KNR 497: Article/abstract reviews – a rubric (used for your grades)

This is intended as a list of the kind of things you might consider in reviewing research. I see these as the possible range of comment types, and I think as you progress from A to D, E, F...the comments become increasingly valuable as critical analysis. In other words, level A is thought to be relatively easy, and the later levels increasingly difficult. For this class, the likelihood of your proposal and exams getting top grades increases as your work include more comments of the D, E, F, variety.

1. a. Sampling issues
   A. Recognition of the sampling strategy.
   B. Recognition of the population/time-setting to which the study is generalized/targeted (either implied or actual)
   C. Recognition of the relation of the sampling strategy to the implied or actual population/time-setting
   D. Correct observation of either match of mismatch between sampling strategy and intended population/time-setting
   E. Reasoning behind the observation given in (D) is also provided
   And here’s the bit that is most often missing:
   F. Further discussion of the likelihood of the mismatch, should there be one, being a problem. Here one needs to imagine circumstances in which the relationship under investigation might differ for another sample within the intended population (here population is defined not only in terms of people but also in terms of the settings and situations in which those people are tested).

b. and c. Measurement issues
   A. Recognition of what the study intends to measure
      i. State the relationship or relationships of interest
      ii. State the dependent measure(s) (effect variable or criterion variable)
      iii. State the independent measure(s) (cause variable or predictor variable)
   B. Recognition of how these measures are being taken within the study
      i. State how dependent measures are operationalized
      ii. State how independent measures are operationalized
   C. Comment on strength and/or weaknesses of the observed operationalizations
      i. These comments may include breadth of definition or measurement of the variables being considered and/or the means by which measurements were taken.
      ii. Note that this can be very similar to external validity, in the sense that a variable within the relationship might be a setting, or a property of a sample - which would mean that the construct partially defines the generalization of the paper.
   D. Further discussion of the likelihood of the measurement problem, should there be one, altering the relationship under investigation. Here plausible differences to the relationship must be considered given the nature of the measurement problem.

d. Internal Validity - design issues
   A. Recognition of the study’s design.
   B. Recognition of whether the study’s design permits a conclusion that the relationship under investigation is causal.
   C. Recognition of whether the article correctly identifies these limitations.
   D. Where limitations to causality are observed, further discussion of plausible alternative explanations for the relationship being found. Here you should ideally provide an alternative explanation, and then comment on whether the study is able to distinguish between the two explanations for the observed relationship. If you can’t provide an alternative, simply noting the limitation and the reason for it is a good start.

e. Measurement issues II - conclusion validity - beyond scope of KNR 497, but should be considered anyway...
   A. Are the measures reliable and valid?
   B. Is the sample large enough to validate the analysis strategy used?
   C. Is the relationship really there? Likelihood of type I and type II errors, statistical power and so on
D. If the relationship is really there (i.e. reliable), then is it practically significant? [effect size]

E. The end