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# ‘Water is Life’

The occupational injustice of  
performing survival tasks in rural  
South Africa

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# Methodology



- Part of PhD Study: ‘Development and validation of an instrument to assess activities of daily living with manual handling requirements in a South African context’
- Study site Limpopo Province, South Africa
- Phase 1:
  - Objective: Identify the basic and instrumental activities of daily living tasks that involve a substantial component of manual handling in a rural less-resourced area of South Africa.
  - Descriptive, cross-sectional non-experimental survey research design
  - Data collection:
    - Stage 1: Discussion groups with CCWs (4 groups in 4 villages)
    - Stage 2: Home Visits (11 households in 4 villages)
  - Data analysis using descriptive statistics







# Results

Age	Gender	Employment status
Mean = 55 years	Female = 89 %	Unemployed = 45.5 %
Frequency of water collection		
Water collection more than twice daily		63.6 %
Water collection twice daily		9.1 %
Time taken per trip		
Mean time taken per water collection round trip		44 minutes
Distances walked to collect water		
Round trip to access water from street tap (18.2 %)		452 m
Round trip to access water from village tap (72.7 %)		1502 m
Round trip to access water from river (9.1 %)		9 676 m





# Household water requirements

## Variables:

- Average size of household in Limpopo = 3.6 people
- Minimum water per person per day
  - SA Water Act, RDP norm = 25 litres pppd within 200m of dwelling
  - WHO = 50-75 litres pppd
- Approximate water requirement per household (3.6 x 50)  
= **180 litres**

## Time implication (excluding waiting times) for collection of 180 litres of water:

### Wheelbarrow with 2 x 25 l containers

3.6 trips	158 minutes (2 hrs 38 mins)
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### Wheelbarrow with 3 x 25 l containers

2.4 trips	105 minutes (1hr 45 mins)
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# Discussion

- Occupational injustice
  - Water collection in rural context has high time & manual handling demands
  - Cumulative impact: multiple water collections plus other bADLs and iADLs
  - Impact at work: reduced performance due to physical and time overload
  - Minimal remaining time to engage in other occupations e.g. education, employment
  - Gender roles: women most affected





# Conclusion & Recommendations

- Water collection is a significant occupation in less-resourced rural contexts
- Availability of limited household amenities results in occupational injustice
- OT Practice Models and Frameworks need to transform to become contextually relevant





Only once you have  
carried your own water,  
will you learn the value  
of every drop

