



Peer Group Stability in Community College Accountability

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Session Objectives

- Quantify the level of instability in peer group identification that an accountability system has implemented since 2007
- Explore the hypothesis that only some peer group results have high instability. (Variation by institution and by performance indicator)
- Help improve the state's accountability reporting system for community colleges

Preface

- Partly based on work of my unit (Catharine Liddicoat, Alice van Ommeren, LeAnn Fong-Batkin*)

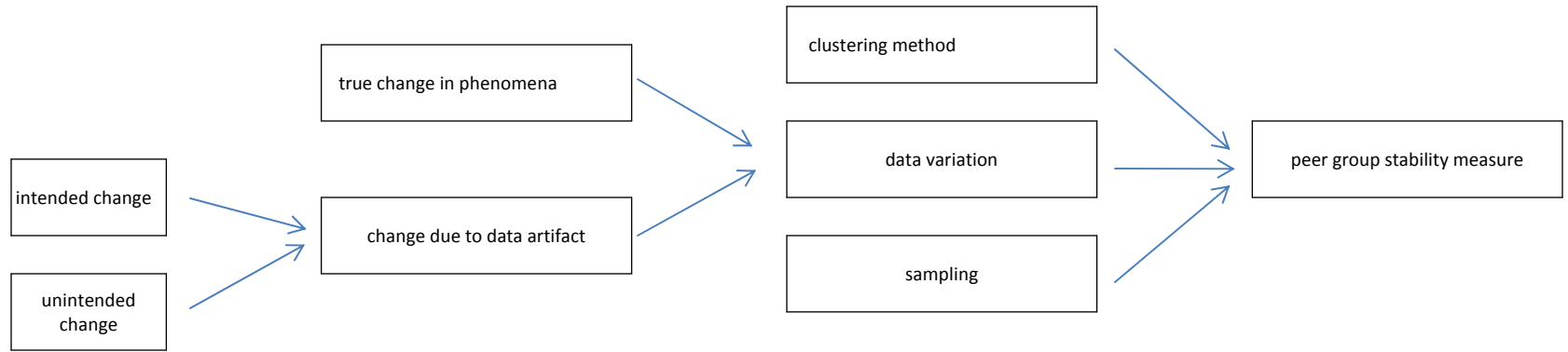
*former unit staff

Some History

- Accountability Reporting for the Community Colleges (ARCC)
- Selected performance indicators
- Board interaction as a requirement
- Peer group performance as part of the accountability toolkit
- Peer groups for analysis & research

Stability of Peer Groups

- An administrative issue
- An empirical/analytical issue



Factors in Peer Group Stability

Measuring Peer Group Stability

- Cluster Sensitivity Index or CSI (see Hom, in press)
- Across three consecutive peer group definitions (2007-2009), does a college have much variation in its defined peers for a given performance indicator?

