Coping and Communication Skills Versus Supportive Therapy for Women Diagnosed with Gynecological Cancers

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Gynecological Cancers

• Prognosis typically poor
  – Ovarian cancer typically diagnosed at later stages
• Lengthy disease course with multiple recurrences
• Debilitating surgery and disease effects
Distress Rates Are Relatively High

• Between 20 and 50% women report moderate to severe anxiety and up to 1/3 report moderate to severe levels of depression

• The trajectory of distress across the disease course is inconsistent
  – Probably relates to disease course
Few Published Interventions

• Yield Inconsistent Findings
  – 2/5 yield no effects on distress outcomes
  – 1/5 reported adverse effects on distress
  – 2/5 report beneficial effects on distress
    • Peterson & Quinlivan (2002)
      – One hour relaxation and counseling interview conducted by medical doctor
    • Cain et al. (1986)
      – Standard group, individual theme counseling, group theme counseling
      – Effects on distress for group and indiv theme counseling
      – Significant effects on depression and anxiety
  – Effects on other outcomes have been shown
    • Self-esteem (Capone et al 1980)
Methodological Issues

- Small sample size (< 50) - underpowered
- Unstandardized interventions
- No treatment fidelity
- No medical and demographic covariates
- No identification of moderators and mediators
- Non-sophisticated analyses approaches
  - No intent-to-treat analyses/growth curve
- No comparison of treatment approaches
  - Non-specific effects of therapist support
Goals of Original Study (1999-2005)

PRIMARY AIM
To compare the efficacy of two interventions Coping and Communication skills (CCI) vs Supportive Counseling (SC) vs Usual care on depressive symptoms and cancer-specific distress

– Hypotheses: CCI > SC > UC
– Long-term effects greatest for CCI
SECONDARY AIMS

1. To identify treatment moderators
   – Emotional expressivity
     • Both CCI and SC will be more effective for more expressive women
   – Disease Stage/Impairment
     • Both CCI and SC will be more effective for women with advanced disease and/or more physical impairment
   – Patient Age
     • Both treatments more effective for younger pts

2. To identify treatment mechanisms for each treatment
   – CCI will have its effects by improving skills focused on in the treatment
     • Positive reappraisal, acceptance, emotional expression, problem solving, seek support, attempting to understand emotional reactions to cancer, self-esteem
   – SC will have its effects by processes encouraged by the treatment
     • Emotional expression, attempts to understand emotional reactions to cancer, self-esteem

3. Evaluate the short- and long-term effects of non-specific therapy processes
   – Generic process model of psychotherapy
Intervention Outcomes and Moderators

Manne et al., JCCP, 2007
Study Methods

- Participants randomly assigned to 3 treatment arms
  - Supportive Counseling (SC)
  - Coping and Communication Skills Intervention (CCI)
  - Usual Care (UC)
- Participants complete measures pre-assignment, three, six, and nine months post-baseline
- Assignment stratified by BDI score ($\geq 19$)
Measures

• Beck Depression Inventory
• Impact of Events Scale
• Dispositional Emotional Expression
• Functional Impairment (CARES)
• Treatment expectancy (Session 1) and Treatment evaluation (Session 6)
• ECOG, demographics, stage of disease
CCI

• 6 weekly sessions plus telephone booster 1 wk post
• Treatment manualized with home assignments
• Topics
  1. Enhancing stress management and problem solving cancer-related problems
  2. Re-evaluating life priorities/finding meaning after diagnosis
  3. Cognitive restructuring targeting cancer concerns
  4. Identifying emotional needs and reducing internal (cognitions, expectancies, expressiveness) and external barriers (others) to these meeting needs
  5. Coping with sexuality and body image concerns
Supportive Counseling

• Six hourly sessions plus telephone booster
• Encourage emotional expression, support existing coping, enhance self-esteem and autonomy (Novalis’ model)
• Main techniques: Reflection, restatement, empathy, reassurance, validation, clarification, exploration, no interruptions
• No skills taught, no didactic content
Figure 1. Study schema.
Treatment Fidelity

