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 evidence-based 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.
Why is Social Validity Important?

- Identify factors that contribute to the efficacy and upkeep of those innovations.
- Identify potential barriers to implementation, which could inform our actions and 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
- Challenges of limited time and resources
- Trial-and-error approach can be costly
- Evaluating social validity can contribute to the sustainability 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.
The term “social validity” has been used widely to refer to a variety of concepts:

- Do I like this procedure?
- Did it provide meaningful information?
- Was it effective?
- Do I have the skills to carry this out?
- Do I have the time/resources to do it?
- Was it easy to use?
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

Acceptability  Understanding  Feasibility  Home-School Collaboration  System Climate  System Support
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
- 28 items, 7 point-Likert scale
URP Research & Considerations for Research and Practice
Understanding Usage

What we say we are going to do

What we actually do

Perceptions of feasibility, understanding, external support, etc.
Usage Rating Profile (URP)

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

<table>
<thead>
<tr>
<th>Subscale</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>F6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptability (F1)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding (F2)</td>
<td>.21**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family-School Collaboration (F3)</td>
<td>.06</td>
<td>.10*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility (F4)</td>
<td></td>
<td></td>
<td>.53**</td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>System Climate (F5)</td>
<td>.81**</td>
<td>.22**</td>
<td>.08</td>
<td>.52**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>System Support (F6)</td>
<td>-.03</td>
<td>-.36**</td>
<td>-.13**</td>
<td>-.18**</td>
<td>-.08</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*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)

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

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
- Positive verbal praise/planned ignoring significantly higher for Feasibility than group contingencies
An emerging alternative to systematic direct observation and behavior rating scales which involves brief rating of target behavior following a specified observation period.

**Interpretation**: The student displayed academically engaged behavior during 80% of the observation period.

**Multi-Item Scale**

<table>
<thead>
<tr>
<th>Did the student follow class rules?</th>
<th>Never</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did the student follow teacher directions?</th>
<th>Never</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did the student do his/her best work?</th>
<th>Never</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total number of points earned**: 5

**Interpretation**: The student earned 84% (5/6) of possible points during the observation period.
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

<table>
<thead>
<tr>
<th>Scale</th>
<th>Behavior</th>
<th>Academic</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptability</td>
<td>.95</td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>Understanding</td>
<td>.79</td>
<td>.68</td>
<td>.80</td>
</tr>
<tr>
<td>Family-School</td>
<td>.78</td>
<td>.84</td>
<td>.83</td>
</tr>
<tr>
<td>Feasibility</td>
<td>.88</td>
<td>.71</td>
<td>.83</td>
</tr>
<tr>
<td>System Climate</td>
<td>.91</td>
<td>.78</td>
<td>.71</td>
</tr>
<tr>
<td>System Support</td>
<td>.67</td>
<td>.65</td>
<td>.63</td>
</tr>
</tbody>
</table>
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.

**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.

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**Secondary Student Performance Descriptor**

**Prosocial Behavior**

**5** Students at this performance level demonstrate most of the following:
- Excellent skills in communicating and/or cooperating with others
- Excellent self-control
- High level of concern for others

**4** Students at this performance level demonstrate most of the following:
- General competence when communicating or cooperating with others
- Adequate self-control
- Adequate level of concern for others

**3** Students at this performance level demonstrate most of the following:
- Occasional difficulty communicating or cooperating with others
- Occasionally difficulty initiating and sustaining conversations/interactions with others
- Some concern for others

**2** 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
- Little self-control
- Little concern for others

**1** Students at this performance level demonstrate most of the following:
- Very limited communication or cooperation skills
- Frequent difficulty initiating or sustaining conversations/interactions in an age-appropriate manner
- Poor self-control
- Bother other children when they are working

**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 x** if the behavior never occurs.
- **Mark ✓** if the behavior sometimes occurs.
- **Mark ✔** if the behavior often occurs.
- **Mark ✘** if the behavior almost always occurs.

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—Almost always

1. Pays attention. ........................................... x s o a
2. Disrupts the play of other children. ................ x s o a
3. Is easily upset. ........................................... x s o a
4. Hits other children. ..................................... x s o a
5. Pulls down a seat ........................................ x s o a
6. Has poor self-control. ................................. x s o a
7. Is sad. ....................................................... x s o a
8. Is easily distracted. ..................................... x s o a
9. Responds appropriately when asked a question. x s o a
10. Changes moods quickly. ............................. x s o a
11. Worries about things that cannot be changed. x s o a
12. Volunteers to help with things. ..................... x s o a
13. Annoys others on purpose. ........................ x s o a
14. Is easily frustrated. ................................... x s o a
15. Acts out of control. .................................... x s o a
16. Defies teachers or caregivers. ....................... x s o a
17. Communicates clearly. ............................... x s o a
18. Bother other children when they are working. x s o a
19. Is able to describe feelings accurately. ........ x s o a
20. Listens to directions. .................................. x s o a
21. Gets very upset when things are lost. ............ x s o a
22. Is a “good sport.” ..................................... x s o a
23. Is negative about things. ............................ x s o a
24. Shares toys or possessions with other children. x s o a
25. Pouts. .................................................... x s o a
Extending the URP to assessment (Miller, Chafouleas, Riley-Tillman, & Fabiano, in Press)

- 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)

Small Group, Intensive Vocabulary Intervention: 48 interventionists
30 mins/day, 4 days/wk

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

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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)
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

- Understanding (.75)
  Understood steps and purpose

- Feasibility (.82)
  Effort required, intrusiveness
Facilitate individualized consultation by gathering URP data up front and probing concerns face-to-face

Gather data efficiently in large-scale 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 social-emotional learning curriculum have been noted across multiple classrooms

- Other applications??
Questions & Comments

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