

San Diego

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Hilton San Diego Bayfront

Using Foil Tasks to Identify and Screen Careless Job Analysis Survey Respondents

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Job Analysis Survey Data Screening

- Should we screen for careless responses?
 - Other survey contexts
 - Self-screening in credentialing
- If so, how?
 - Intrusive methods (foil tasks)
 - Non-intrusive methods
- Does screening have an impact on results?



Intrusive Methods - Foil Tasks

- Bogus tasks
 - Clearly outside scope of practice, but not absurd
 - If endorsed, possible indication of carelessness
 - Written by the SMEs on the job analysis panels
 - Expected response is “seldom or never” (frequency) and “no risk of a negative result” (criticality)
 - “Negotiate contracts with insurance payers.”
- Screening tasks
 - “Demonstrate careful reading of this task by selecting ‘always’ for the frequency rating and ‘no risk of a negative result’ for the criticality rating.”

Non-Intrusive Methods

- Response time
 - Start to end survey time recorded by the survey delivery engine
 - Flag the fastest 5% of respondents
- Response variability
 - Flag responses with no variability across frequency or criticality scales (excluding foil tasks)
- Person misfit
 - Flag Rasch outfit mean square > 1.4 for frequency or criticality scales (excluding foil tasks)

AHIMA Job Analysis Surveys

- Certified Coding Specialist (CCS)
 - 2,086 complete responses, 7.4% response rate, 20 job tasks
- Certified Coding Specialist-Physician based (CCS-P)
 - 462 complete responses, 9.7% response rate, 24 job tasks
- Registered Health Information Technician (RHIT)
 - 2,327 complete responses, 7.5% response rate, 21 job tasks
- Incentive –\$250 gift card drawing entry for fully completing the survey

Face Validity

- Survey Disclaimer
 - “You may have noticed some tasks in this survey that did not appear appropriate to the role of a coding specialist. These were included for research purposes and are not intended for inclusion on the new CCS/CCS-P/RHIT exam.”

Face Validity

- Job Analysis Panel
 - Bogus task writing
 - Concerns expressed
- Other AHIMA stakeholders
 - Concerns expressed

Face Validity – Survey Comments

- CCS (2,086 total responses)
 - Bogus task – 22 mentions
 - Screening task – 19 mentions
- CCS-P (462 total responses)
 - Bogus task – 17 mentions
 - Screening task – 3 mentions
- RHIT (2,327 total responses)
 - Bogus task – 31 mentions
 - Screening task – 6 mentions

Face Validity – Survey Comments

- Bogus task typical comments
 - Generally emphasizing the task is not in scope
 - “It is not the role of an outpatient or CCS-P coder to negotiate contracts with insurance companies.”
- Screening task typical comments
 - Some positive (25%), mostly negative (75%)
 - “Love question 3, makes sure you are paying attention.”
 - “Don't understand 4.03 - is this a trick question??”

False Positive Careless Classification

- Bogus task
 - Misread, misunderstood, random error, different interpretation
- Screening task
 - Misread, misunderstood, random error
- Response time
 - Fast reader

False Positive Careless Classification

- Response variability
 - Genuinely believe all tasks are at the same level
- Person Misfit
 - Misfit due to a truly different perspective on the job tasks

Careless Classification Decisions

- Endorse the bogus task, really fast, and no response variability?
- Trip on the screening task, really fast, and misfit?
- No variability, misfit, and endorse bogus task?



