Toward Sustainable Evidence-based Practice: Considering Social Validity in the Context of School Mental Health

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Introductions

- A little bit about us...
- A little bit about you...

School Mental Health



Agenda & Purpose

- Discuss the importance of evaluating social validity in the context of school mental health.
- Provide an overview of the historical development of social validity assessments and current options in assessing social validity.
- Overview recent research related to the URP line of assessments, applications, and considerations for research and practice.

Objectives

- Participants will be able to discuss the importance of evaluating social validity by multiple stakeholders within the context of school mental health.
- Participants will be able to identify options in assessing social validity.
- Participants will be able to describe the relationship between social validity and sustainable evidencebased practice.



A Quick Primer: What is Social Validity?

- AKA ecological validity, qualitative appraisal, applied importance, consumer satisfaction
- Social validity refers generally to the acceptability of and satisfaction with procedures or innovations, which is usually assessed by soliciting opinions from the people who receive and implement them



Why is Social Validity Important?

Innovations may have comparable efficacy, but consumers may have positive/negative perceptions

Ethics



Skin Shocks Used at Mass. School Draw FDA Attention

Boston.com - Sep 15, 2014 In this Aug. 13, 2014, therapist Joe Andrade checks the ankle strap of a shocking device on student Andrew Goldberg during an exercise ... 6

Minneapolis Star ... Skin shocks at Massachusetts school for violent students: Treatment ... Minneapolis Star Tribune - Sep 15, 2014 Controversial skin shocks used at Mass. school draw FDA look KOMO News - Sep 14, 2014 Skin shocks used at Mass. school draw FDA look Knoxville News Sentinel - Sep 15, 2014 Mass. school at center of treatment controversy News & Observer - Sep 13, 2014

Why is Social Validity Important?

- Identify factors that contribute the efficacy and upkeep of those innovations
- Identify potential barriers to implementation, which could inform our actions & problem-solving
- Stakeholder perceptions and beliefs can have powerful impacts on implementation effectiveness (Kazdin, 1980; Klein & Sorra, 1996; Wolf, 1978).
- The social validity of an innovation can have important implications for the adoption and subsequent use of that methodology (Eckert, Hintze, & Shapiro, 1999).

School Mental Health

 Exploring the social validity of interventions in particular has become a routinely expected practice 8

- Challenges of limited time and resources
- Trial-and-error approach can be costly
- Evaluating social validity can contribute to the <u>sustainability</u> of evidence-based practices in SMH
 - Perceptions of the individual implementing
 - Perceptions of the individual receiving

Currently, there are limitations in the extent to which key stakeholders can systematically evaluate the social validity of various innovations, particularly in a way that would facilitate comparisons across innovations

Share an example of a challenge encountered while implementing an intervention

How might the outcome have changed if we examined stakeholder perceptions?

Evaluating Social Validity: Procedures and Pitfalls

Assessment Options

Evaluating Social Validity

- □ Interviews
- □ Surveys
- Observations
- □ Tracking Generalization/Maintenance
- □ Rating Scales
- The benefit to using standard rating scales is that they allow for direct comparisons to be made between various intervention or assessment options.

A Measurement Problem...

The term "social validity" has been used widely to refer to a variety of concepts:



Historical development

- Treatment Evaluation Inventory (Kazdin, 1980)
- Intervention Rating Profile (Witt & Martens, 1983)
- Treatment Acceptability Rating Form (Reimers & Wacker, 1988)
- Abbreviated Acceptability Rating Scale (Tarnowski & Simonian, 1992)
- Primarily evaluate acceptability
- Finn and Sladeczek (2001) evaluated 9 social validity measures and found that no single measure was more comprehensive than the others

Limitations

- Wide variability in measurement = unclear conclusions
- Primary applications have been in assessing treatments (interventions) only
- We don't have a clear sense of what factors really contribute to social validity and how factors could be modified to improve perceptions and implementation



Our Work

 Development and validation of the Usage Rating Profile (URP) line of assessments

- Designed to evaluate factors associated with innovation usage (assessments or interventions used in schools)
- Goal: to extend beyond acceptability as the sole construct of interest and incorporate a multidimensional perspective of usage



The Usage Rating Profile

Dimensions of Usability



URP Assessment Line

Forms Available

- Usage Rating Profile Intervention Revised (URP-IR)
 - Children's Usage Rating Profile Intervention (CURP-I)
- Usage Rating Profile Assessment (URP-A)