CSI in Concept

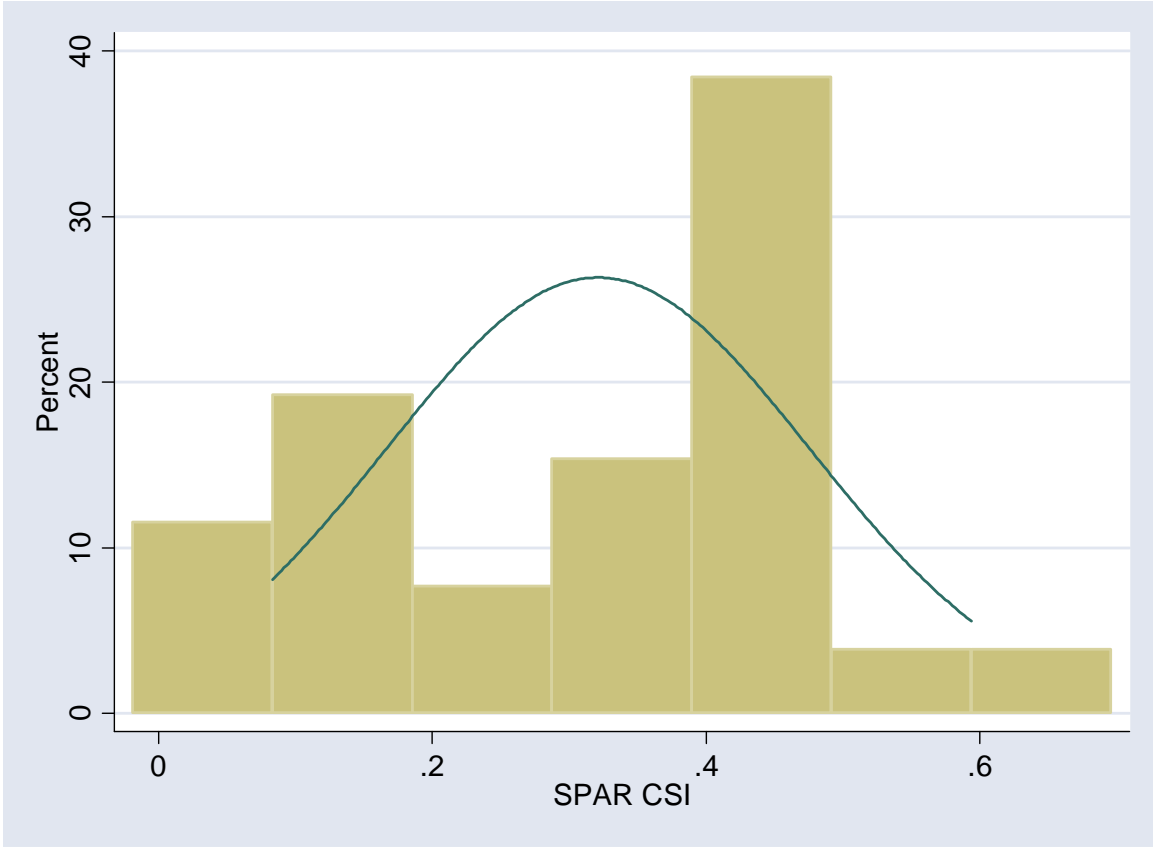
- Compared to the smallest peer group definition, how many “additional” peers do the other definitions add out of the pool of possible peers?
- With the CSI, 0 is excellent (absolute stability) and 1 is very poor (absolute instability).

Data for this Analysis

- Random sample of 26 colleges
- Peer groupings for two performance indicators (SPAR and Voc Ed Completion Rate)
- Peer group memberships across three definitions (2007, 2008, and 2009)

