Appendix 11

Fuller details of the analyses relating ETS exposure at home to education

APPENDIX 11

Years of Education between lifelong nonsmokers exposed or unexposed to ETS at home
Meta-Analysis of Differences, 01-SEP-06

BASIC DATA USED IN META-ANALYSES - YEARS OF EDUCATION

Study Title	Continent	DELTA IN YRS	WGT	WGTNS	WGTETS
Cardenas	US	-0.3160	213154.0	71892.0	141262.0
Curtin 1999	Europe	-0.1920	779.0	698.0	81.0
Enstrom	US	-0.3300	25942.0	7339.0	18603.0
Forastiere 2000	Europe	-0.6422	1933.0	724.0	1209.0
Hamling (HALS2)	Europe	-0.3200	1265.0	974.0	291.0
Hamling (HSE93)	Europe	-0.5150	3664.0	3007.0	657.0
Hamling (HULS)	Europe	-0.4600	948.0	643.0	305.0
Hamling (HALS)	Europe	-0.3950	2351.0	1673.0	678.0
Koo (Hong Kong)	Asia	-0.5000	530.0	419.0	111.0
Koo (USA)	US	-0.4000	144.0	60.0	84.0
Matanoski	US	-0.5032	3791.0	1380.0	2411.0
NHANES III	US	-1.1239	3155.0	2543.0	612.0
NHIS 2000	US	-0.9940	5038.0	4515.0	523.0

NOTES: DELTA IN YRS = DIFFERENCE IN YEARS OF EDUCATION ASSOCIATED WITH ETS EXPOSURE AT HOME
WGT TOTAL NUMBER OF FEMALES
WGTNS NUMBER OF FEMALES WITH NO ETS EXPOSURE
WGTETS NUMBER OF FEMALES WITH ETS EXPOSURE

FEMALES
NEVER SMOKERS OR NEVER AND LONG TERM EX SMOKERS
EXCLUDE THORNTON AND BUTLER THROUGHOUT AS INCLUDED IN HAMLING AND NHANES III

APPENDIX 11

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Meta-Analysis of Differences, 01-SEP-06

REGRESSION ESTIMATES, WEIGHTS AND OTHER RELEVANT DETAILS

Study Title	Country	DELTA in YRS	St.Err. DELTA	Z	WGT	RWGT	SMOKE
Cardenas	US	-0.3160	0.0112	-28.3266	213154.0	8035.5295	1
Curtin 1999	Switzerland	-0.1920	0.2858	-0.6717	779.0	12.2407	1
Enstrom	US	-0.3300	0.0336	-9.8316	25942.0	887.6024	1
Forastiere 2000	Italy	-0.6422	0.1144	-5.6123	1933.0	76.3722	1
Hamling (HALS2)	UK	-0.3200	0.1627	-1.9671	1265.0	37.7888	1
Hamling (HSE93)	UK	-0.5150	0.1049	-4.9111	3664.0	90.9380	1
Hamling (HULS)	Hungary	-0.4600	0.1693	-2.7171	948.0	34.8903	1
Hamling (HALS)	UK	-0.3950	0.1109	-3.5632	2351.0	81.3720	1
Koo (Hong Kong)	Hong Kong	-0.5000	0.2599	-1.9235	530.0	14.8001	1
Koo (USA)	US	-0.4000	0.4116	-0.9718	144.0	5.9030	1
Matanoski	US	-0.5032	0.0822	-6.1221	3791.0	148.0214	1
NHANES III	US	-1.1239	0.1096	-10.2513	3155.0	83.1956	1
NHIS 2000	US	-0.9940	0.1125	-8.8377	5038.0	79.0503	1

NOTES: DELTA IN YRS = DIFFERENCE IN YEARS OF EDUCATION ASSOCIATED WITH ETS EXPOSURE AT HOME
SE DELTA STANDARD ERROR OF DELTA
Z RATIO OF DELTA TO ITS STANDARD ERROR (APPROXIMATE NORMAL STATISTIC)
WGT TOTAL NUMBER OF FEMALES FOR FIXED EFFECT MODELS
RWGT INVERSE OF THE VARIANCE OF DELTA FOR RANDOM EFFECTS MODELS
SMOKE 1 = NEVER SMOKERS, 2 = NEVER OR LONG-TERM EX-SMOKERS