• Fidelity checklists developed for each intervention
• SC: 18 counseling behaviors from model were coded in 5 minute segments
• CCI: Average fidelity across sessions = 90%
• SC:
  – Tracking (88% of 5 min segments)
  – Exploration (66% of 5 min segments)
  – Restatement (47% of 5 min segments)
  – Reflection (19% of 5 min segments)
Treatment Attendance

- 68% SC and 66% of CCI participants attended 5 - 7 sessions
- 13.3% SC and 15% CCI participants attended 1 - 4 sessions
- 17.5% of SC and 19.7% of CCI participants attended no sessions
  - All were asked to complete follow ups
Treatment Expectancies and Evaluations

• Higher expectancy ratings for CCI than SC
  – $M_{CCI} = 3.22, SD = .46$
  – $M_{SC} = 2.95, SD = .49$

• Treatment evaluation scores across all intervention group participants were high
  – $M = 57.6, SD = 8.2$, maximum =69
  – CCI treatment evaluation ratings were significantly higher than SC evaluation ratings
    • $M_{CCI} = 59.76$
    • $M_{SC} = 55.76$
    • $t (147) = 2.9, p < .01$
Table 1  
Basic Descriptive Information By Group

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>CCI</th>
<th>SC</th>
<th>UC</th>
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<tbody>
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<td>Age</td>
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<td>55.99 (10.9)</td>
<td>55.88 (11.2)</td>
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Table 2
Means and Standard Deviations for Study Outcomes by Treatment Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>CCI</th>
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<th>SC</th>
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<th>UC</th>
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<tr>
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<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
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<td>7.86</td>
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<td>3-month follow-up</td>
<td>9.63</td>
<td>6.32</td>
<td>9.95</td>
<td>7.49</td>
<td>11.04</td>
<td>7.93</td>
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<td>6-month follow-up</td>
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<td>6.91</td>
<td>9.30</td>
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<td>9-month follow-up</td>
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<td>Impact of Event Scale</td>
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<td>17.13</td>
<td>27.11</td>
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<td>6-month follow-up</td>
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<td>22.74</td>
<td>15.84</td>
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Note. CCI = coping and communication-enhancing intervention; SC = supportive counseling; UC = usual care control.
Table 3
Intent-to-Treat Results for Growth Curve Model Predicting Depressive Symptoms

<table>
<thead>
<tr>
<th>Effect</th>
<th>Parameter estimate</th>
<th>95% CI</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>21.07</td>
<td>17.13, 26.55</td>
<td>8.97</td>
<td>&lt;.0001</td>
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<td>Intercept–slope covariance</td>
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<tr>
<td>Slope</td>
<td>0.26</td>
<td>0.16, 0.48</td>
<td>3.71</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Tests of fixed effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Parameter estimate</th>
<th>95% CI</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>-0.97</td>
<td>-1.29, -0.65</td>
<td>557</td>
<td>-5.98</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Time × Time</td>
<td>0.09</td>
<td>0.06, 0.12</td>
<td>557</td>
<td>6.32</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Age</td>
<td>-0.16</td>
<td>-0.20, -0.10</td>
<td>339</td>
<td>-6.64</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Baseline self-reported physical symptoms</td>
<td>0.23</td>
<td>0.16, 0.24</td>
<td>339</td>
<td>9.92</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Baseline positive EE</td>
<td>-0.39</td>
<td>-0.55, 0.22</td>
<td>339</td>
<td>-4.67</td>
<td>&lt;.0001</td>
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<tr>
<td>ECOG rating</td>
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<td>0.43, 2.11</td>
<td>557</td>
<td>2.96</td>
<td>.0032</td>
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<td>SC</td>
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<td>-1.64, 1.53</td>
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<td>CCI</td>
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<td>-1.74, 1.20</td>
<td>339</td>
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<tr>
<td>Time × SC</td>
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<td>557</td>
<td>-2.44</td>
<td>.015</td>
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<tr>
<td>Time × CCI</td>
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<td>-0.56, -0.02</td>
<td>447</td>
<td>-2.09</td>
<td>.0372</td>
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</tbody>
</table>

