Report writing

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http://www.shannonburns.com/cartooncatalogcomputer.htm

- In a perfect world, reports would be clear and reproducible
- We'll give three strategies for helping manage report writing
  - Encourage checking the signs, magnitudes and units
  - Focus on interpretation and interpretability
  - Use reproducible research tools

- Signs - check to make sure the directions of the effects are as anticipated (are brain volumes decreasing with Alzheimer's disease?)
- Magnitudes - compare magnitude of effects with other known effects (volume loss is similar to a decade of normal aging)
- Units - make sure units are known, written out explicitly and included on all graph axes

- Compare effects to other known effects (volume loss is similar to a decade of normal aging)
- Encourage parsimony and hence interpretability - place a premium on simplicity (regression model achieved 95% of the prediction performance complex machine learning algorithm, so encourage reporting only the regression results)
- Use effect critiquing - be critical of significant effects and report counterarguments to potential criticisms (volume loss is due to body mass, as the effect did not change when body mass was included in a model)
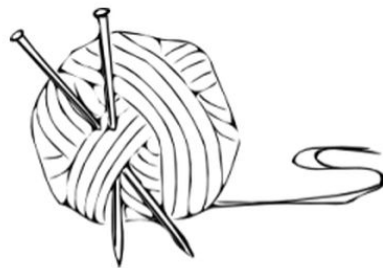
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