Careless Classification Decisions

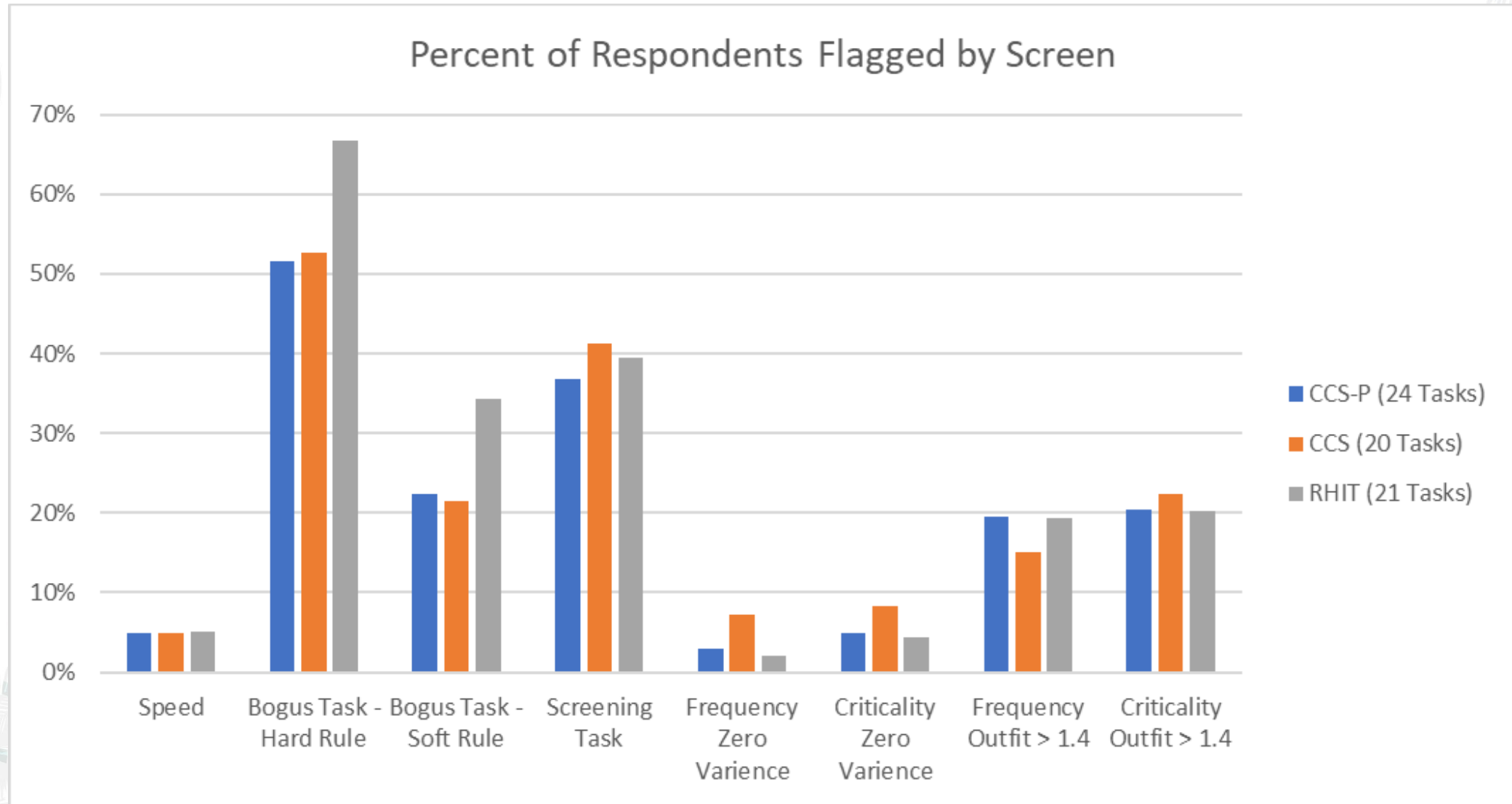
- Number of flags required?
 - Higher number – fewer false positives, more careless respondents included, larger survey sample
 - Lower number – more false positives, fewer careless respondents included, smaller survey sample
- 3 strikes!
- Experimental only. No respondents removed from actual job analysis studies.



Results

- Order effects
 - Randomly assigned both foil tasks early/late in the survey (RHIT)
 - Randomly assigned bogus/screening to early/late (CCS)
 - Negligible differences in failure rates