Note. CI = confidence interval; EE = emotional expressiveness; ECOG = Eastern Cooperative Oncology Group; SC = supportive counseling; CCI = coping and communication-enhancing intervention.
Results- BDI

- Time, Group and Group X Time Effects:
  - Quadratic – reduction in sx followed by increase over time
  - No Group effect
  - Group X Time Effect
    - 6 month FU
      » CCI depression < UC
    - 9 month FU
      » CCI depression < UC
      » SC depression < UC
- 10.4% variance accounted for in BDI trajectory
Interaction of Time X Treatment Group
Table 4
Intent-to-Treat Results for Growth Curve Model Evaluating Moderators Predicting Depressive Symptoms

<table>
<thead>
<tr>
<th>Effect</th>
<th>Parameter estimate</th>
<th>95% CI</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>20.93</td>
<td>17.04, 26.33</td>
<td>9.04</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Intercept slope covariance</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Slope</td>
<td>0.21</td>
<td>0.12, 0.43</td>
<td>3.27</td>
<td>.0005</td>
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</tbody>
</table>

Tests of fixed effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Parameter estimate</th>
<th>95% CI</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>-0.95</td>
<td>-1.26, -0.65</td>
<td>549</td>
<td>-6.14</td>
<td>&lt;.0001</td>
</tr>
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<td>Time × Time</td>
<td>0.10</td>
<td>0.07, 0.12</td>
<td>549</td>
<td>6.61</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Age</td>
<td>-0.16</td>
<td>-0.20, -0.11</td>
<td>337</td>
<td>-6.58</td>
<td>&lt;.0001</td>
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<tr>
<td>Baseline self-reported physical symptoms</td>
<td>0.20</td>
<td>0.16, 0.24</td>
<td>337</td>
<td>9.98</td>
<td>&lt;.0001</td>
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<td>ECOG rating</td>
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<td>-1.86, 1.68</td>
<td>549</td>
<td>-0.10</td>
<td>.9173</td>
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<td>SC</td>
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<td>CCI</td>
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<td>549</td>
<td>-2.66</td>
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<td>Baseline positive EE</td>
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<td>Time × ECOG</td>
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<td>Baseline Positive EE × SC</td>
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<td>Baseline Positive EE × CCI</td>
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Note. CI = confidence interval; ECOG = Eastern Cooperative Oncology Group; SC = supportive counseling; CCI = coping and communication-enhancing intervention; EE = emotional expressivity.
Results- Moderator Analyses

• No effects for age or impairment (CARES)
• ECOG effects
  – Low ECOG, no Group X Time effects
  – High ECOG (more impaired)
    • At 6 and 9 month FU, SC$_{BDI}$ < UC$_{BDI}$
• Baseline Emotional Expressiveness effects
  – Low EE, no Group X time effects
  – High EE
    • At 9 month FU, SC$_{BDI}$ < UC$_{BDI}$
INTERACTION OF TIME X ECOG

1 SD above mean

1 SD below mean
Positive Expressivity Moderates Treatment Effects

TIME BY TREATMENT GROUP BY POSITIVE EMO EXPRESSIVENESS
1 S.D. BELOW THE MEAN

TIME
12 9 6 3 0 -3
MEAN BECK DEPRESSION
16 15 14 13 12 11 10 9
Treatment Group
Usual Care
CCI
Supp Couns

Diagram showing the relationship between time and Beck Depression scores across different treatment groups, with positive expressivity moderating treatment effects.
Positive Expressivity Moderates Treatment Effects

TIME BY TREATMENT GROUP BY POSITIVE EMO EXPRESSIVENESS
1 S.D. ABOVE THE MEAN

TIME
-3 0 3 6 9 12

MEAN BECK DEPRESSION
16 14 12 10 8 6

Treatment Group
○ Usual Care
+ CCI
▼ Supp Couns
INTERACTION OF TIME X BASELINE EMO EXPRESSIVITY

