Predictors and Moderators of Parent Management Training and Collaborative Proactive Solutions in the Treatment of Oppositional Defiant Disorder in Youth

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Examining predictors and moderators:

• How can we improve these treatment outcomes?!?!

• Identify parent and child variables which impact outcome in both CPS and PMT

• Identify those who may respond better to CPS versus PMT (or visa versa)

• Better match therapy to individual clients and directly improve treatment outcomes
Research to date...

- The research on moderators for treatment outcomes in externalizing disorders is a “work in progress” (Maric, Prins & Ollendick, 2016).

- Moderators and predictors examined have commonly been confined to data that is routinely collected (e.g., age, SES, initial level of severity) and risk factors, such as maternal depression (Lundahl et al., 2006; Shelby & Shaw, 2014).

- There are currently limited studies with definitive results to answer whom and under what conditions and circumstances treatments produce the greatest benefits (Maric, Prins & Ollendick, 2016).

- Current research aims to build and strengthen our knowledge in this area by examining theoretically and clinically based moderators and predictors.
Child factors:
- Age
- Initial severity of conduct problems
- Lagging skills*

Parental factors:
- Maternal distress
- Parenting style*
- Emotion regulation
- Perceived self efficacy and competence
- Attributions of child misbehavior*
Child behavior outcome measures

N= 160

Independent assessor:

• Anxiety Disorders Interview Schedule (ADIS C/P)
  = Clinical severity rating (CSR) of ODD

Treating clinician:

• Clinical Global Impressions (GGI) – Severity/Improvement:

Self report:

• Disruptive Behavior Disorders Rating Scale (DBDRS) -ODD subscale
Lagging Skills

• Lagging skills are major contributing factors to the development of oppositional behavior (Greene, 2010).

• Challenging behavior occurs when the child does not have the skills to respond adaptively to the demands and expectations being placed upon them.

• Lagging skills are generally in the domains of:
  – executive functioning;  
  – communication skills;  
  – cognitive flexibility;  
  - language processing;  
  - emotion regulation;  
  - social skills.
Assessment of Lagging Skills for Plan B:

- 9 item scale

- Example items:
  - e.g., “Exhibits difficulty expressing concerns, needs, or thoughts in words”
  - e.g., “Difficulty empathizing with others, appreciating another person's perspective or point of view”
  - e.g., “Has difficulty considering a range of solutions to a problem”
Did Lagging Skills affect treatment outcome?

• **Yes!**

• They predicted but did not moderate outcome

• **The more lagging skills present at Time1, the poorer the treatment outcome at post and 6-month follow up**

<table>
<thead>
<tr>
<th>Outcome variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td><strong>Post tmt</strong></td>
<td></td>
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<tr>
<td>ADIS CSR</td>
<td>.110</td>
<td>.038</td>
<td>.225</td>
<td>.004</td>
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<tr>
<td>F(1,158) = 12.576, r² = .074, p &lt; .001</td>
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<tr>
<td>DBDRS</td>
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<td>.036</td>
<td>.175</td>
<td>.027</td>
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<tr>
<td>F(1,159) = 4.736, r² = .051, p &lt; .01</td>
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<tr>
<td><strong>6-month f/up</strong></td>
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<tr>
<td>ADIS CSR</td>
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<td>.036</td>
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<td>.027</td>
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<tr>
<td>F(1,159) = 4.993, r² = .31, p &lt; .05</td>
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Lagging skills are an important part of the picture!!
Parenting style  (Baumrind, 1966; Maccoby & Martin, 1983)

- **Permissive parenting** a warm style that is non-demanding, and non-controlling. They are less likely to set limits or use discipline and leave the child to regulate their own activities

- **Authoritarian parenting** values unquestioning obedience and attempts to control the behavior of the child, often through punitive disciplinary practices

- **Authoritative parenting** is firm and clear in expectations, but flexible and rational in setting limits or making exceptions
  - Research supports this parenting style
  - Treatment aims to shift parents away from authoritarian and permissive parenting to a more authoritative style
Parent Authority Questionnaire-Revised
(Reitman, Rhode, Hupp et al., 2002)

- 30 item scale
- Example items:

  **Authoritarian:**
  
  e.g., “When I ask my children to do something, I expect it to be done immediately without questions”.

