


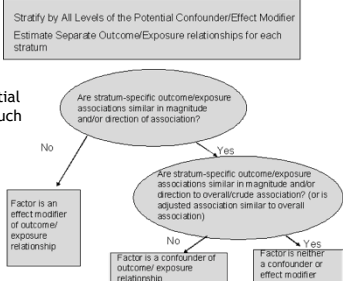
# Lecture 2c: Practice Problem Solutions: John McGready

  
**Lecture 2c: Practice Problem Solutions**  
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### Solutions

1. Explain the difference between confounding and statistical interaction. Can you come up with a flowchart approach to deciding between interaction, confounding or neither?

— Here is a potential candidate for such a flowchart:



```
graph TD; A[Stratify by All Levels of the Potential Confounder/Effect Modifier  
Estimate Separate Outcome/Exposure relationships for each stratum] --> B{Are stratum-specific outcome/exposure associations similar in magnitude and/or direction of association?}; B -- No --> C[Factor is an effect modifier of outcome/exposure relationship]; B -- Yes --> D{Are stratum-specific outcome/exposure associations similar in magnitude and/or direction to overall crude association? (or is adjusted association similar to overall association)}; D -- No --> E[Factor is a confounder of outcome/exposure relationship]; D -- Yes --> F[Factor is neither a confounder or effect modifier];
```

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### Practice Problems

2. Can you envision a research situation where there is no confounding, but there could be interaction?

- We will discuss this further in LiveTalk—but feel free to add your thoughts on this to a BBS topic

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