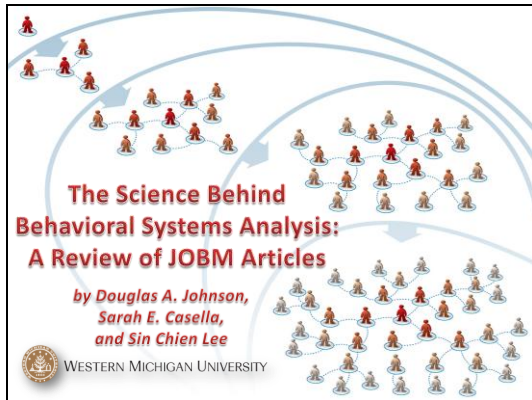
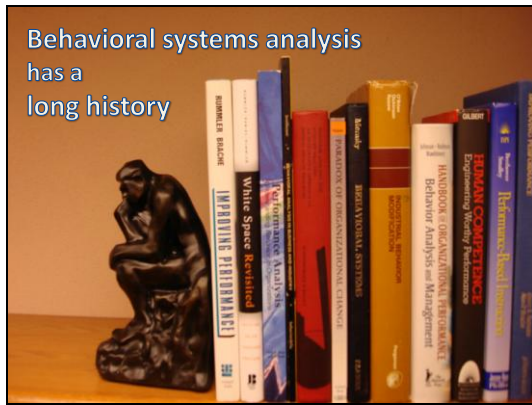


Slide 1



Slide 2



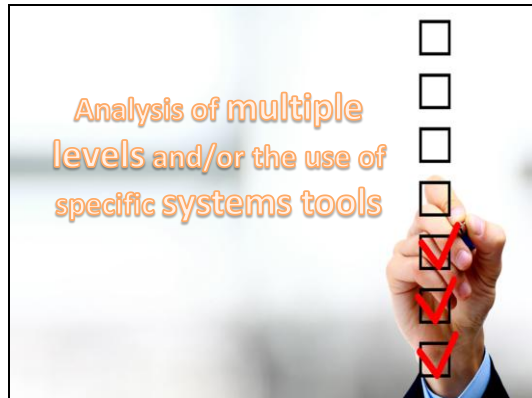
- BSA has a very long history (Brethower, 1972, 1982; Maley & Harshbarger, 1974; Morasky, 1982)
- Developed a very elaborate and impressive series of maps, charts, and other tools
- Whether improves selection of interventions and adds value to organizations remains open to scientific inquiry

Slide 3



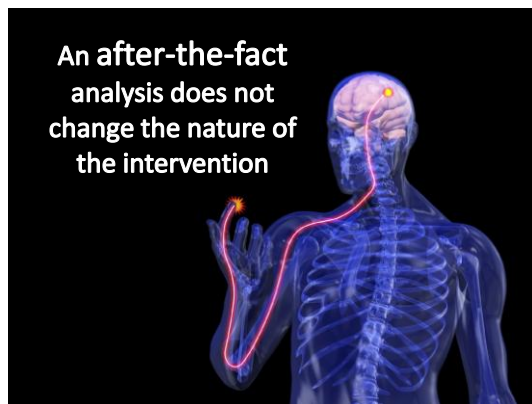
- Many definitions can be found
- Common themes include large scale perspectives with many interacting parts

Slide 4



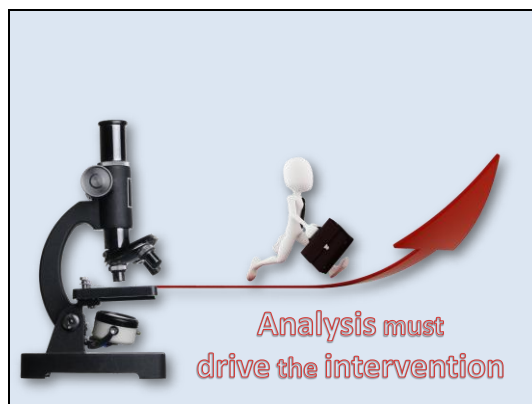
- Critical attributes when determining if BSA or other behavior change approach
- Implied that analysis is done prior to intervention