  **Permissive:**
  
  e.g., “I usually don't set firm guidelines for my children's behavior.”

  **Authoritative:**
  
  e.g., “I always encourage discussion when my children feel family rules and restrictions are unfair.”
Did parenting style affect treatment outcome?

• Yes!

• Authoritarian and permissive parenting styles were predictors but not moderators

higher levels of permissive parenting predict better treatment outcome at POST

high levels of authoritarian parenting predict poorer outcomes at POST

• Authoritative parenting style was NOT a predictor or moderator

<table>
<thead>
<tr>
<th>Post tmt Outcome Variable</th>
<th>Predictor</th>
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<th>SE</th>
<th>β</th>
<th>p-value</th>
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<tr>
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<td>F(1,159) = 3.872, r²= .024, p=.05</td>
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Attributions

- Parental attributions may play a key role in problematic parenting and child behavior problems (Johnston, Chen and Oman, 2006; Snarr et al., 2009).

- The research investigating the effects of pre-treatment parental attributions on child behaviour outcomes is limited (Sawrikar & Dadds, 2018).

- Parental attributions of child mis-behavior has been typically categorized as either child or parental causal (e.g., Snarr et al., 2009).
Parent Cognition Scale—Child responsible subscale (Snarr et al., 2009)

• Child misbehavior is attributed to factors under the child’s control. The child is perceived as having a willful intent to misbehave, and/or a desire to have a negative effect on the parent.

• Example items

  “My child is headstrong”

  “My child purposely tries to get me angry”

  “My child thinks that he/she is the boss”

  “My child is very demanding”
Parent Cognition Scale-Parent Causal subscale (Snarr et al., 2009)

• Child’s misbehavior is attributed to stable, global, trait-like characteristics of the caregiver

• Example items

  “I’m not patient”

  “It’s hard for me to set limits”

  “I’m not structured enough with my child”

  “I don’t give my child enough attention”
Did attributions affect treatment outcome?

• **Yes!**

- **Child – causal attributions**
  - Were a predictor at POST, but not a moderator.
  - *The more mothers attribute the child’s misbehaviour to factors under the child’s control the better the treatment outcome at POST treatment.*

- **Parent responsible attributions**
  - Were a predictor at POST and 6 month FOLLOW UP, but not a moderator.
  - *The more mothers attribute child behavior to their own behaviors, traits, or characteristics, the better the treatment outcome at POST and 6 month FOLLOW UP*

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### Outcome Predictor | B | SE | β | p-value
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**Post tmt:**

| ADIS CSR | Child resp | -.081 | .031 | -.203 | .010  
| F(1, 159) = 10.568, r² = .088, P < .01 |
| CGI-S | Child resp | -.070 | .023 | -.235 | .003  
| F(1, 159) = 9.253, r² = .055, P < .01 |
| Parent causal | -.083 | .029 | -.224 | .004  
| F(1, 159) = 8.325, r² = .050, P < .01 |
| CGI-I | Child resp | -.043 | .013 | -.249 | .002  
| F(1, 159) = 10.403, r² = .062, p = .002 |
| DBDRS | Child resp | -.188 | .064 | -.214 | .002  
| F(1, 159) = 9.947, r² = .059, p < .01 |
| **6-month f/up**

| DBDRS | Parent causal | -.211 | .081 | -.204 | .010  
| F(1, 159) = 6.836, r² = .041, p < .05 |
Where to from here?

- Better understand for whom, under what conditions and why the treatments work:
- Continue to examine moderators and predictors of treatment outcome
- Look at possible mediators of treatment outcome

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