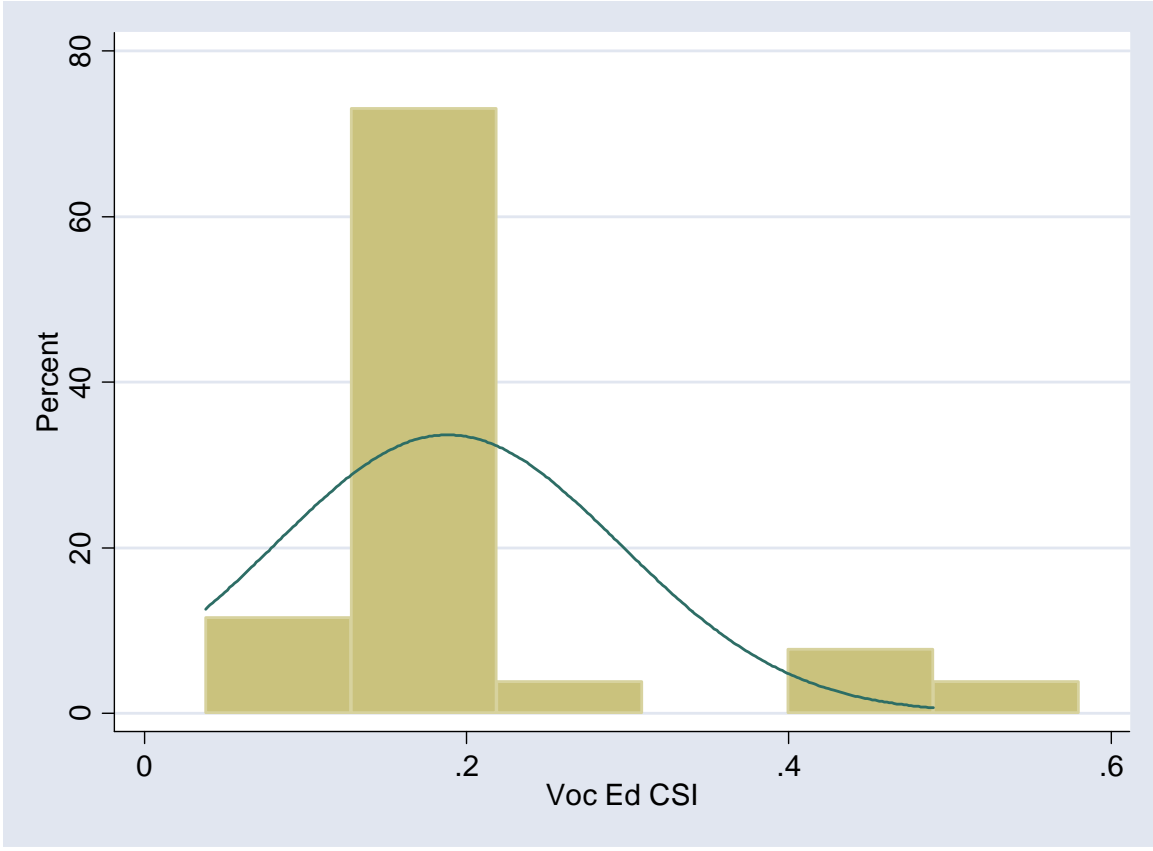
SPAR Results

- Mean of 0.321
- 95% confidence interval of 0.259 to 0.384
- Standard error of 0.030



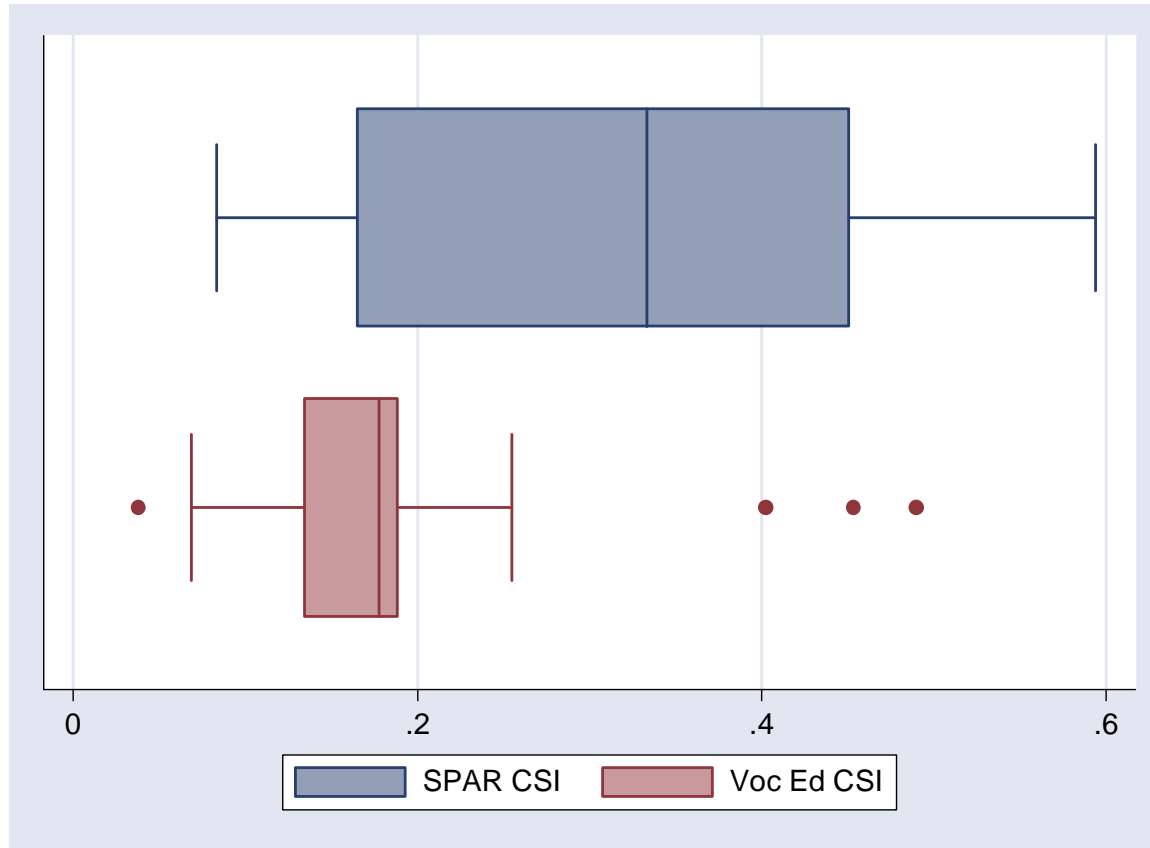
Voc Ed Result

- Mean of 0.188
- 95% confidence interval of 0.145 to 0.231
- Standard error of 0.021