Slide 5



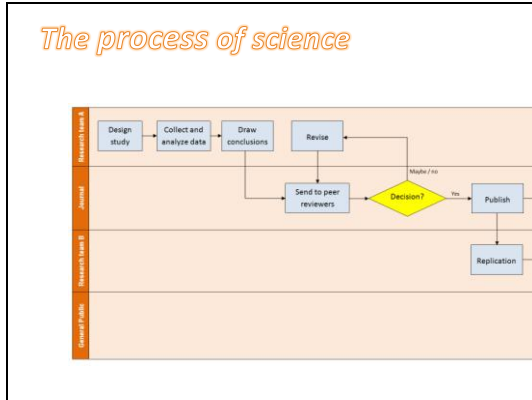
- For example
- Boy's behavior analyzed in terms of behavioral consequences and token economy selected as result
- Not a neurological intervention even though multiple neurons, blood vessels, and tissues involved
- Inappropriate to label the intervention as neurological

Slide 6



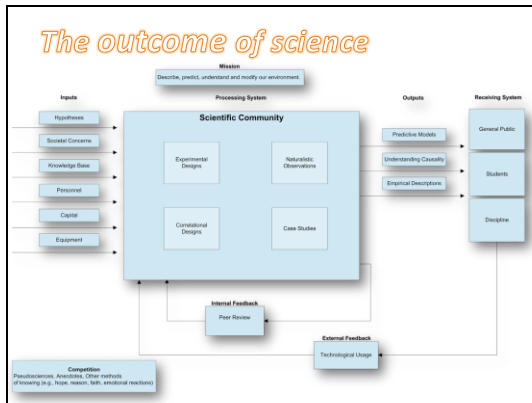
- Similarly
- behaviors of employees analyzed in terms at a single level and task clarification, goal setting, and feedback selected as result
- Not BSA-driven intervention
- inappropriate to consider the results of the intervention as supporting behavioral systems analysis, even if systems factors were considered and discussed following the completion of the intervention.
- An after-the-fact analysis that speculates about the role of systems variables does not retroactively cause an intervention to be informed by BSA

Slide 7



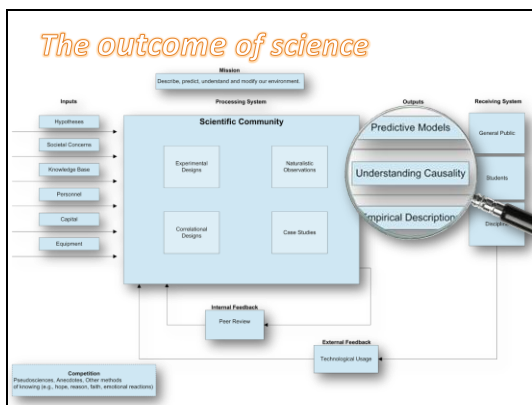
- Why do we bother with cumbersome process

Slide 8



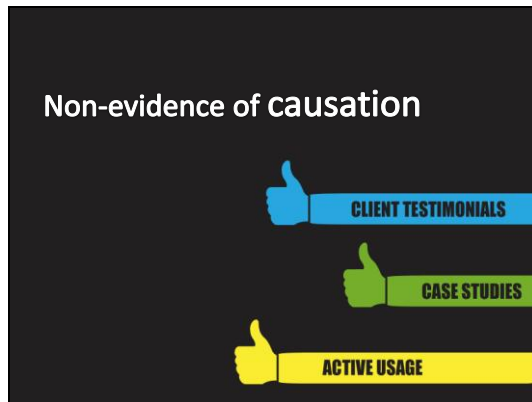
- It gives us pretty special outcomes
- It helps us separate out *demonstrations* of fact from *simple assertions* of fact

