that your participation is voluntary and that you are not being forced to take part in this study. The choice of whether to participate or not, is yours alone. However, I would really appreciate it if you do share your thoughts with me. If you choose not to take part in the training programme, you will not be affected in any way whatsoever. If you agree to participate, you may withdraw from participation in the study at any time, without negative consequences.

All information will remain **confidential** and be treated as such.

The questionnaire will take about 20 minutes to complete. Please be as open and as honest as possible in answering the questions. Remember there are no right or wrong answers.

Once the final report of this study is completed findings will be shared and recommendations will be made to the relevant authorities and organisations. In addition, the report will be posted on the following web-site www.glenstantia.co.za

Please indicate by ticking the appropriate box whether you would be participating in this study or not:

YES NO

Carin van Dorsten
Tel: 012 998 6116
Fax: 012 9987252
E-mail icdev@mweb.co.za

CONSENT FORM – Learner

Dear Parent

If your child is willing to participate in this study please read, and explain the content of this letter to him/her.

Dear Learner,

I am studying this year at the University of Pretoria. I am doing a project on children's weight. The name of the project is *underweight children in South African schools*. Some of these children might be sick, because they are not eating enough healthy food. This project will help me and your teacher to understand underweight children a little bit better.

Children, if you want to help me do this project, you will be asked to come to school on a certain day; and we will do some exercises, for example sit-ups. If you do not want to do the exercises it is fine. If you do not want to do the exercises anymore after you have started, you are welcome to stop exercising and your parents will take you home. However, I would really appreciate it if you do come and help me.

The exercises will take about an hour. You need to wear your PE clothes and running shoes for the exercises. All information will be kept **private**, meaning that only people like myself, your teacher, your parents and the school will know how you have performed.

Once all the children have done their exercises you will get a report showing you how you have done.

Thank you very much for listening. If you want to participate in my project please let your parents help you fill in the tear off slip at the bottom of this letter. Do you want to ask any questions? Please reflect any relevant information here:

.....

Thank you

Carin van Dorsten (Tel: 012 998 6116 Fax: 012 998 7252 E-mail icdev@mweb.co.za)

Tear - off slip

I (name of child participating) would like to do physical assessments/ exercises as part of a study on children with weight problems

or

prefer not to participate in this study. *Please underline the preferred choice.*

To: The Headmaster, H.P.J Pretorius
From: Carin van Dorsten (Motor skills Educator)
17-07-2007

Re: Permission to conduct research at Glenstantia Primary school

I the headmaster of Glenstantia Primary school hereby grant permission that Mrs.C.van Dorsten may conduct research at the above mentioned institution. We request that she and the University of Pretoria will take care in protecting and safeguarding the rights and autonomy of all parties; including the participants and all outside parties with whom contact will be made in the course of this study.

HPJ Pretorius
Headmaster Glenstantia Primary school
Tel: 012 998 6116
Fax: 012 998 7252
E-mail glenstan