ACTIVITY, FRAILTY AND WELL-BEING IN LATER LIFE: A TEN-YEAR LONGITUDINAL STUDY IN SWITZERLAND

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QUESTION

Is continuity in activity engagement related to well-being:
1) when frailty appears?;
2) when frailty is worsening (increasing deficiencies)?

SAMPLE

SWILSO-O
(Swiss Interdisciplinary Longitudinal Study on the Oldest Old)

Participants[1)]	295	224	190	162	124	99	75	51	42
Mean Age	81.8	83.2	84.2	85.1	86.5	87.9	88.9	89.8	91.4

1994 1995 1996 1997 1999 2000 2001 2002 2004

[1)] First cohort, those living at home and directly interviewed

INDICATORS

The two Dimensions of Well-Being

Affective dimension

Affective Well-Being: Standardised mean index of 8 items measuring frequency of positive and negative affects

Cognitive dimension

Perception of Health: Standardised mean index of 2 items: self-rating health and frequency of worries about one's own health

Activities

Sum index of regular activities (0-16)

- Listen to radio;
- Watch television;
- Read the newspaper;
- Read books or magazines;
- Play games with others;
- Play solitary games;
- Do gardening;
- Do craftwork;
- Go to walk;
- Do physical exercice;
- Visit coffees, restaurants;
- Participate in trips or outings;
- Attend cultural events;
- Attend local fairs or celebrations;
- Pray;
- Attend religious services.

Health Status

Robust (R) no ADL incapacities and not more than one affected dimension of frailty (mobility, memory, energy, physical ailments, sensory capacities)

Frail (F)[1)] no incapacities on the ADL, but two or more deficiencies on the dimensions of frailty

[1)] ADL-Dependents, having one or more ADL incapacities, have been excluded of analyses

RESULTS

A) Evolution in aggregate mean level of well-being between Tn and Tn+1 for three types of health and activity trajectories (test of Wilcoxon)

B) Well-being in Tn+1 by health and activity trajectories (multi-level models)

1) Entry into Frailty (R-F)

	A		B[1)]	
	Affective Well-Being	Perception of Health	Affective Well-Being	Perception of Health
Stability in Robustness (R-R) (=ref. group)	→	→		
Entry into Frailty (R-F) with Continuity in Activity	→	→	-0.06	-0.12
Entry into Frailty (R-F) with Decline in Activity	↘	↘	-0.14**	-0.24**

[1)] Multi-levels models. *p.<0.05; **p.<0.01; ***p.<0.001
Note. Controlled by gender, socio-economic status, region, age, living alone and well-being in Tn

2) Worsening Frailty (with increasing deficiencies) (F-F+)

	A		B[1)]	
	Affective Well-Being	Perception of Health	Affective Well-Being	Perception of Health
Stability in Frailty (F-F) (=ref. group)	→	↗		
Worsening Frailty (F-F+) with Continuity in Activity	→	→	-0.10	-0.05
Worsening Frailty (F-F+) with Decline in Activity	↘	↘	-0.20**	-0.40***

[1)] Multi-levels models. *p.<0.05; **p.<0.01; ***p.<0.001
Note. Controlled by gender, socio-economic status, region, age, living alone and well-being in Tn

When frailty appears or is worsening, a continuity in activity is:

A) related with no change in well-being, in contrast with a decline in activity which implies a decrease in well-being;

B) associated with no statistically significant difference in well-being when compared to a stable robustness or a stable frailty, whereas the difference is highly significant in case of a decline in activity.

CONCLUSION

The entering into frailty or the worsening in frailty has a deleterious effect on well-being when it is accompanied with a decline in practices; but such a consequence is softened (if not eliminated) when there is a continuity in activity level.

The preservation of the oldest old well-being affected by the frailty process depends on the resources and the capability they have to cope with its impact.

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