Slide 9



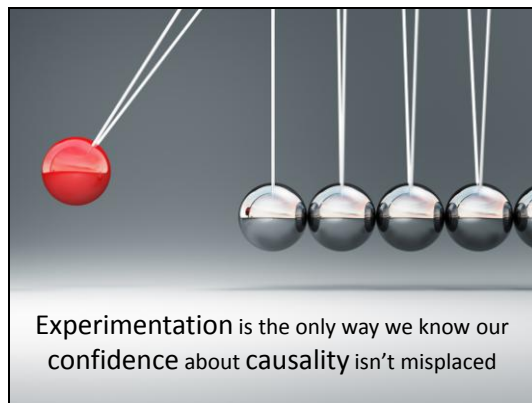
- Of particular interest is the ability to understand and establish causality

Slide 10



- Client testimonials, case studies, and active usage
- Important
- But do not prove causality

Slide 11



- Large amounts of time and money
- Where the field currently *is*
- Where we believe it *should* be

Slide 12



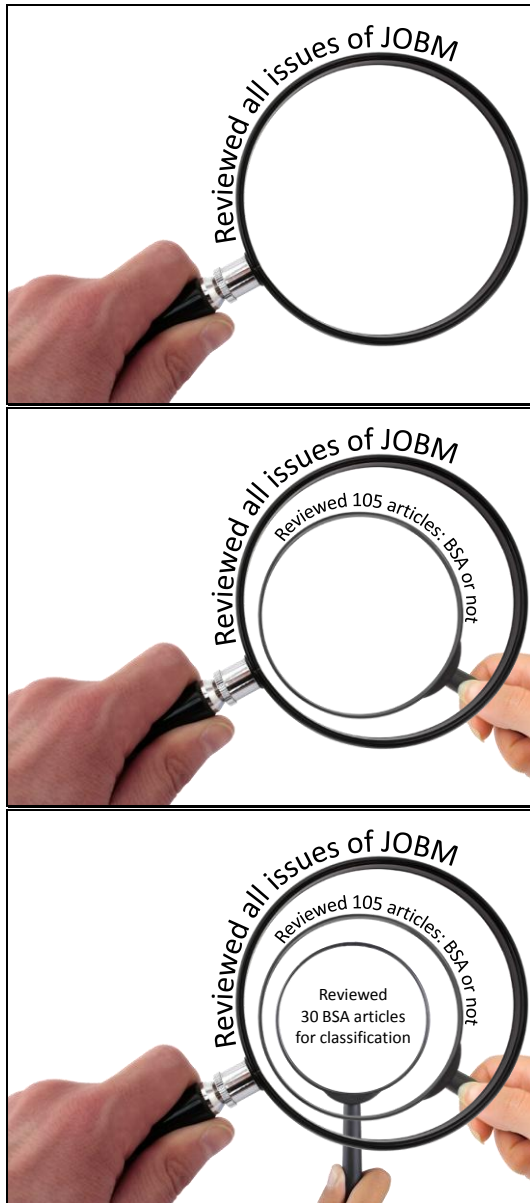
- Why JOB? Long history, BSA popular among the JOB audience
- All issues of *JOB* from 1977 thru 2010, volumes 1-30, were reviewed to identify articles that included content related specifically to BSA

Slide 13



•Search terms

Slides  
14-16



- First level: All issues
- Second level: 105 articles
- Third level: 30 articles

The Science Behind Behavioral Systems Analysis:  
A Review of the *Journal of Organizational Behavior Management*

