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***Social Science
Research Methods***

Dr. Peter R. Gillett

Associate Professor

**Department of Accounting & Information Systems
Rutgers Business School – Newark & New Brunswick**

Overview

- Statistical Methods Revisited – CCC
- A Critique and Defense – Dugoni & Ilgen
- A Critique and Defense – Non-Audit Fees

Statistical Methods Revisited – CCC

- Catholicism Causes Corruption?
 - ★ See SPSS listing and output

A Critique and Defense

- “Realistic Job Previews and the Adjustment of New Employees”
Bernard L. Dugoni & Daniel R. Ilgen
Academy of Management Journal
Vol 24, No 3, 579-591 (1981)

A Critique and Defense

■ Critique

- ★ Three alternative processes of micromediation – the second ambiguously stated (diminished disturbance or prerehearsed methods?) and the third without provenance
- ★ External validity: are baggers and checkers representative of all permanent part-time employees, all workers in mid-western retail food chains, all workers? Does this matter since the authors reach no generalizable conclusions?
- ★ Treatment contamination is a threat to internal validity
- ★ History or maturation threats between 0 and 2 and between 2 and 6 months?

A Critique and Defense

■ Critique

- ★ No examination or control of potential confounding effects of racial, ethnic, socioeconomic characteristics of applicants
- ★ No statistics to support claim that attrition unrelated to RJP manipulation
- ★ No investigation of potential demoralizing effects of layoffs and fires – could affect internal validity
- ★ After attrition, sample sizes not large; we are not told how attrition impacts groups differentially (statistical conclusion validity?) – only 20 examples of voluntary turnover in the end
- ★ Randomization long before job offers made – better after acceptance – only four candidates did not accept – which group were they in?

A Critique and Defense

■ Critique

- ★ Perhaps RJPs deter candidates most likely to leave, prior to job acceptance (not considered)
- ★ No results of pre-treatment measures of comparability between treatment and control groups to assess the effectiveness of randomization
- ★ Only two raters (the authors?) compiled the five areas and developed the items and subscales – content validity? No validation with the original group of workers from whom they were derived
- ★ Few details of questionnaires used, so we cannot assess face validity or form our own views of construct validity; no convergent or discriminant validity cited

A Critique and Defense

■ Critique

- ★ We are not told how many items per category so it is hard to assess implications for reliability; since total of 35 items probably included 'fillers', probably less than 7 items per subscale
- ★ No item-correlations or item-total correlations to facilitate assessment of the extent to which items are measuring the same dimension
- ★ Internal consistencies (coefficient alphas?) 0.37 – 0.79, mean 0.54 – not impressive in itself – also, we do not know which subscale has low reliability
- ★ No coefficient alphas for coping measures – and this is a self-report measure, prone to unreliability

A Critique and Defense

■ Critique

- ★ We are not told how many people eliminated from coping analysis because they had not encountered the relevant events
- ★ MANOVA used, but only univariate results cited??? Averages for perceptions significantly different even though no individual component was
- ★ Difference in voluntary rates only marginally significant – and only 20 voluntary quits – so view with some suspicion
- ★ Correlations in table 2 all weak and predictive validity is questionable at best – implications of semi-partial correlations for refutation of hypothesis low – authors claim this is their strongest result
- ★ Not clear that Table 2 support the claims made

A Critique and Defense

■ Critique

- ★ Meanings of “Facet” and “Overall” columns not given
- ★ Data not really equal to the burden of demonstration demanded of it
- ★ No correction for attenuation
- ★ Explanation of control group handling adverse situations better is plausible – but no supporting data or ancillary ANOVA cited
- ★ Conclusions weak
- ★ No suggestions for future research to shed further light on issues

A Critique and Defense

■ Defense

- ★ Worthwhile research question
- ★ Arguments given for why attrition unrelated to RJP manipulation and not confounded
- ★ 130 workers used – enhances content validity
- ★ Social desirability effects reduced by embedding issues in larger instrument – apparently(?) still not too long
- ★ Coefficient alphas averaging 0.63 acceptable, as are alpha of 0.77 for overall job satisfaction and 0.81 for openness and honesty – it is hard to assess 0.79 for satisfaction without information regarding reliability of the MSQ
- ★ Authors recognize limitations of study