1 SD below mean on EE

1 SD above mean on EE
Results - IES

- Main effects for Time, Group, and Group X Time
  - IES declines over time
  - Higher baseline IES, slower decline
  - Younger age, more impairment, higher education, greater IES
  - No Group or Group X Time effects
Conclusions

• CCI had beneficial impact on depressive symptoms compared with SC and UC
• SC more effective than UC for women with more ECOG impairment and women who were more expressive of positive emotions at baseline
• All women became more depressed over time
  – Which may have “washed out” Group X Time effects of both CCI and SC
  – Both interventions (CCI < SC) delayed this return of depressive symptoms, with delay longer for CCI
MEDIATORS OF CCI AND SC EFFECTS

Manne et al., JCCP, 2008
Methods

• Used data taken from the same study time points (baseline, 3 months, 6 months, and 9 months post baseline)
Measures

• Positive reappraisal, acceptance, planful problem solving, seeking support for emotional reasons, seeking support for instrumental reasons, emotional processing (COPE, Carver et al., 1993)

• Emotional Expression (King & Emmons, 1990)
  – Comfort expressing positive emotions (joy), intimacy emotions (love), and negative emotions (anger)

• Cancer-related emotional expression
  – Emotional expression scale (“I acknowledged my emotions) (Stanton et al., 2000)

• Self-esteem (Rosenberg, 1962)
<table>
<thead>
<tr>
<th>Variable and Assessment time</th>
<th>CCI</th>
<th>SC</th>
<th>UC</th>
<th>alpha</th>
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<tr>
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<tr>
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<td>11.05 (3.36)</td>
<td>11.11 (3.01)</td>
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<td>Six months</td>
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<td>10.87 (3.30)</td>
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<td>months</td>
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<td><strong>Planful problem-solving</strong></td>
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<tr>
<td>Baseline</td>
<td>11.23 (3.22)</td>
<td>10.69 (3.45)</td>
<td>11.96 (4.96)</td>
<td>.69</td>
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<td>Three months</td>
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<td>10.59 (3.54)</td>
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<td>months</td>
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<td>months</td>
<td>10.75 (3.87)</td>
<td>9.67 (3.29)</td>
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<td><strong>Expression of positive emotion</strong></td>
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<tr>
<td>Baseline</td>
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<td><strong>Expression of intimacy emotions</strong></td>
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<tr>
<td>Baseline</td>
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<td>15.23 (2.68)</td>
<td>15.26 (2.50)</td>
<td>.61</td>
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<tr>
<td>Three months</td>
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<td>Six months</td>
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<td>Nine months</td>
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<td>15.13 (2.78)</td>
<td>14.97 (2.66)</td>
<td>.68</td>
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<tr>
<td><strong>Self-esteem</strong></td>
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<tr>
<td>Baseline</td>
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<td>Six months</td>
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<td>25.32 (4.56)</td>
<td>24.54 (5.03)</td>
<td>23.66 (5.09)</td>
<td>.89</td>
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</table>
Results for CCI

Effect for CCI on depressive symptoms was *fully mediated* by:

- Positive reappraisal
- Planful problem solving
- Self-esteem

Effect of CCI on depressive symptoms partially mediated by:

- Expression of intimacy emotions
- Expression of positive emotions
Results for SC

SC significantly increased cancer-related emotional expression, emotional processing, positive reappraisal, and seeking instrumental support.

SC had marginal effects on planful problem solving.

SC did not have significant effects on acceptance, seeking emotional support, self-esteem, expression of intimacy emotions, expression of positive emotions.
SC Mediators

• Only positive reappraisal met all criteria for mediation
• However parameter estimate for SC as a predictor of BDI continued to be significant suggesting partial mediation
Conclusions about CCI

• CCI mediators were consistent with the content of this therapy approach’s foci:

  Benefit finding, problem-solving skills, self-esteem, and to some extent enhancing the expression of intimacy-related emotions

  HOWEVER, support seeking did not mediate and neither did acceptance…
Conclusions about SC

• SC was more of a mystery
  – Only increases positive reappraisal mediated effects
  – No clear explanation as to why other mediators did not work
  – Need to look more closely at sessions
Other Mechanisms?