DOUGLAS A. JOHNSON, Sarah E. Casella, and Sin Chien Lee

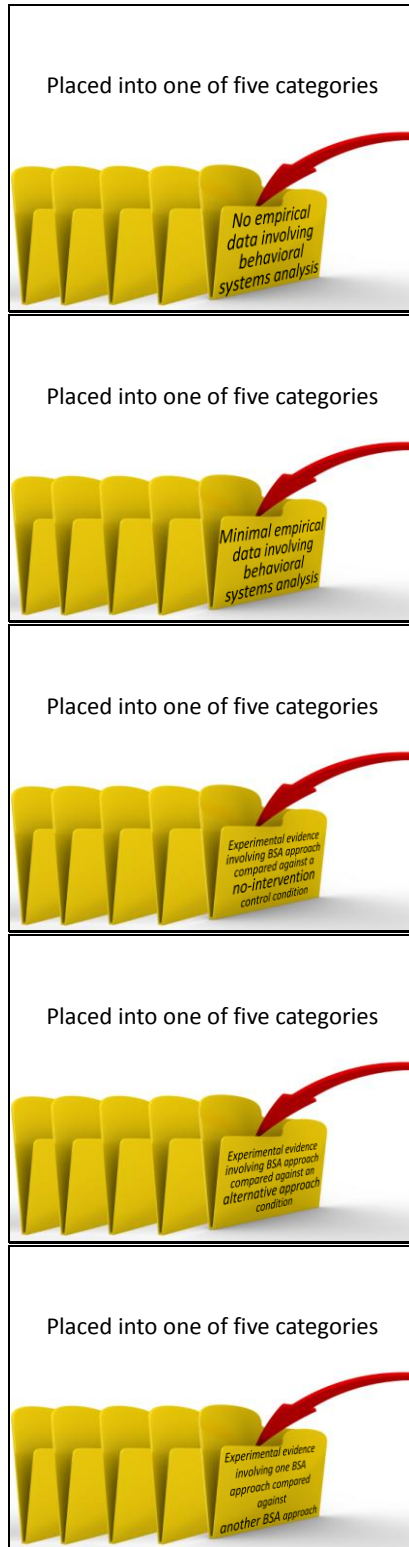
Western Michigan University

May 28th, 2011

Association for Behavior Analysis International 37th Annual Convention, Denver, CO

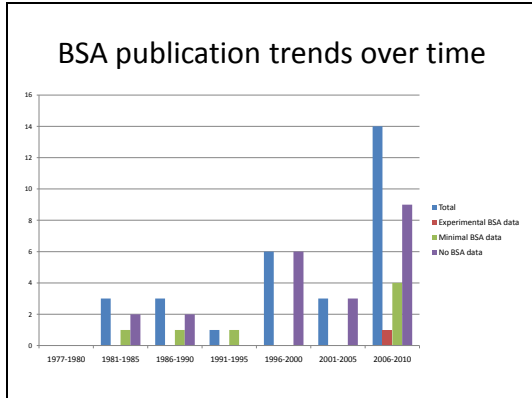
Correspondence: djohnson@operant-tech.com

Slides  
17-21



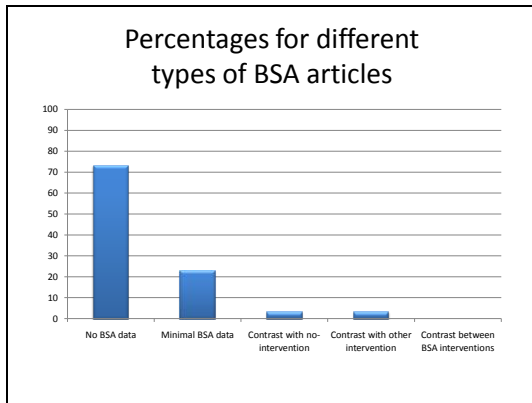
- No empirical data involving behavioral systems analysis
- Minimal empirical data involving behavioral systems analysis
- Experimental evidence involving behavioral systems analysis approach compared against a no-intervention control condition
- Experimental evidence involving behavioral systems analysis approach compared against an alternative approach condition
- Experimental evidence involving one behavioral systems analysis approach compared against another behavioral systems approach

Slide 22



•Publication trends

Slide 23



•Percentages of article types  
 •Note about Sasson, Alvero, & Austin (2006)

Slide 24



•Search terms  
 •Other journals  
 •BSA definition



Slide 25



- Even acknowledging the possible shortcomings
- Lots of discussion about BSA

Slide 26



- We have plenty of articles simply talking about BSA and some with minimal data
- It allows for demonstration of the phenomenon
- Does not show cause and effect
- Minimal data is not enough

