Identifying Clinical Practice Patterns of Integrated Primary Care Psychology Interns and Postdocs: Implications for Training

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Presentation Overview

• Background
  – The Primary Care Behavioral Health Provider Adherence Questionnaire (PPAQ)

• Study Goals
  – Examine practice patterns of advanced psychology trainees using the PPAQ
  – Relationships between PPAQ domain scores and training experiences

• Method

• Findings

• Implications
  – Facilitating evidence-based training

• Limitations and Future Directions
Learning Objectives

• Describe practice patterns of advanced psychology trainees on the Primary Care Behavioral Health Provider Adherence Questionnaire, a validated measure of behavioral health provider fidelity.

• Identify advanced psychology trainee clinical practices and describe implications of these findings in addressing specific evidence-based training needs for providers in Primary Care (PC) Behavioral Health.
Primary Care Behavioral Health Provider Adherence Questionnaire (PPAQ)

- The PPAQ is an evidence-based, empirically validated self-report measure that examines fidelity to the Primary Care Behavioral Health (PCBH) model by assessing essential and prohibited provider behaviors (Beehler, Funderburk, Possemato, & Vair, 2013).

- Questionnaire items classified based on relevance for practice in PCBH
  - **Essential** (consistent with the integrated care model; required for good practice)
  - **Prohibited** (inconsistent with the integrated care model; should be avoided)

- 48 items representing provider behavior across four practice domains
  - *Clinical Scope and Interventions*
  - *Practice and Session Management*
  - *Referral Management and Care Continuity*
  - *Consultation, Collaboration, and Interprofessional Communication*
Validation study conducted to determine reliability and validity of measure

- 173 VA Primary Care-Mental Health Integration (PC-MHI) providers completed PPAQ as part of validation study (Beehler, Funderburk, Possemato, & Dollar, 2013)
- Latent class analysis utilized to identify clusters of providers based on responses to PPAQ items (Beehler, Funderburk, King, Wade, & Possemato, 2015)

Can the PPAQ be used to identify potential gaps in trainee translation of evidence-based practices?

- Relatively few doctoral-level training programs with emphasis in PC psychology; modest growth in availability of pre-doc internships and post-doc fellowships.
- Newly trained psychology interns and fellows represent substantial portion of the future workforce.
- The number of optimally trained psychologists remains “sparse” (Beacham et al., 2012; Blount & Miller, 2009).
Study Goal

• Examine practice patterns of advanced psychology trainees on the PPAQ
  – How do trainees’ scores compare to seasoned providers’ responses from PPAQ validation study?
    • Essential (PPAQ-E) and Prohibited (PPAQ-P) subscales
    • Four practice domains
  – Are there differences in PPAQ domain scores based on trainee practice environment?
    • Clinic model
      – Coordinated Care, Collaborative Care, Integrated Care,
    • Current practice setting
      – VA versus other settings
  – How do trainees’ prior experiences relate to PPAQ domain scores?
    • Total number of months in current PC role
    • Items representing total training experiences, prior intervention training, access to resources, frequency of use of evidence-based practices (EBPs) in PC, and comfort in use of EBPs
<table>
<thead>
<tr>
<th>Types of Primary Care Settings</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative Care</td>
<td>primary care and psychology providers/trainees deliver care in the <strong>SAME</strong> practice setting</td>
</tr>
<tr>
<td>Coordinated Care</td>
<td>primary care and psychology providers/trainees practice <strong>SEPARATELY</strong> within their respective systems and exchange information as needed</td>
</tr>
<tr>
<td>Integrated Care</td>
<td>primary care and mental health providers/trainees work as a tightly integrated, on-site <strong>TEAM</strong> with unified care plans</td>
</tr>
</tbody>
</table>

![Integrated Care Diagram](image)
Analyses

- **PPAQ-P and PPAQ-E:**
  - Comparison of current sample vs. validation sample
- **PPAQ Domain scores:**
  - ANOVA of PC clinic model by domain mean score(s)
  - *T* test of setting by domain score(s)
- **Correlational analyses of trainee PPAQ domain scores:**
  - number of months in PC role
  - summations of past training experiences, frequency of and comfort in utilizing evidence-based practices
Demographics

