

6 April 2007 MSS 1

## Teaching Statistical Literacy

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[www.StatLit.org/pdf/2007SchieldMSSQL6Up.pdf](http://www.StatLit.org/pdf/2007SchieldMSSQL6Up.pdf)

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## Deaths "from" Secondhand Smoke

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**Fatal disease from secondhand smoke**

Lung disease 3,000  
 Heart disease 35,000

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## The New "Science": Study of Social Risk Factors

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TV violence is

- a contributing factor to increases in violent crime and antisocial behavior. .
- a "risk factor" that contributes to increasing a person's aggressiveness.

just as every cigarette increases the chance that someday the smoker will get lung cancer, so every exposure to violence increases the chances that someday a child will behave more violently than they otherwise would.

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## Statistical Literacy GST 200

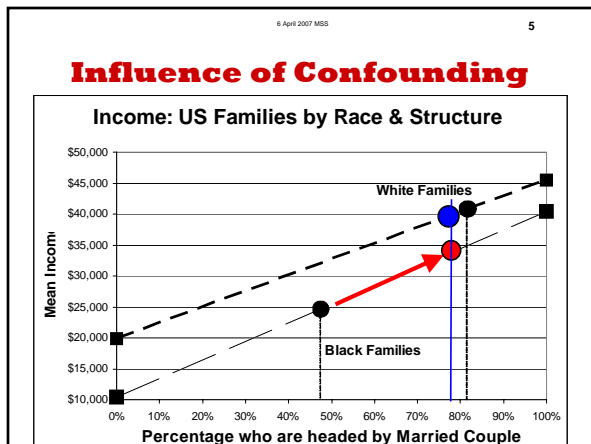
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Calculate number of "statistical events":

- "Deaths" due to obesity or underweight
- "Deaths" due to being male, single or black
- "Deaths" *attributed to* not going to college

Study how a *statistical association* (black-white income gap) is influenced by taking into account a confounder (family structure).

Study how *statistical significance* is influenced by what is taken into account in obs. studies.



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## Things to Read

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Lynn Steen: *Math & Democracy*  
 Joel Best: *Damned Lies & Statistics*  
 Milo Schield: *Statistical Literacy and Liberal Education at Augsburg College*  
[www.StatLit.org/pdf/2004SchieldAACU.pdf](http://www.StatLit.org/pdf/2004SchieldAACU.pdf)

Schield, Milo (2006). *Presenting Confounding Graphically using Standardization*, Fall 2006 STATS magazine.  
[www.StatLit.org/pdf/2006SchieldSTATS.pdf](http://www.StatLit.org/pdf/2006SchieldSTATS.pdf)