Structure

- > 29 items, 7-point Likert scale
 - > 21 items, 4-point Likert scale

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28 items, 7 point-Likert scale

URP Research & Considerations for Research and Practice

Understanding Usage



Usage Rating Profile (URP)

Designed to be broadly applicable rather than tied to a particular intervention



Acceptability (.95)

- This intervention is an effective choice for addressing a variety of problems.
- > The intervention is a fair way to handle the child's behavior problem.
- I would not be interested in implementing this intervention.
- I would have positive attitudes about implementing this intervention.
- ▶ This intervention is a good way to handle the child's behavior problem.
- I would implement this intervention with a good deal of enthusiasm.
- ▶ This intervention would not be disruptive to other students.
- ▶ I would be committed to carrying out this intervention.
- ▶ The intervention procedures easily fit in with my current practices.

Understanding (.79)

- ▶ I understand how to use this intervention.
- I am knowledgeable about the intervention procedures.
- ▶ I understand the procedures of this intervention.

Home-School Collaboration (.78)

- A positive home-school relationship is needed to implement this intervention.
- Parental collaboration is required in order to use this intervention.
- Regular home-school communication is needed to implement intervention procedures.

FEASIBILITY (.88)

- I would be able to allocate my time to implement this intervention.
- The total time required to implement the intervention procedures would be manageable.
- Preparation of materials needed for this intervention would be minimal.
- Material resources needed for this intervention are reasonable.
- ▶ This intervention is too complex to carry out accurately.
- The amount of time required for record keeping would be reasonable.

System Climate (.91)

- My administrator would be supportive of my use of this intervention.
- Use of this intervention would be consistent with the mission of my school.
- Implementation of this intervention is well matched to what is expected in my job.
- These intervention procedures are consistent with the way things are done in my system.
- My work environment is conducive to implementation of an intervention like this one.

System Support (.67)

- I would need additional resources to carry out this intervention.
- I would need consultative support to implement this intervention.
- I would require additional professional development in order to implement this intervention.

Relationships between factors

Table 5

Correlations among the subscales derived from exploratory factor analysis.

| Subscale | F1 | F2 | F3 | F4 | F5 | F6 |
|--|---------------------------|--|------------|-------|------|------|
| Acceptability (F1) Understanding (F2) | 1.00 .21 ^{**} | 1.00 | | | | |
| Family-School Collaboration (F3) | .21 | .10* | 1.00 | | | |
| Feasibility (F4) System Climate (F5) | .81** | .24 ^{**} .22 ^{**} | .00 .08 | .52** | 1.00 | |
| System Support (F6) | 03 | 36** | 13** | 18 | 08 | 1.00 |

Note. Values represent the correlations between mean subscale scores (i.e. mean of all items within a given subscale).

* *p*<.05.

** p<.01.

URP-IR scores across interventions (Briesch, Briesch, & Chafouleas, 2014)

Mean (SD) by Subscale and Vignette

| | | | Subs | scale | | |
|--|---------------|---------------|-------------------|-------------|-------------------|-------------------|
| | Acceptability | Understanding | Family- School | Feasibility | System Climate | System Support |
| Interdependent group contingency | 3.73 (1.04) | 5.01 (0.63) | 3.99 (1.17) | 4.57 (0.92) | 3.99 (1.20) | 2.53 (0.97) |
| Self-managed response cost | 4.20 (0.98) | 5.19 (0.44) | 3.92 (1.27) | 4.69 (0.94) | 4.42 (1.16) | 2.29 (0.92) |
| Response cost with home- school notes | 4.04 (0.98) | 5.08 (0.64) | 5.29 (0.76) | 4.55 (0.98) | 4.21 (1.21) | 2.50 (1.10) |
| Positive verbal praise | 4.15 (0.90) | 5.07 (0.60) | 3.73 (1.27) | 5.02 (0.52) | 4.50 (1.07) | 2.36 (0.93) |
| Dependent group contingency | 3.14 (1.01) | 5.00 (0.49) | 3.86 (1.19) | 4.34 (0.95) | 3.32 (1.23) | 2.49 (1.00) |
| Mean | 3.85 (1.06) | 5.07 (0.57) | 4.16 (1.28) | 4.63 (0.90) | 4.09 (1.25) | 2.44 (0.99) |
| | | , | | | | |

Note. Although transformed values for the Understanding, Feasibility, and System Support subscales were used for the purpose of ANOVA, all means and standard deviations are presented as raw, untransformed scores.

