Implementation of Evidence-Based Practice: The Role of Leadership and Provider Attitudes

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Acknowledgements

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- Health and Human Service Agency
- Mental health agencies and programs
- Family & Youth Roundtable

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  - NIMH R03 MH070703 (Aarons) Concept Mapping of Readiness for Evidence-Based Practice
  - NIMH K01 MH01695 (Aarons) Organizational Factors in Youth Mental Health Services

Agenda

- Why study leadership in mental health services?
- Qualitative study: Implementation factors
- Quantitative study: Leadership and provider attitudes to EBP
- Discussion, Implications, Future Directions

Leadership & EBP Implementation: Local, National, International Concern

- EBP Implementation in four countries
  - Brazil, Israel, Lebanon, Egypt
  - World Psychiatric Association
  - Integrated Services Task Force

- Identified leadership as important
  - Early adoption and guidance by innovative leaders
  - "There was agreement across the sites on several items, including the importance of leadership support"
  - "Directors were able to exert high quality leadership and guidance to the project, even when formidable obstacles occurred"
  - "Early adoption and guidance by innovative leaders"

Why Examine Leadership and EBPs

- Growing (mature?) momentum to implement EBPs into real world practice
- Determine what factors can support implementation that serves all stakeholders
- Provider attitudes and preferences have not been well studied

American Psychologist
- Special issue: Leadership (Jan, ’07)
  - Situational Context (Vroom & Jago)
  - Theory Driven Models (Avolio)
  - Leader Challenges (Bennis)
  - Leader Traits (Zaccaro)
  - WICS (Sternberg)
    - Wisdom, Intelligence, Creativity

"There was agreement across the sites on several items, including the importance of leadership support"
"Directors were able to exert high quality leadership and guidance to the project, even when formidable obstacles occurred"
"Early adoption and guidance by innovative leaders"
Concept Mapping of Readiness for Evidence-Based Practice

- Identify barriers and facilitators of EBP implementation in public mental health
- Youth and Family mental health programs operated by the county or provided contract services
- Participants selected by snowball sampling

Participants

- Participants represent important stakeholders:
  - Policy: County Mental Health Officials (n = 6)
  - Agency: Organization/Agency directors (n = 5)
  - Program: Program managers (n = 6)
  - Clinical: Clinicians (n = 7)
  - Administrative: Administrative staff (n = 3)
  - Consumers: Parents/Families using MH services (n = 5)

Participant Demographics (n = 31)

<table>
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<td>Male</td>
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<th>Experience w/ EBPs</th>
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<tr>
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<td>30.8%</td>
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<td>To a moderate extent</td>
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Procedure

- Concept Mapping (Trochim, Cook, & Setze, 1994)
  - Mixed qualitative-quantitative method
  - Qualitative methods used to generate data
  - Data analyzed using quantitative methods
- Begin with structured brainstorming
  - Participants generate and then use a focus statement to guide identifying barriers and facilitators to implementation
  - Focus statement: "What are the factors that influence the acceptance and use of evidence-based practices in publicly funded mental health programs for families and children?"
- Independent stakeholder group brainstorming
- Statements individually sorted and rated on importance changeability

Analysis

- Multidimensional scaling (MDS) and cluster analysis
- MDS analysis results in a "map" of the conceptual space with similar issues closer together
- Solution represents psychological "distance" or similarity between concepts
- Statements more similar in meaning are closer together
- Statements grouped into non-overlapping categories called clusters
- Clusters closer together are more conceptually related

Results

- Fourteen overall clusters identified
- Reassessed data to identify leadership statements
  - 105 statements evaluated by research team
- Leadership cluster identified
  - Six items derived from two clusters
    - Staff development & support
    - Clinician perspectives
Leadership Impacts on Implementation

- Level of support and supervision for clinicians
- Staff “champion” or “local opinion leader” for EBP
- Enhance openness and adaptability of staff, clinicians, and managers
- Increase buy-in and commitment of staff and trainees
- Increase staff desire/motivation for better client outcomes
- Enhance interest, openness, curiosity of clinicians and managers

Overall Rank of Implementation Factors

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<thead>
<tr>
<th>Importance</th>
<th>Changeability</th>
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<tr>
<td>1. Leadership</td>
<td>1. Leadership</td>
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<tr>
<td>2. Funding</td>
<td>2. Clinical perceptions</td>
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<tr>
<td>3. Staff Dev/Support</td>
<td>3. Consumer values</td>
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<tr>
<td>4. Staff resources</td>
<td>4. Staff Dev/Support</td>
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<tr>
<td>5. Costs</td>
<td>5. Impact on clinical practice</td>
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<td>7. Beneficial EBP features</td>
<td>7. Consumer concerns</td>
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<td>8. Political dynamics</td>
<td>8. Agency compatibility</td>
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<td>10. Consumer values</td>
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<td>13. Impact on clinical practice</td>
<td>13. EBP limitations</td>
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<td>14. Costs</td>
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<td>15. Agency compatibility</td>
<td>15. Funding</td>
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"They always say time changes things, but you actually have to change them yourself.”