- Emotional processing during SC sessions
  Greenberg’s measure of depth of emotional engagement and processing
  Approaching, experiencing, and tolerating emotions
Non-Specific Therapy Processes

Manne and colleagues (JCCP 2010)
Therapy Processes

• Little attention paid to non-specific therapy processes in the effects of psych interventions for cancer patients

• Nonspecific, common elements of therapy known to predict both short-term and long-term effects of therapy (working alliance)
What are the Non-specific Effects?
Generic Model of Psychotherapy (Orlinsky, Kolden)

• Six main change processes
  – Therapeutic contract (commitment)
  – Therapeutic interventions (directiveness)
  – Temporal patterns (rupture and repair)
  – Therapeutic bond
  – Therapeutic realizations
  – Therapeutic openness/involvement
Generic Model, continued

Process Definitions

Bond
* quality of emotional bond with therapist
* collaboration between patient and therapist in setting goals for therapy
* agreement on how to achieve goals

Realizations
* insights about past connections
* unburdening of concerns
* enhanced morale and mastery experiences

Openness/ Involvement
* capacity to experience and process emotions and receive feedback during sessions
General Model, continued

Effects of treatment are short- and long-term

*Short -term outcomes* (during treatment)
Post-session progress
Behavioral and mood changes post - session

*Long-term outcomes* (after treatment ends)
Empirical Support for GMP

• Early bond predicts long-term outcomes
• Therapeutic realizations predict better short-term therapy outcomes (Kolden 2006)
  – Greater perceived progress
  – Greater post-session mood
Figure 1. Path Model for Associations between GMP constructs and Outcomes

- Therapeutic Bond Session 2
- Emotional Arousal Session 3
- Therapeutic Realization Session 3
- Session Progress & Post-Session Mood Session 3-6
- Post-treatment Depressive symptoms
Hypothesized Model for Associations for GMP constructs and outcomes

Therapeutic Alliance: Bond, Task, and Goal

- Emotional Arousal – Positive Affect
- Emotional Arousal – Negative Affect

Therapeutic Realization

Session Progress

Post-Session Depressed Mood

Post-treatment Depressive Symptoms
Study Measures

• Post- session outcomes after ALL in person sessions
  – Depressive symptoms (BDI)
  – Session Progress (How well session went)

• Therapy process
  – Working Alliance (after session 2)
  – Therapeutic realizations (all sessions)
  – Therapeutic openness/involvement (all sessions)
Process Measures

• Working Alliance Inventory (Horvath & Greenberg, 1989)

• Therapeutic Realizations- Therapy Session Report (Kolden 1993)
  Unburdening (“A chance to let go and get things off my chest”)
  Mastery/Insight (“More ability to feel my feelings”)
  Encouragement (“Confidence to try things differently”)
Process Measures, continued

• Therapeutic openness/involvement
  – Therapy session report
    • 30 feelings, positive and negative
Final Model for the GMP during Sessions 2 and 3 predicting post-session BDI

BDI Session 2

Negative affect - Session 2

Therapeutic alliance - Task, Session 2

Therapeutic realization - Session 2

Positive affect - Session 2

Therapeutic alliance - Bond, Session 2

Session progress - Session 2

Negative affect - Session 3

Therapeutic realization - Session 3

Positive affect - Session 3

BDI Session 3

Session progress - Session 3

Variables and coefficients:

- BDI Session 2: 0.17
- Negative affect - Session 2: 0.49
- Therapeutic alliance - Task, Session 2: 0.15
- Therapeutic realization - Session 2: 0.22
- Positive affect - Session 2: 0.52
- Therapeutic alliance - Bond, Session 2: 0.19
- Session progress - Session 2: 0.44
- Negative affect - Session 3: 0.16
- Therapeutic realization - Session 3: 0.57
- Positive affect - Session 3: 0.25
- Session progress - Session 3: -0.30