Acceptability and System Climate significantly lower for dependent group contingencies

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 Positive verbal praise/planned ignoring significantly higher for Feasibility than group contingencies

29 Extending the URP to Assessment: Direct Behavior Rating



Extending the URP to Assessment

Procedures

283 teachers (grades 1-8) asked to complete DBR-SIS daily for 2 weeks for 10 randomly sampled students

Reliability

| Scale | Behavior | Academic | Assessment |
|----------------|----------|----------|------------|
| Acceptability | .95 | .90 | .90 |
| Understanding | .79 | .68 | .80 |
| Family-School | .78 | .84 | .83 |
| Feasibility | .88 | .71 | .83 |
| System Climate | .91 | .78 | .71 |
| System Support | .67 | .65 | .63 |

Extending the URP to

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OSSESSMENT (Miller, Chafouleas, Riley-Tillman, &

Fabiano, in Press)

65 1st-8th grade teachers completed triannual behavior screening (DBR, Social Skills Improvement System-Performance Screening Guide, Behavioral and Emotional Screening System), and completed the URP at each time point

Definition of Prosocial Behavior

Prosocial Behavior is behavior directed toward other people that involves effective communication skills, cooperative acts, selfcontrol in difficult situations, and empathic or supportive responses to others who experience a problem. For example, children who consistently act in a prosocial manner compromise in conflict situations, invite others to join activities, volunteer to help others, and listen when others are speaking.

| ondary Student Performance Descriptor | ondar | v Student | Performance | Descriptor |
|---------------------------------------|-------|-----------|-------------|------------|
|---------------------------------------|-------|-----------|-------------|------------|

Sec

Level

Prosocial Behavior

| | Students at this performance level demonstrate most of the following: |
|---|--|
| | · excellent skills to communicate and/or cooperate with others |
| | excellent skills to initiate and sustain conversations/ interactions with others |
| | excellent self-control |
| | a high level of concern for others |
| | Students at this performance level generally do not need additional instruction to improve their social skill level, and their current skill level is considered to be high for their age. |
| | Students at this performance level demonstrate most of the following: |
| | a general competence when communicating or cooperating with others |
| | adequate skills to initiate and sustain conversations/ interactions with others |
| | adequate self-control |
| 1 | an appropriate level of concern for others |
| | Students at this performance level may benefit from additional instruction to improve their social skills, but their current skill level is considered to be appropriate for their age. |
| | |
| | Students at this performance level demonstrate most of the following: |
| 1 | occasional difficulty communicating or cooperating with others |
| | occasional difficulty initiating and sustaining conversations/ interactions with others |
| ł | somewhat less than expected self-control |
| 1 | some concern for others |
| | Students at this performance level are often in need of additional instruction to improve their social skills. |
| 1 | Water Street Country of the Country of Count |
| | Students at this performance level demonstrate most of the following: |
| | following: |
| | Students at this performance level demonstrate most of the following: • frequent difficulty communicating or cooperating with others • frequent difficulty initiating and sustaining conversations/ interactions with others |
| | following: frequent difficulty communicating or cooperating with others frequent difficulty initiating and sustaining conversations/ |
| | following: • frequent difficulty communicating or cooperating with others • frequent difficulty initiating and sustaining conversations/ interactions with others |
| | following: • frequent difficulty communicating or cooperating with others • frequent difficulty initiating and sustaining conversations/ interactions with others • limited self-control |

nication or cooperation skills

at this performance level often need remedial in and/or coaching to improve their social skills

me difficulty initiating or sust actions in an age-appropriate little or no concern for others

Instructions

Listed below are phrases that describe how children may act. Please read each phrase, and mark response that describes how this child has behaved recently (in the last several months).

- Mark in if the behavior never occurs.
- Mark s if the behavior sometimes occurs
- Mark o if the behavior often occurs.
- Mark A if the behavior almost always occurs.

Please mark every item. If you don't know or are unsure of your response to an item, give your b estimate

A "Never" response does not mean that the child "never" engages in a behavior, only that you have observed the child to behave that way.