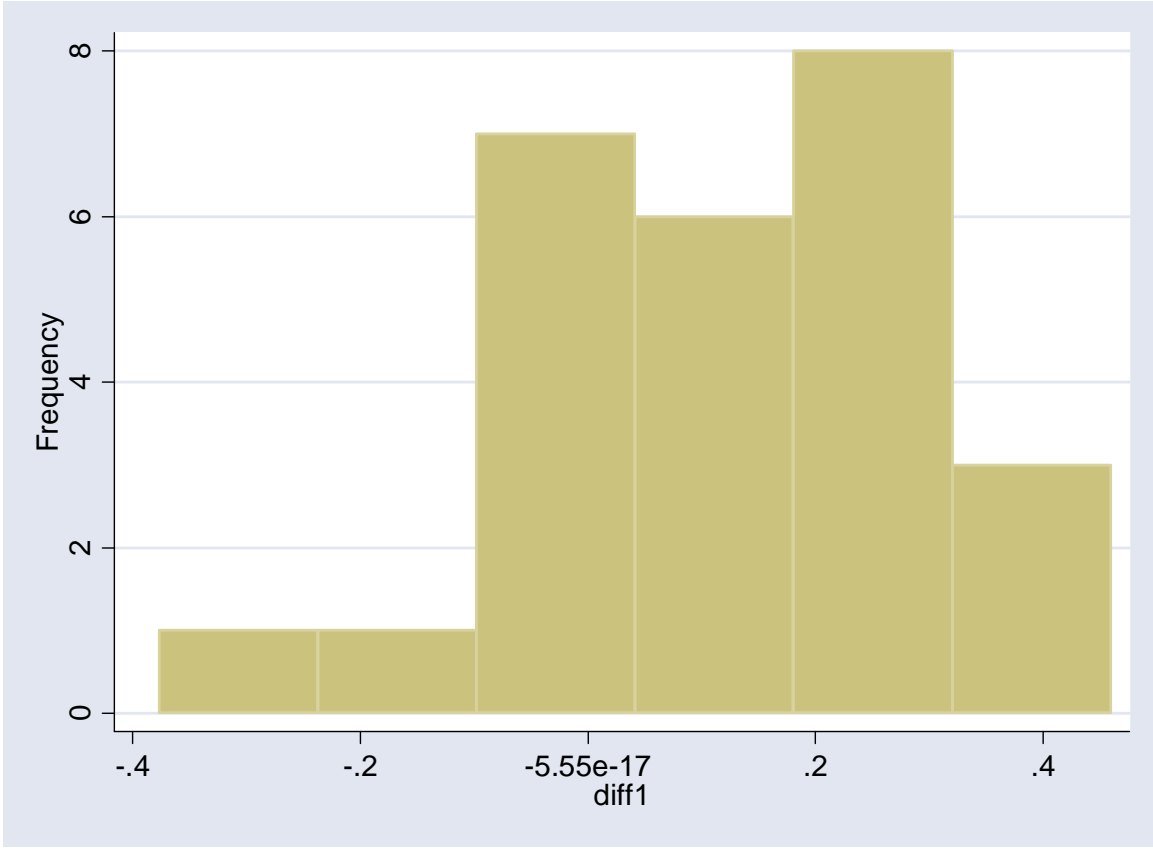


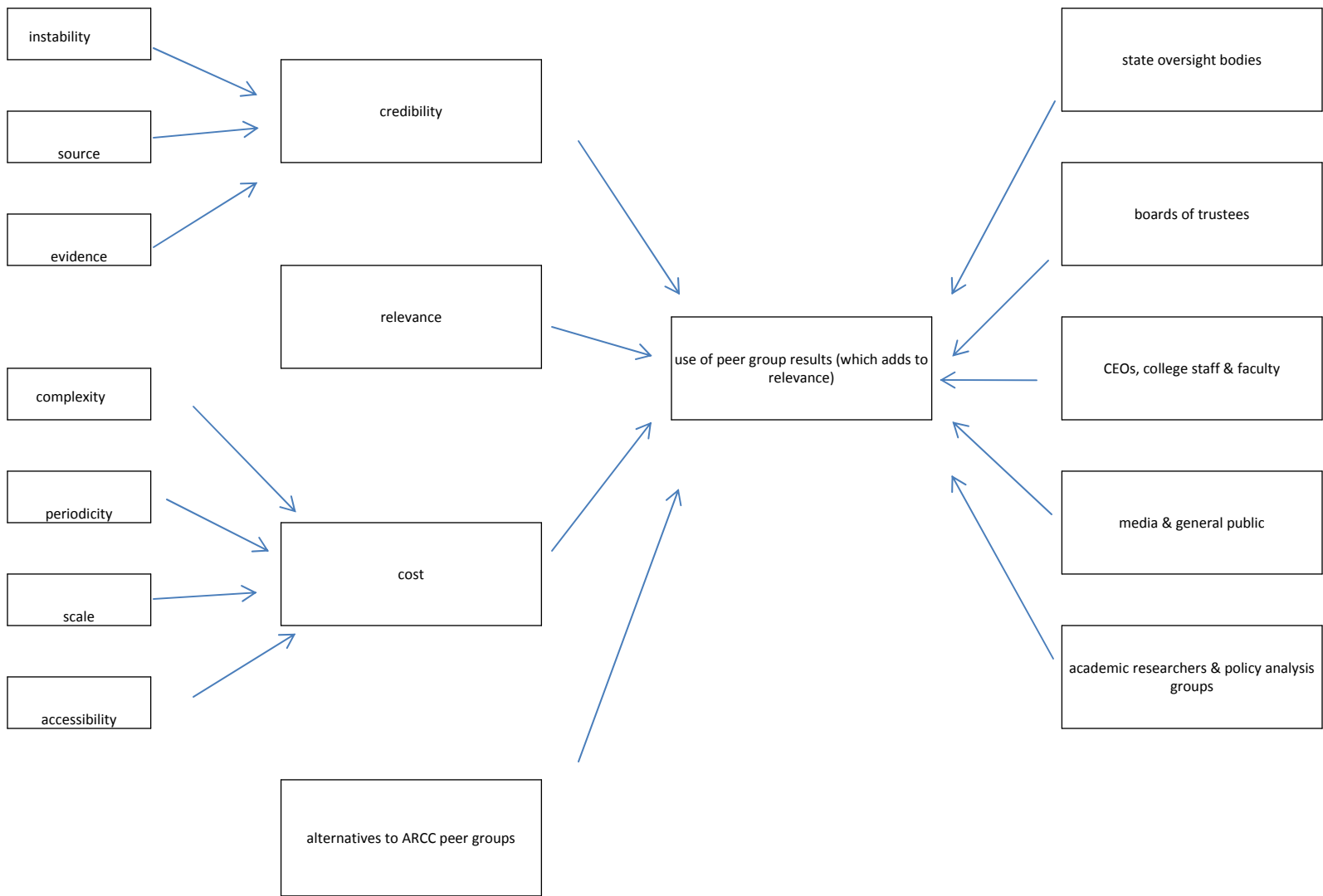
Comparing the Two CSI's

- Not associated (n.s. results for Spearman and Kendall correlations).
- Mean difference is 0.133 (CI of 0.062 to 0.204)
- T-test of difference=0 rejected at the .05 level.



Comparison of SPAR CSI to the Voc Ed CSI





Small Change Options

- Continue annual peer group process as is, encouraging caveats in ARCC self-assessment
- Redefine peer groups only every 3rd or 4th year

Big Change Options

- Allow special definitions of peer groups or new methods for between-college comparison
- Drop peer grouping from ARCC

Conclusion

- We calculated CSI's on only 2 of the 7 indicators that have peer grouping in ARCC.
- We assume data stability in the future.
- If instability persists, then we may propose flexibility or customization in between-college comparisons (upgrading accountability tools).