A Critique and Defense

- See Handout

A Critique and Defense

- “The Relation Between Auditors’ Fees for Non-Audit Services and Earnings Quality”
Frankel, Johnson & Nelson (FJN)
- “Do Non-Audit Services Compromise Auditor Independence? Further Evidence”
Ashbaugh, LaFond, Mayhew (ALM)

A Critique and Defense

- “We use the fee disclosures to construct two measures of non-audit services” (FJN)
 - ★ *What is the construct being measured?
What is its constitutive definition?*
- “The first measure is the ratio of non-audit fees to total fees” (FJN)
 - ★ *In what way could this be a measure of ‘non-audit services’*
 - ★ *Is fee-ratio perhaps the construct?*

A Critique and Defense

- “Results . . . indicate a significant positive association between the purchase of non-audit fees and earnings management” (FJN)
 - ★ Do they test an association – a correlation, or a causal relation? And what had they hypothesized?
 - ◆ HI: The provision of non-audit services to audit clients is not associated with earnings management
 - ➔ Since they state the null form, we can’t see whether their alternative is directional (in the sense of a one- or two-sided test)
 - ◆ Their test is a logistic regression of $\text{Prob}(\text{Benchmark}) = F(\dots + b_1\text{FEERATIO} + \dots)$
 - ➔ This IS directional in the casual sense

A Critique and Defense

- “Results also indicate . . . FEERATIO . . . significantly higher for firms with high absolute discretionary accruals” (FJN)
 - ★ Isn't this the converse of what we are interested in?
 - ★ Isn't it also the converse of what they actually tested?
- Of course, FJN predates implementation of Sarbanes-Oxley
- This has now become a topic of substantial interest: many non-audit fees are now forbidden, although the evidence that they are a real (as opposed to a perceived) problem is inconclusive

A Critique and Defense

- There is no formal explication of the theoretical model or constructs being investigated
- While this may not invalidate the test actually carried out, it does impair our ability to interpret the results
- What roles are played by independence, auditor compromise, etc.?
- Are we investigating whether adverse effects are produced when auditors defend non-audit fees that are a high *proportion* of their fees from a particular client, or that are high in *value*

A Critique and Defense

- Note the ways that the sample is progressively reduced (to maintain external validity)
- “FEERATIO . . . has been used as a proxy for auditor independence in prior research” (FJN)
 - ★ What exactly is a proxy, and how is it different from a measure?
 - ◆ A variable that acts as a substitute for an unobserved/unobservable variable
 - ◆ Presumably – but unknowably – highly correlated with it?
 - ◆ Sign and significance of proxy are useful – but coefficient itself is not reliable

A Critique and Defense

- “We use percentile ranks . . . to mitigate error” (FJN)
 - ★ *Ranks are more robust*
- A whole slew of additional variables are added to the tests without clear theoretical motivation
 - ★ *What are the dangers in this???*
- Dependent variables are also problematic, seeming to *begin* with measurement rather than constitutive definition
- The cross-sectional modified Jones model used for discretionary earnings is standard in this domain

A Critique and Defense

- ALM argue that total fee is a better measure of economic independence than fee ratio as used by FJN
- They also propose different measures of discretionary accruals
- Once again, there is no formal articulation of the model or the constructs
- While they argue they are using a different measure (total fees instead of fee ratio) it appears that they may be using a different construct

A Critique and Defense

- They argue that measure better captures economic dependence than FJN's, which is based on the SEC's view
 - ★ *So are they testing a different theory?*
- ALM 'replicate' FJN's model (insofar as we can tell what that was!)
 - ★ *But actually the replication is different in three ways!*
 - ★ *Still, they find similar results*

A Critique and Defense

- They test a model with their ‘improved’ measure of non-audit services and improved measures of discretionary accruals
 - ★ Unlike FJN they have no significant findings
 - ★ However, this is hard to interpret
 - ◆ It would have been more helpful to compare the effect of their measure of non-audit fees on the *same* measures of discretionary accruals!