Results

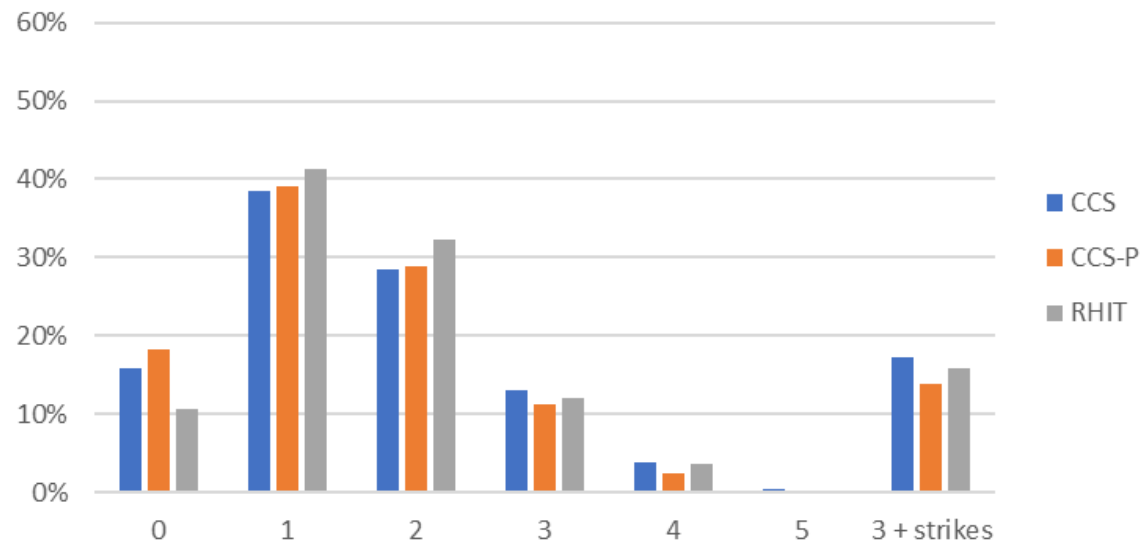


Results – Possible Strikes

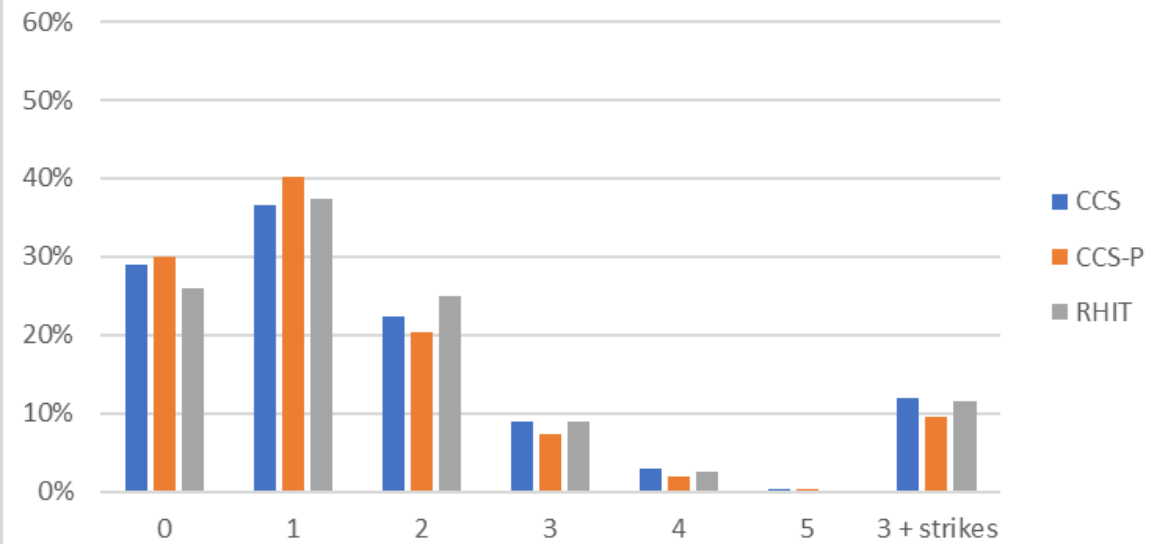
- Bogus task
 - Fail to select both “seldom or never” and “no risk” (hard rule)
 - Fail to select “seldom or never” (soft rule)
- Screening task
 - Fail to select “always” and “no risk”
- Response time
 - Fastest 5% of respondents
- Response variability
 - No variability across frequency or criticality scales (excluding foil tasks)
- Person misfit
 - Rasch outfit mean square > 1.4 for either scale (excluding foil tasks)

