

COM 633, Content Analysis
Neuendorf, Fall 2009

Reliability Assessment Assignment
Worth: 10% of your course grade
Due: Tuesday, Nov. 17

For this assignment, use the simulation data set (relsim101509.xls) which will be emailed to you. This data set corresponds to the FRAMES Laugh Track Study Audience Behavioral Reaction Coding Scheme (attached). In the simulated data set, two coders have each coded (a) 100 units (cases) for a point-by-point analysis of seven different variables selected from the coding scheme, and (b) 10 units (cases) for a by-subject analysis of three different variables. The data for (a) are in Sheet 1 or the Excel file, and the data for (b) are in Sheet 2.

For this assignment, you should use PRAM 0.4.7, which has been emailed to you. Please note that Scott's pi is not working on this version of PRAM. (If you'd like to see the Scott's pi results, you may download PRAM 0.4.5 from the following site:
<http://www.geocities.com/skymegsoftware/pram.html>.)

Run the following five reliability statistics for all 10 variables: Percent agreement, Cohen's kappa, Krippendorff's alpha (this will require separate runs for variables measured at different levels of measurement), Pearson correlation, and Lin's concordance.

Remember that not all stats are "appropriate" for all variables, but running all stats on essentially all the variables is efficient and easy.

Complete in writing a relatively brief (5 pages or less, not including output, which I'd like you to hand in as an attachment) analysis of several things; also be prepared to discuss your analyses in class:

1. Comment on the "face" reliability of each of the 10 variables, following a visual inspection of the data set. Which variables seem to show acceptable reliability, and why do you say this?
2. Compare these assessments with the findings of the reliability coefficients. For nominal variables, look at percent agreement, Cohen's kappa, and Krippendorff's alpha. For interval/ratio variables, look at all five coefficients. What do the reliability coefficients tell you that your visual inspection did not?
3. What do you conclude about the future of these 10 variables? Are they usable? If not, what might be done?
4. Comment on reasonable improvements that you think could and should be made to PRAM 0.4.7.

:FR:AMES Laugh Track Study
Audience Behavioral Reaction Coding Scheme

10/15/09 version for COM 633

This coding scheme was developed to quantify audience members' reactions during a presentation of a situation comedy. In a true experiment, each subject viewed one of four episodes of the classic sitcom, *The Andy Griffith Show*, either with or without a laugh track. Each episode was tagged by the researchers for a series of "coding points"—i.e., moments where a laugh track was inserted, plus other moments where an audience laugh might logically occur.

Two types of coding of behavioral reactions are to be conducted for *each* subject in the study:

I. Point-by-point coding—for each "coding point" defined in the episode transcripts, a number of measures will be applied for each subject.

II. Overall subject coding—additional measures will be assessed for each subject overall, i.e., for their behavior across the entire episode

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I. Point-by-point coding

1. Mirth behavior

0 = No humor reaction

1 = Slight smile, with no teeth visible

2 = Large smile with teeth visible

3 = Laughter (some audible utterance)

4 = Large laugh (loud, appreciable audible utterance)

2. Negative reaction to content (e.g., groaning, shaking head in disgust, negative comments, etc.)

0 = No, no negative reaction to content

1 = Yes, at least some type of negative reaction to content

3. "Crying" behavior (i.e., eye wiping or rubbing, indicative of crying or attempting not to cry)

0 = No, no crying behavior

1 = Yes, crying behavior

4. Eyes closed

0 = No, eyes not closed

1 = Yes, eyes closed

5. Hand(s) on face in reaction to content

0 = No, no hand(s) on face in reaction to content

1 = Yes, hand(s) on face in reaction to content

6. Other physical reaction to content

0 = No, no other physical reaction to content

1 = Yes, other physical reaction to content

7. Turned away from screen—assess whether the subject’s head is turned away from the screen at that point

0 = No, head not turned away from screen

1 = Yes, head turned away from screen

8. Look at others in room—assess whether the subject is looking at one or more of the other subjects at that point

0 = No, not looking at other(s)

1 = Yes, looking at other(s)

9. Talking—determine whether verbal behavior is exhibited (i.e., use of words)

00 = No, not talking

11 = Talking to other(s) in the room, relevant to the episode content

12 = Talking to other(s) in the room, relevant to the experimental situation

13 = Talking to other(s) in the room, not relevant to episode or situation

21 = Talking to the screen, relevant to the episode content

22 = Talking to the screen, relevant to the experimental situation

23 = Talking to the screen, not relevant to episode or situation

31 = Talking to no one in particular, relevant to the episode content

32 = Talking to no one in particular, relevant to the experimental situation

33 = Talking to no one in particular, not relevant to episode or situation

10. Imitative behavior—e.g., repeating a line or sound

0 = No, no imitation

1 = Yes, imitation of line or sound by Barney

2 = Yes, imitation of line or sound by Andy

3 = Yes, imitation of line or sound by Opie

4 = Yes, imitation of line or sound by Aunt Bea

5 = Yes, imitation of line or sound by Gomer

6 = Yes, imitation of line or sound by other character

7 = Yes, imitation of sound not generated by a character

8 = Yes, imitation of music

11. Odd behavior (e.g., grabbing one’s own body, going to the door, reading a book, counting money)

0 = No, no odd behavior

1 = Yes, some odd behavior

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II. Overall subject coding

A. Code as “yes” if at any time during the episode, the subject exhibits the behavior

12. Accessing purse or backpack
0 = No
1 = Yes
13. Looking at cell phone
0 = No
1 = Yes
14. Hitting buttons on cell phone (e.g., checking or sending text messages, checking who might have called)
0 = No
1 = Yes
15. Drinking
0 = No
1 = Yes
16. Chewing gum
0 = No
1 = Yes
17. Eating
0 = No
1 = Yes
18. Feet on chair—own
0 = No
1 = Yes
19. Feet on chair—empty chair
0 = No
1 = Yes
20. Excessive fidgeting over an extended period of time (30+ sec.) or repeatedly (3+ times)
0 = No
1 = Yes
21. Extreme grooming (i.e., combing hair, rubbing skin, playing with hair/eyebrows) over an extended period of time (30+ sec.) or repeatedly (3+ times)
0 = No
1 = Yes
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B. Count the number of times the subject exhibits each of the following behaviors:

22. Yawning
____ times

23. Stretching
____ times

24. Coughing
____ times