Andy Warhol

Leadership and Provider Attitudes to EBP

- Study of organizational issues, delivery of mental health services, and attitudes toward EBP
- Question: Is mental health program leadership related to clinician attitudes toward adopting evidence based practices?

Leadership

- Multifactor Leadership Questionnaire (Bass & Avolio)
  - Excellent reliability and validity
  - Based on rewards/sanctions (contingent reward, management by exception, laissez-faire)
  - Extrinsic motivation
  - Specific goals
  - Performance criteria
  - Supports adherence to practice standards

- Transformational
  - Similar to charismatic leadership (inspirational motivation, intellectual stimulation, idealized influence)
  - Increases intrinsic motivation
  - Garners buy-in
  - Creates vision
  - Inspires hard work

- Transactional
  - Based on rewards/sanctions (contingent reward, management by exception, laissez-faire)
  - Extrinsic motivation
  - Specific goals
  - Performance criteria
  - Supports adherence to practice standards
Evidence-Based Practice Attitudes Scale (Aarons, 2004)

- **Appeal** (4-items; α = .77)
  - The extent to which an EBP would be adopted if it is intuitively appealing, makes sense, could be used correctly, or is being used by colleagues who are happy with it.

- **Requirements** (3-items; α = .90)
  - The extent to which an EBP would be adopted if it is required by his/her supervisor, agency, or state.

- **Openness** (4-items; α = .76)
  - The extent to which an EBP would be adopted if it involved following a treatment manual, was developed by researchers or is very different from what they are used to doing.

- **Divergence** (4-items; α = .59)
  - The extent to which there is perceived divergence between EBP and usual care.

Hypotheses

- Transformational leadership will be:
  - Positively associated with openness to EBPs
  - Negatively associated with perceived divergence

- Transactional leadership will be:
  - Positively associated with openness to EBPs

Methods

- **Participant Organizations**
  - 49 programs in San Diego County
  - 94.4% participation rate
  - Services provided:
    - Outpatient treatment 49.0%
    - Day treatment 19.6%
    - Assessment and evaluation 9.8%
    - Case management 7.8%
    - Residential treatment 5.9%
    - Other 7.9%

- **Participant providers**
  - 303 public sector clinical and case management service workers from programs providing mental health services to children and adolescents and their families
  - 96% participation rate
  - 80% Full-time employees
  - 32% Marriage and family therapy
  - 31% Social work
  - 23% Psychology
  - 2% Psychiatry
  - 12% Other

Participant Demographics (n = 303)

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Procedure

- Contacted a program manager at each site and explained the study
  - Organizational feedback offered as incentive

- Scheduled clinician survey sessions at the program or agency
  - Surveys were presented and questions answered for groups of respondents

Analyses

- Descriptive statistics and distributional characteristics assessed
  - No significant departures from normality

- Multilevel Modeling
  - Analysis accounted for clustering of providers in programs

- All results reported here were statistically significant p < .05
## Results

- **Transactional leadership** positively associated with provider Openness.
- **Transformational leadership** positively associated with Requirements Scale.
- Transformational leadership negatively associated with perceived Divergence of usual care and EBP.
- Transformational and transactional leadership both positively associated with more overall openness to EBP.

## Limitations

- Not an experimental study
- Can’t assume causality
- Effects are significant but effect sizes are not large
- No behavioral criterion
- Other factors also impact provider attitudes:
  - Organizational culture and climate
  - Level of bureaucracy
  - Formal policies regarding use of EBPs

## Summary of Two Studies

- **Leadership cluster identified**
  - Rated most important and most changeable
- More positive leadership associated with more positive staff attitudes toward adopting EBPs

## Conclusions

- Leadership is an important area for empirical study in mental health
- Supervisor-supervisee relationship is a potential important point of influence
- Leader development for all stakeholders needs to be evidence-based

## Discussion

- **EBP Leadership likely important in:**
  - Setting direction, Strategy
  - Organizational decision making and process
  - Decision to adopt (or not) overt/covert
  - Staffing issues
  - Culture
  - Climate
  - Consumer satisfaction
  - Patient outcomes (quality of life)
  - Organizational change

“Leadership should be born out of the understanding of the needs of those who would be affected by it.”

Marian Anderson