Results

Bogus Task - Hard Rule Strikes

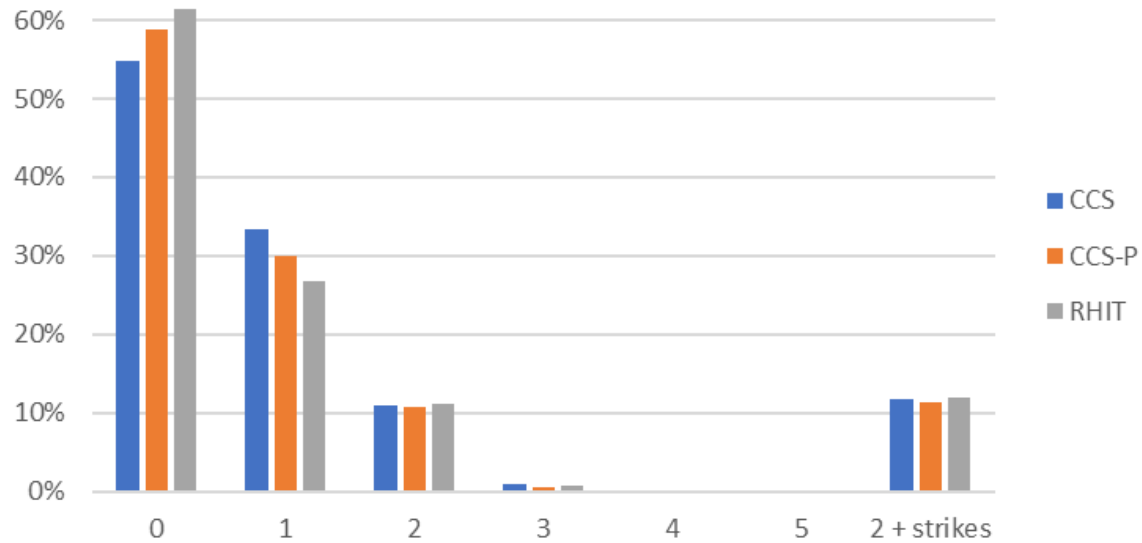


Bogus Task - Soft Rule Strikes

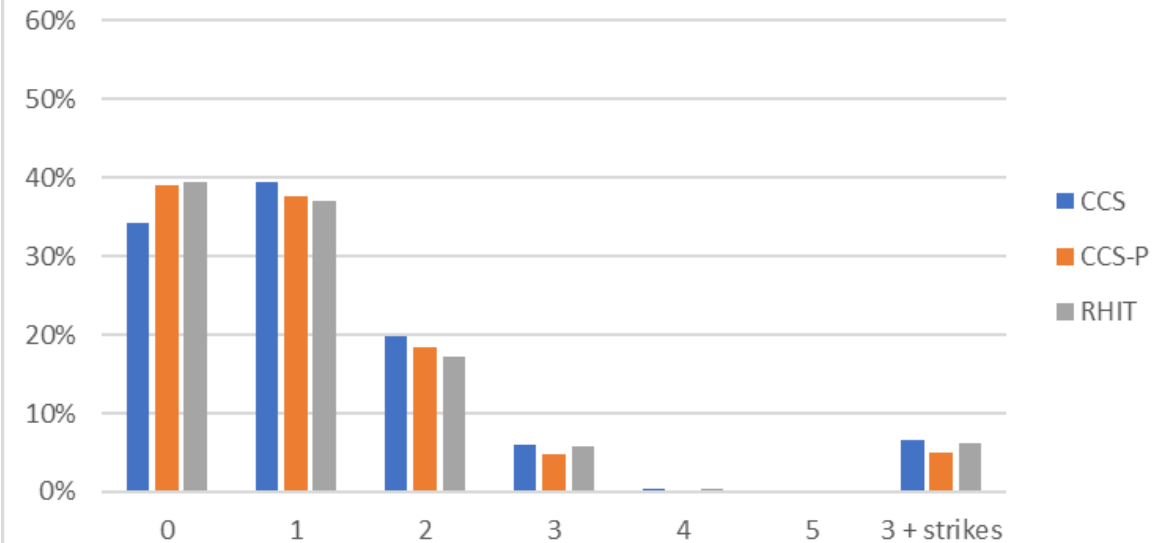


Results

Non-Intrusive Only Strikes



Bogus Task Removed Strikes



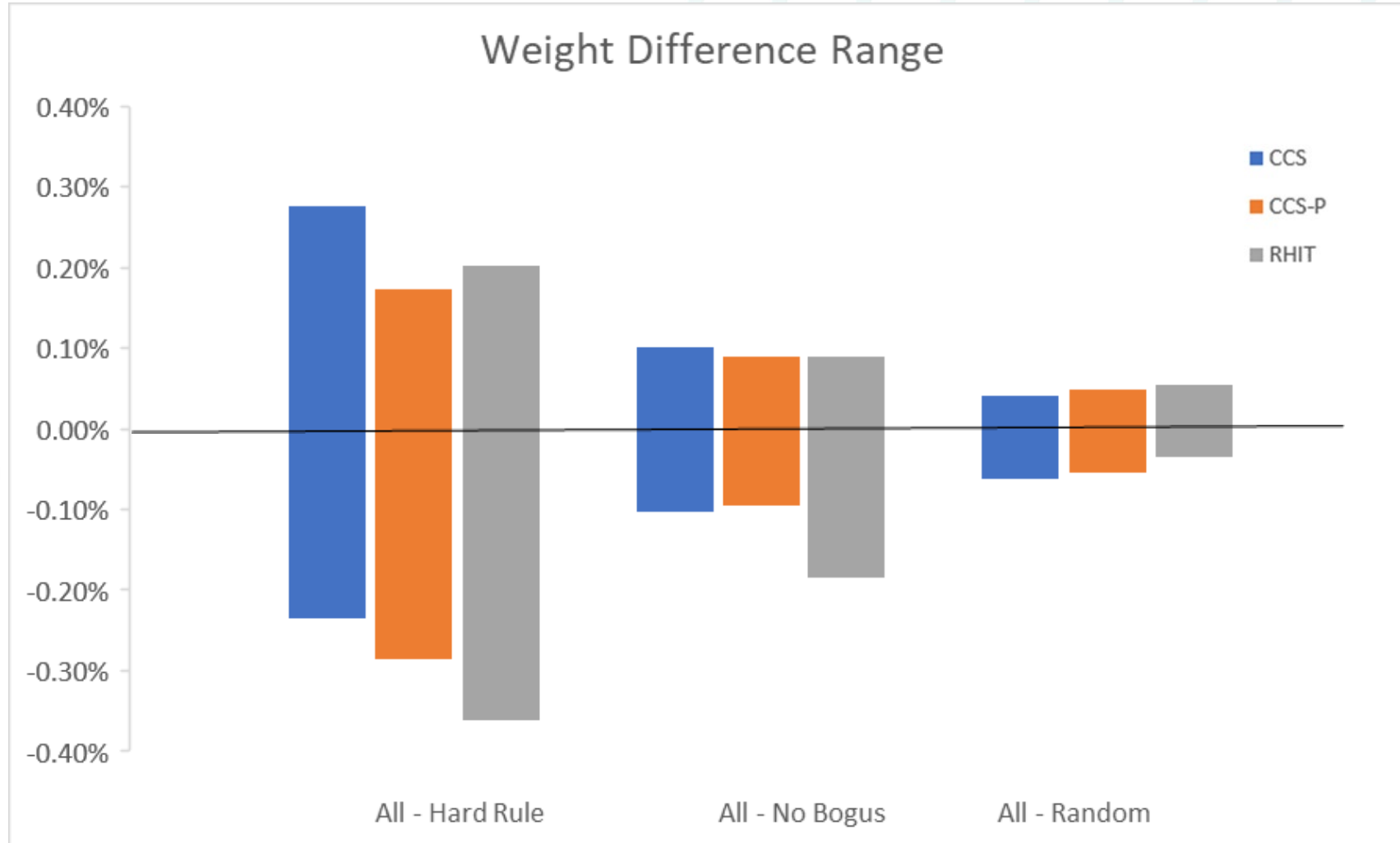
Results – Average Classification Agreement

	CCS	CCS-P	RHIT
Speed	74%	75%	71%
Bogus Task Hard Rule	49%	49%	37%
Bogus Task Soft Rule	71%	70%	61%
Screening Task	58%	60%	58%
Frequency No Variance	74%	76%	72%
Criticality No Variance	74%	75%	71%
Frequency Misfit	69%	68%	63%
Criticality Misfit	62%	65%	63%

