



















15	16
Types of missing data	Repeated measurements with monotone dropout (attrition), Figure 1b
$\mathbf{Y}_{com} = (\mathbf{Y}_{obs}, \mathbf{Y}_{mis})$	 MCAR: Y_j is missing with probability unrelated to any variables.
MAR: The distribution of missingness does not depend on $\boldsymbol{Y}_{\text{mis}}$	 MAR: It may be related only to Y₁,, Y_{j-1} (only seen responses). <i>Noninformative</i> or <i>innorable</i> dropout
$P(R Y_{com}) = P(R Y_{obs})$	 MNAR: Related to Y₁,, Y_p (seen and unseen
MCAR: It does not depend on Yobs either:	responses). Informative dropout.
$P(R Y_{com}) = P(R)$	
Det skapende universitet	D NTNU Det skapende universitet
www.ntnu.no	www.ntnu.ne













		Not at all	A little	Quite a bit	Very
21	. Did you feel tense?	17	2	з	4
22	2. Did you worry?	1	2	з	4
23	. Did you feel irritable?	1	21	3	4
24	Did you feel depressed?	1	2√	3	4































	Completed the physical-performance evaluation					
	Yes		No			
Dead by 12/31/1991	No	Yes	No	Yes		
n	1527	264	416	134		
Age, median (IQR)*	77 (74-81)	78 (74-84)	78 (74-83)	85 (78-90)		
Male, %	32.0	45.1	30.3	47.0		
Physical performance median (IQR)	8 (5-10)	6 (2-8)	-	-		
Cen assessed real interial (Cert)	2(2-3)	3 (2-3)	2 (2-3)	3 (2-3)		
Epidemiologic Studies of the Elderly (see, for exam tate their health relative to others of their age as 1, performance. This was based on brief tests of bala scores indicting better function (Guralnik et al. [36 interquarile range.	pie, Gijnn et al. [35]). They excellent; 2, good; 3, fair; o noe, gait, strength, and end D.	ranged in age from 71 to 10 r 4, poor. Those who were a urance, and summarized in a	13 years at that time. Particip ble, also had objective evalu in overall score ranging from	ants were asked to ation of physical 0 to 12, with higher		

	Analytic method					
	Complete case	No physical performance	Multiple imputation	Indicator method		
(deaths)	1791 (264)	2341 (398)	2341 (398)	2341 (398)		
Age	0.033 (0.013)	0.088 (0.009)	0.057 (0.011)	0.068 (0.01)		
Male	0.92 (0.15)	0.82 (0.12)	1.00 (0.14)	0.92 (0.12)		
Self-assessed health	0.38 (0.095)	0.60 (0.073)	0.39 (0.087)	0.46 (0.076)		
Physical performance	-0.14 (0.023)	-	-0.15 (0.024)	-0.12(0.022)		
ntercept	-4.76 (1.17)	-10.41 (0.79)	-6.60 (1.04)	-7.42 (0.92)		
indicator of missing performance				-0.47 (0.13)		

Summary of linear-regression model predicting physical-performance score, and 5 draws of these regression parameters							
Variable		5 drawn values of parameters					
	Estimate (SE)	1	2	3	4	5	
Age (per year)	-0.22 (.013)	-0.23	-0.23	-0.23	-0.21	-0.22	
Male gender	1.18 (0.15)	1.21	1.08	1.29	1.25	1.22	
Self-assessed health	-1.38 (0.089)	-1.33	-1.43	-1.24	-1.43	-1.35	
Dead by 1991	-1.30 (0.20)	-1.12	-1.47	-1.37	-1.60	-1.05	
ntercept	27.2 (1.1)	27.6	27.7	27.5	26.3	27.2	
Overall Rº 0.30; Root M	ASE 2.88						
	102 2:00						



