Is Your District Producing High-Quality FBA/BIPs? The TATE and Improving Practice

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Objectives

- Describe the purpose and use of the Technical Adequacy Evaluation Tool
- Apply a scoring rubric to case examples
- Discuss further use of the evaluation

Discussion

- What makes an FBA/BIP technically adequate?

Context for FBAs/BIPs

- FBA/BIP—substantial evidence base
- Behavior 'gold' standard for more than 20 years
- Systemic and skill issues impeding implementation
- Wealth of literature providing evidence-basis
  - BUT, does not address the contextual fit of FBA in school culture (Scott & Kamps, 2007)
    - Educators' willingness and ability to engage in process
    - Level and intensity of FBA necessary to result in improvements
- Conceptually, FBA seen as tool for use in multi-tiered system of supports rather than separate process
  - If part of process, may change traditional definition of what and who is involved in FBA

Current Status of FBA/BIP Implementation in Schools

- No systematic policies adopted at federal level or guidance on key components (Scott & Kamps, 2007)
- Three primary flaws in school-setting use (Scott, Liaupsin, Nelson, & McIntyre, 2005).
  - Used as reactive process
  - "Expert" model vs. collaborative model
  - Rigid, rigorous procedures not feasible in public school settings
- In response, schools have "implemented a variety of inexact practices and procedures that have been loosely labeled as FBA, the majority of which are not tied to any solid evidence base. (Scott, Anderson, & Spaulding, 2008)

Technical Adequacy Research

- Studies conducted exploring technical adequacy of FBAs
  - Blood, E., & Neel, R. S. (2007). From FBA to implementation: A look at what is actually being delivered. Education and Treatment of Children, 30, 67-80.
  - Cook, C. R., Crews, S. D., Wright, D. B., Mayer, G. R., Gale, B., Kraemer, B., & Gresham, F. M. (2007). Establishing the substantive adequacy of positive behavioral support plans. Journal of Behavioral Education, 16, 191-206.
  - Van Acker, R., Boreson, L., Gable, R. A., & Potterton, T. (2005). Are we on the right course? Lessons learned about current FBA/BIP practices in schools. Journal of Behavioral Education, 14, 35-56.

Results of Technical Adequacy Research

- Limited input from teachers and others
- Target behaviors missing or inadequately defined
- FBA hypotheses flawed—attempt to assign one function/hypothesis to group of target behaviors (e.g., treated all behaviors as one behavior—collected data and developed interventions)
- Behavior intervention strategies not linked with hypothesis statement(s)
  - Predominant type of BIP "hierarchical stock list of possible positive and negative consequences" that follow any problem behavior (Van Acker et al.)
- Replacement behaviors not included
  - Van Acker—46% FBA/BIPs reviewed only included aversive strategies
- No follow-through on next steps (promote and check maintenance and generalization of behavior change)

TATE-Development and Use of Tool

Purpose of TATE

- Develop a "district/educator" friendly tool that could be used by practitioners to evaluate FBA/BIPs
- Determine the technical adequacy of FBA/BIPs and establish baseline for:
  - District
  - Campus/School
  - Individual
- Provide information to generate data to guide strategic action planning

Development of Tool

- Review of literature to identify essential components for adequate FBA/BIPs
- Original measure included 24 items (FBA/BIP)
- Edited to 20 items
- Sent out to three national experts (Terry Scott, Cindy Anderson, Glen Dunlap) to review
  - Is the item essential?
  - Is the item worded clearly?
- Final tool contains 18 items (9 FBA/9 BIP)
- Rubric provides scoring guidelines
- Scores range from 0-2 for each item.

Preliminary Findings- Interrater Reliability

- n = 143/135
- 13 Florida School Districts
- 3 Sources
  - 35.1% FL Department of Education
  - 11.3% Volunteer to improve Tier 3 practices
  - 53.6% FL PBS Project Evaluation Project
- n = 38 (25.2%) evaluated by two trained raters

Inter-rater Reliability (*n* = 38)

Total Scale Scores-
Intraclass Correlations
(ICC)
** $p < 0.001$

	ICC	*Lower*	*Upper*
FBA	0.92**	0.85	0.96
BIP	0.93**	0.86	0.96
TOTAL	0.94**	0.88	0.97

INDIVIDUAL ITEM SCORES-WEIGHTED COHEN'S KAPPA

FBA (Items 1-9)

	1	2	3	4	5	6	7	8	9
Kappa	0.82	0.57	0.76	0.85	0.86	0.88	0.63	0.70	0.87

BIP (Items 10-18)

	10	11	12	13	14	15	16	17	18
Kappa	0.98	0.65	0.57	0.78	0.68	0.73	0.97	0.87	-0.03*

*BIP Item 9 (Fidelity)-no variability in data (e.g., almost 100% of BIPs scored 0).