FEMALES
NEVER SMOKERS OR NEVER AND LONG TERM EX SMOKERS
EXCLUDE THORNTON AND BUTLER THROUGHOUT AS INCLUDED IN HAMLING AND NHANES III

APPENDIX 11

Years of Education between lifelong nonsmokers exposed or unexposed to ETS at home
Meta-Analysis of Differences, 01-SEP-06

FIXED- AND RANDOM-EFFECTS META-ANALYSES OF DATA FOR YEARS OF EDUCATION

ALL STUDIES

Difference in Years (DELTA YR)

	Deviance	(DF)	
Model 1	0.8636	(12)	
	Estimate	S.E.	P
Constant	-0.5147	0.0744	0.0000

WEIGHTED on DELTA Weights

	Deviance	(DF)	
Model 1	4638.5472	(12)	
	Estimate	S.E.	P
Constant	-0.3493	0.0384	0.0000

RANDOM EFFECTS MODEL
WEIGHTED on Random Weights

	Deviance	(DF)	
Model 1	17.4962	(12)	
	Estimate	S.E.	P
Constant	-0.5337	0.0634	0.0000

NORTH AMERICA

	Deviance	(DF)	
Model 1	0.6319	(5)	
	Estimate	S.E.	P
Constant	-0.6112	0.1451	0.0084

WEIGHTED on DELTA Weights

	Deviance	(DF)	
Model 1	4316.2944	(5)	
	Estimate	S.E.	P
Constant	-0.3441	0.0586	0.0020

RANDOM EFFECTS MODEL
WEIGHTED on Random Weights

	Deviance	(DF)	
Model 1	12.1868	(5)	
	Estimate	S.E.	P
Constant	-0.6083	0.0946	0.0014

EUROPE

	Deviance	(DF)	
Model 1	0.1226	(5)	
	Estimate	S.E.	P
Constant	-0.4207	0.0639	0.0012

FEMALES
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FIXED- AND RANDOM-EFFECTS META-ANALYSES OF DATA FOR YEARS OF EDUCATION

EUROPE

Difference in Years (DELTA YR)
WEIGHTED on DELTA Weights

	Deviance	(DF)	
Model 1	165.9103	(5)	
	Estimate	S.E.	P
Constant	-0.4614	0.0551	0.0004

RANDOM EFFECTS MODEL
WEIGHTED on Random Weights

	Deviance	(DF)	
Model 1	4.6974	(5)	
	Estimate	S.E.	P
Constant	-0.4752	0.0548	0.0003

NORTH AMERICA AND EUROPE

	Deviance	(DF)	
Model 1	0.8633	(11)	
	Estimate	S.E.	P
Constant	-0.5159	0.0809	0.0001

WEIGHTED on DELTA Weights

	Deviance	(DF)	
Model 1	4626.4801	(11)	
	Estimate	S.E.	P
Constant	-0.3490	0.0401	0.0000

RANDOM EFFECTS MODEL
WEIGHTED on Random Weights

	Deviance	(DF)	
Model 1	17.2829	(11)	
	Estimate	S.E.	P
Constant	-0.5351	0.0651	0.0000

ASIA

	Deviance	(DF)	
Model 1	0.0000	(0)	
	Estimate	S.E.	P
Constant	-0.5000		

WEIGHTED on DELTA Weights

	Deviance	(DF)	
Model 1	0.0000	(0)	
	Estimate	S.E.	P
Constant	-0.5000		

FEMALES
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FIXED- AND RANDOM-EFFECTS META-ANALYSES OF DATA FOR YEARS OF EDUCATION

ASIA
RANDOM EFFECTS MODEL

Difference in Years (DELTA YR)
WEIGHTED on Random Weights

	Deviance	(DF)	
Model 1	0.0000	(0)	
	Estimate	S.E.	P
Constant	-0.5000	0.2599	

FEMALES
NEVER SMOKERS OR NEVER AND LONG TERM EX SMOKERS
EXCLUDE THORNTON AND BUTLER THROUGHOUT AS INCLUDED IN HAMLING AND NHANES III