



Age Institute

Functional capacity among unemployed people

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Introduction

- Even though the health of the unemployed people has been studied in many forms, the factors of functional capacity have not drawn much attention.
- Physical functional capacity is one of the most important factors in enhancing the health of the unemployed.

The purpose of this study

- To describe the various components of functional capacity
- To describe associations of functional capacity with age, education and self-rated health

Study population

- 59 men, 55 women
- Mean age of men: 46.5 years, mean age of women: 48.1 years
- The range of age 23 – 62 years

Measurements of Functional Capacity

- Body mass index
- Muscle strength
- Hand grip
- Flexibility tests
- Respiratory functions
- Six-minute walking test
- Reaction time

Background variables

- Age
- Education
- Self-rated health

Table 1. Means of measurements of functional capacity among men and women.

Measurements	Men (n=54)	Women (n=54)	Statistical significance
Chair stand (number)	13.4	12.2	NS
Arm curl (number)	20.9	17.0	P=.001
Chair sit-and-reach (cm)	0.5	3.5	NS
Back scratch (cm)	- 9.1	- 5.3	NS
Hand grip (kg)	57.2	35.5	P=.000
Simple reaction time (ms)	324	286	P=.033
Simple movement time (ms)	218	222	NS
Choice reaction time (ms)	447	443	NS
Choice movement time (ms)	273	259	NS
Vital capacity (l)	5.1	3.7	P=.000
Peak expiratory flow (l/s)	10.5	7.6	P=.000
6 min walk (m)	555.0	492.7	P=.006

Table 2. Statistically significant correlations between measurements of functional capacity and age among men and women.

Measurements	Men (n=54)	Statistical significance	Women (n=54)	Statistical significance
Chair stand		NS	-.32	P=.025
Arm curl	-.36	P=.007	-.42	P=.002
Chair sit-and-reach		NS		NS
Back scratch	-.36	P=.009	-.27	P=.055
Hand grip		NS	-.44	P=.001
Simple reaction time	.26	P=.058		NS
Simple movement time	.33	P=.016	.29	P=.037
Choice reaction time	.36	P=.008	.48	P=.000
Choice movement time	.38	P=.005	.40	P=.004
Vital capacity		NS	-.41	P=.002
Peak expiratory flow		NS		NS
6 min walk		NS	-.41	P=.003

Table 3. Means of measurements of functional capacity by education among women.

Measurements	Comprehensive school or less (n=27)	More than comprehensive school (n=27)	Statistical significance
Chair stand (number)	11.2	13.2	P=.042
Arm curl (number)	15.2	18.6	P=.023
Hand grip (kg)	32.8	37.3	P=.044
Simple reaction time (ms)	300	272	P=.070
Simple movement time (ms)	247	198	P=.009
Choice reaction time (ms)	482	407	P=.025
Choice movement time (ms)	280	239	P=.037
Vital capacity (l)	3.4	3.9	P=.020
6 min walk (m)	447	537	P=.010

Table 4. Statistically significant correlations between measurements of functional capacity and self-rated health among men and women.

Measurements	Men (n=53)	Statistical significance	Women (n=52)	Statistical significance
Chair stand	-.44	P=.001	-.47	P=.001
Arm curl	-.37	P=.007	-.48	P=.000
Chair sit-and-reach	-.45	P=.001	-.33	P=.019
Back scratch	-.12	NS	-.46	P=.001
Hand grip	-.09	NS	-.17	NS
Simple reaction time	.31	P=.022	.41	P=.003
Simple movement time	.27	P=.051	.25	NS
Choice reaction time	.33	P=.018	.25	NS
Choice movement time	.41	P=.002	.29	P=.039
Vital capacity	-.26	NS	-.09	NS
Peak expiratory flow	-.12	NS	.02	NS
6 min walk	-.46	P=.001	-.47	P=.001

Conclusions

- The results showed that about 50 % of the unemployed had a long-term illness and 20 % had difficulties in coping with worklife because of deteriorated health.
- Many of the measurements of physical functional capacity were connected with self-rated health.
- Education connected with functional capacity specially among women.
- These results show that the evaluation of functional capacity is important when implementing programmes which aim to enhance working ability and general health among unemployed people.