Slide 27



- Lack of experimentation
- Virtually none of our data allows for satisfactory verification or replication



Slide 28



- Logic and sensibility are not enough
- Behavioral systems analysis has great potential
- The plurality of anecdotes and case studies does not prove causal relationships

Slide 29



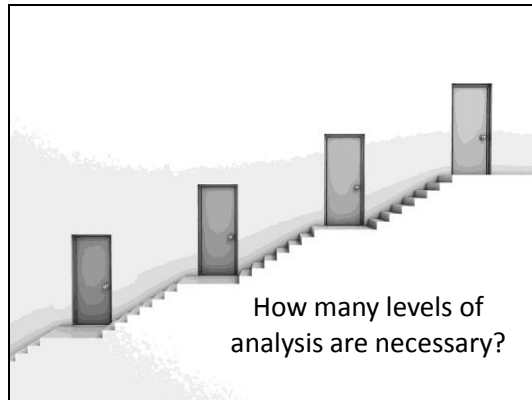
- As scientists, this is tremendous opportunity
- "Understand that I am trying to be descriptive, not accusatory."
- At least three basic lines of experimental research that should be conducted and are currently being neglected
- Namely studies comparing BSA approaches to no interventions, alternative non-BSA approaches, and different types of BSA approaches

Slide 30



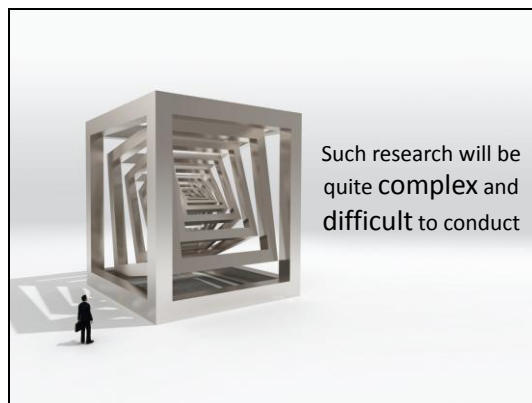
- Does BSA lead to measurably superior results?
- Does BSA lead to measurably superior results in comparison to traditional PM alone?
- Are visual representations of tools necessary or will text-based counterparts work just as well?
- Which systems tools are essential and which are excess?

Slide 31



- How many levels of analysis are necessary?
- How much measurable gain is obtained with each level of analysis?
- Does the mission statement need to be considered and communicated to all levels?
- Empirical evidence for sub-optimization principle?
- Does BSA need to be done prior to an intervention, concurrently, or either?
- Is it better to implement an immediate change in absent of systems analysis or wait until analysis is complete and implement delayed change?

Slide 32



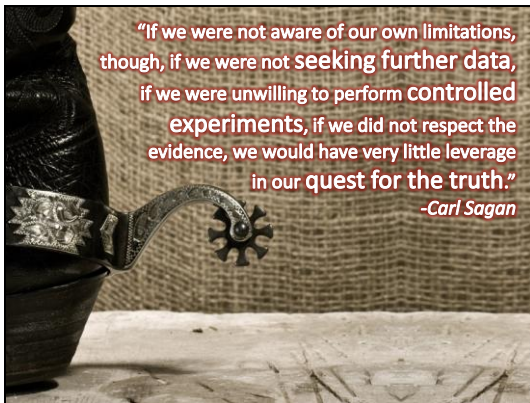
- Outside of an experimental framework, BSA is quite complex in and of itself
- No doubt that such good experimental or quasi-experimental research will be difficult to conduct
- Ability to place strong confidence in recommending the use of BSA should merit the extra effort and difficulty

Slide 33



- Mission statement of behavioral sciences
- We're missing the piece of demonstrating control
- Serious disconnect between the scientific mission and scientific processes of behavioral systems analysis

Slide 34



- Many are aware of this disconnect
- Presentation is not meant to solve the problem, but rather suggest some ways of addressing the problems
- Bring spotlight on this concern
- Spur on more experimental work in this field

Slide 35