- National web-based survey of pre-doctoral psychology interns and postdoctoral fellows \((N = 100)\) with prior training experiences in PC
  - Pre-doc intern: 50.9%, Post-doc fellows: 48.2%
  - 74 Female, 24 Male, 2 Transgender
  - Age: \(M = 31.3\) \((SD = 4.3\), Range: 25 to 56\)
  - 90% White, 4.5% Black, 4.5% Asian, .9% American Indian or Alaska Native
  - Graduate training programs
    - Clinical Psychology: 85.7%, Counseling Psychology: 8.0%, Health Psychology: 5.0%
  - Current training sites
    - VA: 73.2%
    - Non-VA: Outpatient medical clinic: 12.5%, FQHC: 8.9%, Other: 5.4%
  - Number of months in current PC role: \(M = 9.29\) \((SD = 6.89\), Range: 2 to 34\)
  - Theoretical orientation
    - Cognitive Behavioral: 70.5%, Integrative: 11.6%, Behavioral: 5.4%, Psychodynamic/Psychoanalytic: 3.6%, Other: 8.9%
  - Primary care clinic model
    - Integrated Care: 40.2%, Collaborative Care: 35.7%, Coordinated Care: 15.2%
Comparison to PPAQ Validation Study

• Trainees had higher mean total score on PPAQ-E subscale, lower mean score on PPAQ-P subscale compared to validation study sample
  – Trainees:
    • PPAQ-E: \( M = 152 \) (\( SD = 18 \))
    • PPAQ-P: \( M = 19 \) (\( SD = 5 \))
  – Validation study sample:
    • PPAQ-E: \( M = 144 \) (\( SD = 19 \))
    • PPAQ-P: \( M = 21 \) (\( SD = 5 \))
  – Mean scores suggest trainees demonstrating better overall fidelity to PCBH model

• Significant difference in PPAQ-E scores (\( F [3.96] = 3.72, p = .01 \)) based on access to resources, consistent with validation study
• No statistically significant relationship between CBT theoretical orientation and PPAQ-E subscale scores, unlike finding from validation study
Comparison to Validation Study, cont.

- On four practice domains of PPAQ (Beehler, Funderburk, King, Wade, & Possemato, 2015)
  - Trainees had higher mean scores than full validation study sample
  - Trainees reported scores similar to the “high performing” subgroup found in latent class analysis

<table>
<thead>
<tr>
<th>PPAQ Practice Domain</th>
<th>Full Sample</th>
<th>Low Performing Subsample</th>
<th>High Performing Subsample</th>
<th>Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Scope &amp; Intervention</td>
<td>3.96</td>
<td>3.79</td>
<td>4.28</td>
<td>4.22</td>
</tr>
<tr>
<td>Practice &amp; Session Mgmt</td>
<td>3.86</td>
<td>3.35</td>
<td>4.22</td>
<td>4.05</td>
</tr>
<tr>
<td>Referral Mgmt &amp; Care Continuity</td>
<td>3.74</td>
<td>2.76</td>
<td>3.97</td>
<td>4.12</td>
</tr>
<tr>
<td>Consultation, Collaboration &amp; Interprofessional Communication</td>
<td>3.30</td>
<td>2.41</td>
<td>3.59</td>
<td>3.48</td>
</tr>
</tbody>
</table>
### PPAQ Domains by PC Model