Before starting, please fill in the information in the boxes on the first two pages of this form

| Mark: | N—Never | S—Sometimes | O—Often | A—4 | Imost | alw | ays |
|--------|----------------------|-------------------------|---------|-----|-------|-----|-----|
| 1. P | ays attention | | | . N | s | 0 | A |
| 2. D | isrupts the play | of other children | | . N | S | 0 | A |
| 3. Is | easily upset | | | . N | S | 0 | A |
| | | L | | | s | 0 | A |
| 5. P | olitely asks for he | elp | | . N | S | 0 | A |
| 6. H | as poor self-con | trol | | . N | S | 0 | A |
| 7. Is | sad | | | . N | S | 0 | A |
| 8. Is | easily distracted | 1 | | . N | S | 0 | A |
| 9. R | esponds approp | riately when asked a q | uestion | . N | S | 0 | A |
| | | quickly. | | | s | 0 | A |
| 11. W | forries about thir | ngs that cannot be cha | nged | . N | S | 0 | A |
| 12. V | olunteers to help | with things | | . N | S | 0 | A |
| | | purpose | | | S | 0 | A |
| 14. Is | easily frustrated | 1 | | . N | S | 0 | A |
| 15. A | Acts out of control. | | | | s | 0 | (A) |
| | | r caregivers | | | S | 0 | A |
| | | early | | | S | 0 | A |
| 18. B | others other chil | dren when they are wo | orking | . N | S | 0 | A |
| | | e feelings accurately | | | s | 0 | A |
| 20. Li | istens to directio | ns | | . N | S | 0 | A |
| 21. G | iets very upset w | hen things are lost | | . N | S | 0 | A |
| | | | | | S | 0 | A |
| | | things | | | S | 0 | A |
| 24. S | hares toys or po | ssessions with other cl | hildren | . N | S | 0 | (A) |
| 25. P | outs | | | . N | S | 0 | A |

Academically Engaged

Place a mark along the line that best reflects the percentage of total time the student was Academically Engaged during math today.

Place a mark along the line that best reflects the percentage of total time the student was academically engaged during math today.



Extending the URP to assessment (Miller, Chafouleas, Riley-Tillman, & Fabiano, in Press)

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- Statistically significant differences across assessments on Understanding and System Support subscales
- Statistically significant differences across time on Acceptability and System Support subscales





Note: Higher System Support Scores reflect a perception to implement with greater independence

URP-IR & Academic Intervention (Neugebauer, Chafouleas, Coyne, McCoach, &

Briesch, under review)







54 teachers 15-20 mins/day, 5 days/week

| Scale | Behavior | Academic |
|----------------|----------|----------|
| Acceptability | .95 | .90 |
| Understanding | .79 | .68 |
| Family-School | .78 | .84 |
| Feasibility | .88 | .71 |
| System Climate | .91 | .78 |
| System Support | .67 | .65 |

Does Usability help to predict student performance?

- Controlling for previous vocabulary performance (i.e. target word vocabulary, expressive vocabulary knowledge) and implementation fidelity...
- System Climate scores helped to predict student performance in the Tier 1 intervention
 - For every 1 pt higher teachers rated the System Climate subscale, students scored an average of 3.13 points higher on a researcher-developed expressive vocabulary instrument (total = 40 pts)
- Feasibility scores helped to predict student performance in the Tier 2 small group intervention
 - For every 1 pt higher teachers rated the Feasibility subscale, students scored an average of 5.00 points higher on a researcher-developed expressive vocabulary instrument (total = 40 pts)

Assessing students' perspectives on usability (Briesch & Chafouleas, 2009)

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Children's Usage Rating Profile administered to 208 4th-6th grade students after reading description of self-management intervention

- Acceptability
- Understanding
- Home-School Collaboration
- Feasibility
- System Climate
- System Support



Personal Desirability (.92) Personal interest, willingness

> <u>Understanding (.75)</u> Understood steps and purpose

<u>Feasibility (.82)</u> Effort required, intrusiveness

Potential Uses

Facilitate individualized consultation by gathering URP data up front and probing concerns face-to-face



 Gather data efficiently in largescale research or program evaluations



Use within School Mental Health Assessment & Intervention

- District looking to adopt universal behavioral screening measure across elementary buildings
- Problems with implementation of a Tier 1 socialemotional learning curriculum have been noted across multiple classrooms
- Other applications??



Questions & Comments

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