TATE Results from Florida FBA/BIPS-Overall

TATE Scale	N	Mean (0-18 range)	Standard Deviation
FBA Scale	143	9.3 (52%)	2.63
BIP Scale	135	7.4 (41%)	2.72

TATE Results per Component: Florida FBAs

Component/Item	Mean (0-2)	Standard Deviation
1. FBA Sources	1.47	.68
2. Operational Definition	1.49	.50
3. Baseline Data	0.95	.66
4. Setting Events	0.35	.56
5. Antecedents Problem Behavior	1.19	.60
6. Antecedents-Absence of Problem Behavior	0.49	.74
7. Consequences	0.79	.79
8. Hypothesis Statement	1.08	.51
9. Valid Function	1.48	.66

TATE Results per Component: Florida BIPs

Component	Mean (0-2)	Standard Deviation
10. Timeline	1.54	.84
11. Hypothesis Match	1.33	.84
12. Prevent/Antecedent Strategy	0.72	.62
13. Teach (Replacement behavior) Strategy	0.84	.53
14. Reinforce Strategy	0.69	.56
15. Discontinue Reinforcement Problem Behavior Strategy	0.46	.66
16. Crisis Plan	0.88	.91
17. Progress Monitoring	0.85	.56
18. Fidelity	0.09	.31

Table N

Relative Frequency Distributions of the TATE Items

TATE Items	Score 0		Score 1		Score 2	
	n	%	*n*	%	*n*	%
1. FBA – Sources of Data	16	10.8	45	30.4	87	58.8
2. FBA – Operational Definition	0	0	77	52.0	71	48.0
3. FBA – Baseline Data	35	23.6	82	55.4	81	20.9
4. FBA – Setting Events	**101**	**68.2**	41	27.7	6	4.1
5. FBA – Antecedent Events TCB	13	8.8	91	61.5	44	29.7
6. FBA – Antecedent Events AB	**101**	**68.2**	41	27.7	6	4.1
7. FBA – Consequences	63	42.6	52	35.1	33	22.3
8. FBA – Hypothesis Statement	13	8.8	112	75.7	23	15.5
9. FBA – Valid Function	13	8.8	55	37.2	80	54.1
10. BIP – Timeline	32	21.8	4	2.7	**111**	**75.5**
11. BIP – Hypothesis Match	36	24.5	27	18.4	84	57.1
12. BIP – Prevent Strategy	56	38.4	77	52.7	**13**	**8.9**
13. BIP – Teach Strategy	35	23.8	102	69.4	**10**	**6.8**
14. BIP – Reinforce Strategy	54	36.7	86	58.5	**7**	**4.8**
15. BIP – Change Responding Strategy	94	63.9	40	27.2	**13**	**8.8**
16. BIP – Safety Plan	69	47.3	26	17.8	**51**	**34.9**
17. BIP – Progress Monitoring	37	25.2	96	65.3	14	9.5
18. BIP – Implementation Fidelity Plan	**134**	**91.2**	11	7.5	2	1.4

Tate Components

Download the TATE Scoring Tool and the Rubric

Essential Components of FBA/BIPs

1. Input obtained from multiple sources
2. Problem behavior that is the focus of the FBA is identified and defined in measureable terms
3. Baseline data is provided on the identified problem behavior
4. Setting events are considered and identified if pattern of predictability is present
5. Antecedent events triggering problem behavior are identified and described adequately
6. Antecedent events present when no problem behavior occurs are identified and described adequately
7. Responses made by others following the problem behavior are identified and described adequately
8. Hypothesis statement is written and uses the information from the FBA
9. Function in hypothesis is valid (negative or positive reinforcement-i.e., escape/avoid/delay; access/obtain)
   - Iovannone, R., Anderson, C., & Scott, T. (2013). Power and control: Useful functions or explanatory fictions? Beyond Behavior, 22, 3-6.

Essential Components of FBAs/BIPs

10. BIP is developed in timely manner after FBA
11. Hypothesis from FBA is included or referenced in BIP
12. A minimum of one antecedent strategy is described that links with the hypothesis and provides enough detail so that it would be implemented consistently each day by multiple people
13. A minimum of one teach (functionally equivalent replacement behavior/alternate skill) strategy is described that links with the hypothesis and provides enough detail so that it could be implemented consistently each day by multiple people
14. A minimum of one reinforcement strategy is described that links with the hypothesis (provides the function and provides enough detail so that it could be implemented consistently each day by multiple people
15. A minimum of one strategy that changes the response after problem behavior is present, is linked with the hypothesis and provides enough detail so that it could be implemented consistently each day by multiple people.
16. A crisis plan was considered and if necessary, is described in enough detail so that it could be implemented consistently each day by multiple people.
17. An evaluation plan for determining effectiveness is described
18. A plan for measuring fidelity is described

Practice Time

Practice with TATE

- Download the Bart Simpson FBA/BIP
- Get in teams
- Select one person who will be the score keeper and enter your scores into Qualtrics
- Identify one person who will keep track of your ratings for when we check inter-rater agreement
- Review the TATE rubric and come to consensus on the score for each item

Scoring tips

- Scoring Tips
  - Use rubric examples to guide your scoring
    - Match your item with the closest example given on rubric
  - If uncertain of score, decide on one of two strategies:
    - Alternate scoring: First time, give credit for higher score, second time-give credit for lower score
    - or
    - Always give credit for the higher score

https://usf.az1.qualtrics.com/jfe/form/SV_3OiwVgHYbJhkj3f

Debrief

- What did you like?
- What did you dislike?
- What was easy?
- What was difficult?
- What questions do you still have?

Looking at the FBA/BIP Example Modified to be Technically Adequate Scoring of Technically Adequate FBA/BIP

Questions?


LIFE IS PECULIAR...
WOULDN'T YOU LIKE TO HAVE YOUR LIFE TO LIVE OVER IF YOU KNEW WHAT YOU KNOW NOW?
WHAT DO I KNOW NOW?

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