<table>
<thead>
<tr>
<th>Domain</th>
<th>(1) Integrated Care</th>
<th></th>
<th>(2) Collaborative Care</th>
<th></th>
<th>(3) Coordinated Care</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Scope &amp; Interventions</td>
<td>4.34</td>
<td>.40</td>
<td>4.18</td>
<td>.40</td>
<td>3.93</td>
<td>.41</td>
</tr>
<tr>
<td>Practice &amp; Session Management</td>
<td>4.23</td>
<td>.38</td>
<td>3.94</td>
<td>.44</td>
<td>3.81</td>
<td>.47</td>
</tr>
<tr>
<td>Referral Management &amp; Care Continuity</td>
<td>4.29</td>
<td>.60</td>
<td>4.00</td>
<td>.76</td>
<td>3.83</td>
<td>.66</td>
</tr>
<tr>
<td>Consultation, Collaboration, &amp; Interprofessional Communication</td>
<td>3.80</td>
<td>.67</td>
<td>3.29</td>
<td>.62</td>
<td>3.04</td>
<td>.87</td>
</tr>
</tbody>
</table>

Post hoc comparisons: 1 > 2 > 3

- Trainee scores on PPAQ domains suggest increased level of fidelity within each domain as level of integration within clinic setting increased
Practice and Session Management

Clinical Scope & Intervention

Consultation, Collaboration

Referral Mgmt, Care Continuity

Integrated Care

Collaborative Care

Coordinated Care
## Correlations Between Past Training and PPAQ Domains

<table>
<thead>
<tr>
<th></th>
<th>Prior PC Training</th>
<th>Prior EBP Training</th>
<th>Frequency of EBP Use</th>
<th>Comfort in EBP Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Scope &amp; Interventions</td>
<td>.17</td>
<td>.27**</td>
<td>.27**</td>
<td>.30**</td>
</tr>
<tr>
<td>Practice &amp; Session Management</td>
<td>.23*</td>
<td>.38**</td>
<td>.32**</td>
<td>.46**</td>
</tr>
<tr>
<td>Referral Management &amp; Care Continuity</td>
<td>.30</td>
<td>.29**</td>
<td>.52**</td>
<td>.47**</td>
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<td>Consultation, Collaboration, &amp; Interprofessional Communication</td>
<td>.26</td>
<td>.38**</td>
<td>.34**</td>
<td>.46**</td>
</tr>
</tbody>
</table>

* Correlation significant at $p = .05$; ** Correlation significant at $p = .01$
Results, cont.

- Subsequent analyses on PPAQ domains demonstrated
  - No significant differences on any of the domain mean scores between
    - Interns and post-docs
    - Trainees identifying as having a cognitive-behavioral theoretical orientation versus all other theoretical orientations
    - Trainees in VA versus non-VA settings
  - Domain mean scores not significantly correlated with number of months in integrated care role
    - Negative, non-significant correlation between number of months and mean score for Clinical Score and Interventions ($r = -.03$), Practice and Session Management ($r = -.01$)
Summary and Implications

• The PPAQ is the first reliable, validated measure of provider fidelity for PCBH model
  – Present study demonstrates possible utility of measure with trainees
  – Trainees with experience in integrated care (as opposed to coordinated or collaborative care) scored highest across domains, scored similarly to high performing sample from validation study

• Findings indicate that psychologists trained in settings other than integrated care (i.e., coordinated or collaborative care) may have greater need for additional training to maximize fidelity to PC-BH model, utilization of evidence based practices

• Findings suggest need for training programs to emphasize evidence-based training:
  – skills for consultation, collaboration & interprofessional communication
  – use of and comfort with relevant EBPs
Limitations and Future Directions

• Limitations
  – Relatively small sample size
  – Representativeness of sample
    • Bulk of participants currently practicing in VA settings
    • Majority reported PC clinic model as integrated care
  – Possible social desirability bias in responses
  – PPAQ designed to measure PCBH model, specifically
    • Validation sample included only VA PC-MHI providers

• Future directions
  – Using PPAQ in different types of training programs to help further understanding of gaps in evidence-based training for behavioral health providers
    • Using PPAQ to help further refine, define program descriptions, consistency in use of terminology
  – Combine PPAQ with other program development activities (e.g., facilitation and coaching) to monitor and support trainees’ development
  – Linking trainee and other provider clinical practices to patient outcomes
    • PPAQ Tool Kit (Lilenthal & Beehler, 2016)
References


Questions?