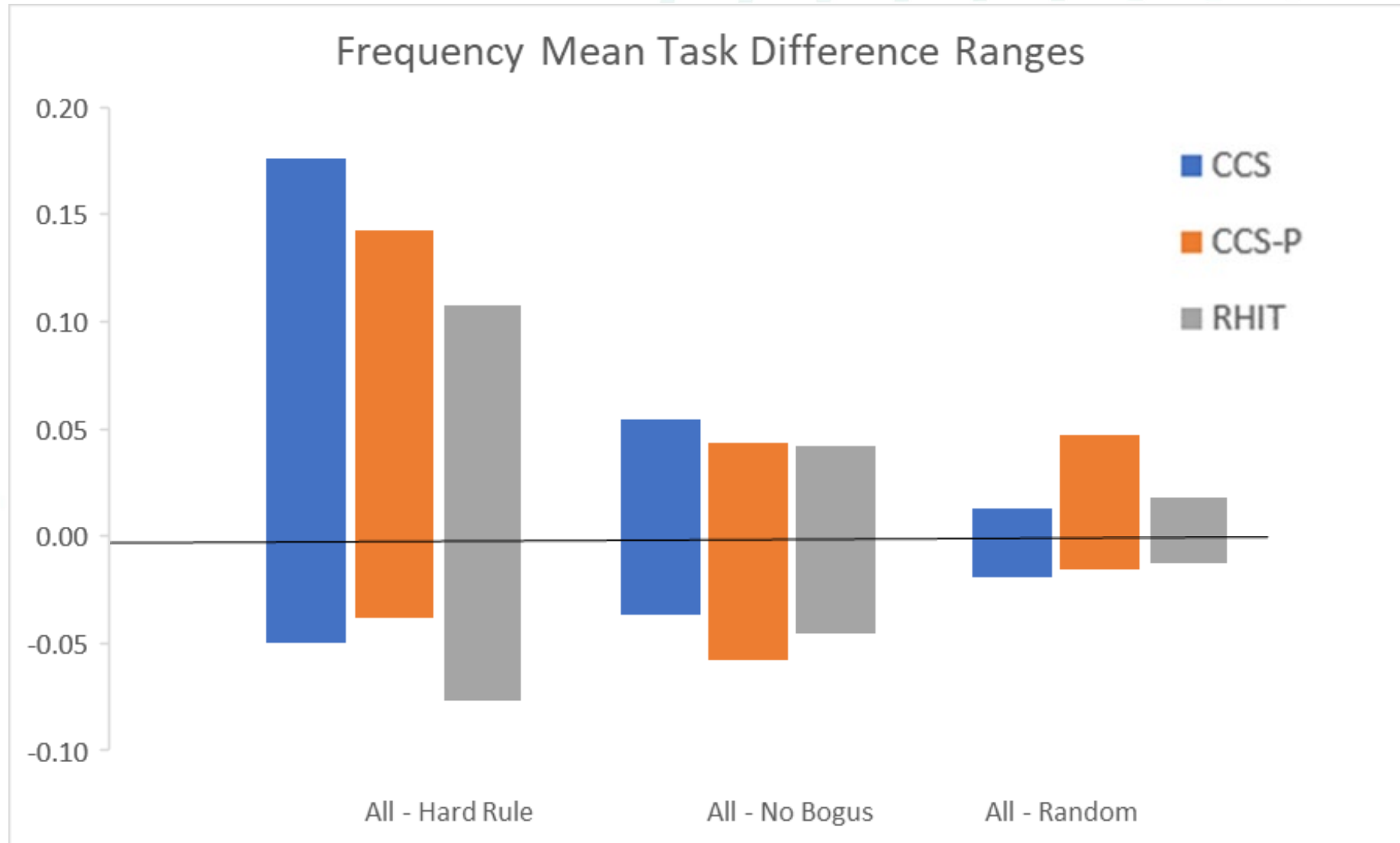
Impact – Task Weight and Mean Differences

- Task weight/mean all respondents – Task weight/mean careless removed
- Task 1.01 weight difference
 - 5.57% using all respondents
 - 5.71% removing “careless” respondents
 - - 0.14% difference
- Task 1.01 Criticality scale mean difference
 - 3.77 using all respondents
 - 3.78 removing “careless” respondents
 - - 0.01 difference
- Looked at range of differences across tasks
 - 3 strikes bogus task hard rule (maximum number removed)
 - 3 strikes no bogus task (minimum number removed)
 - Random sample equal to number removed under hard rule

Impact – Task Weight Differences



Impact – Task Mean Rating Differences



Further Investigation

- Task list length
- Better incentives
- Careless respondent demographics
- Disclaimer statement placement

Thoughts About Next Time

- Bogus tasks
- Screening tasks
- IRT person fit
- Response variability
- Response time