Correlation values indicate the strength of the relationship between variables.
Final model of ratings made about Sessions 2 and 3 predicting Session 6 and Post-treatment BDI

- Negative affect Session 2
- BDI Session 2
- Session progress Session 2
- Therapeutic alliance-bond Session 2
- Positive affect Session 2
- Therapeutic realization Session 2
- Negative affect Session 6
- BDI Session 6
- Post-treatment BDI
- Session progress Session 6
- Positive affect Session 6
- Therapeutic realization Session 6

Correlation coefficients:
- Negative affect Session 2 to Negative affect Session 6: 0.53
- BDI Session 2 to BDI Session 6: 0.59
- Session progress Session 2 to Session progress Session 6: 0.33
- Therapeutic alliance-bond Session 2 to Positive affect Session 6: 0.19
- Positive affect Session 2 to Positive affect Session 6: 0.43
- Therapeutic realization Session 2 to Therapeutic realization Session 6: 0.50
- Negative affect Session 6 to BDI Session 6: 0.12
- BDI Session 6 to Post-treatment BDI: 0.23
- Session progress Session 6 to Post-treatment BDI: 0.48
- Positive affect Session 6 to Therapeutic realization Session 6: 0.42
- Therapeutic alliance-bond Session 2 to Therapeutic realization Session 2: 0.22
- Post-treatment BDI to Therapeutic realization Session 6: 0.36
- Positive affect Session 6 to Post-treatment BDI: 0.22
Conclusions

• Bond predicted positive emotional arousal during early sessions, which then predicted therapeutic realizations and greater perceived session progress.
• When post-treatment depression was studied, early bond predicted later therapy realizations indirectly via positive emotional arousal which then predicted greater session progress and ultimately less depression after treatment ended.

Summary:

Bond creates safety to express affect and affect lead to insights, mastery, and unburdening of concerns—ultimately to progress in therapy and better mood.

Less depression lead to lower depression after treatment ended.
Conclusions, continued

• The role of treatment alliance on therapy processes and outcomes was not as strong as others have reported

• Bond was predictive, but not Task and Goals
The Negativity Loop

• Negative affect during sessions and depression form loop
• Early depression is highly predictive of post-therapy depression
• Looks like positive affect may play a protective role
Current R01 Project

- Added a treatment session to improve efficacy- address increases in depression we began to see (8 sessions)
- CCI is enhanced by adding a session focusing on managing fears of recurrence and attention to physical symptoms
- SC was enhanced by more focus on affect and goal setting in sessions
- Follow women for a longer period of time, through first recurrence to evaluate long-term effects (18 months rather than 9 months)
- Identify unique and shared mechanisms
  - CCI: holding back sharing, coping confidence, stress management skill, goal attainment in therapy
  - SC: Depth of emotional processing, sessions 2 and 6
- Broader range of treatment outcomes
  - Global and Spiritual QOL
  - Concerns about Recurrence
Refusal & Verbal Revocation, n = 1084

Written Consent, n = 373 (25%)

Approached, n = 1457

SC, n=125
- Q2 completed, n = 118
- Q3 completed, n = 109
- Q4 completed, n = 109
- Q5 completed, n = 95
- Q6 completed, n = 79

UC, n=124
- Q2 completed, n = 113
- Q3 completed, n = 116
- Q4 completed, n = 103
- Q5 completed, n = 89
- Q6 completed, n = 75

CCI, n=120
- Q2 completed, n = 107
- Q3 completed, n = 100
- Q4 completed, n = 104
- Q5 completed, n = 88
- Q6 completed, n = 78
Findings to date

Affect experienced during our sessions

Holding back sharing concerns and psychological outcomes

Fear of Recurrence – trajectories over time
Coding Therapy Sessions: Emotion Episodes

An EE MUST contain:

1) Emotional Reaction and/or Action Tendency

2) Situation

Consistent with previous studies, the present study included Emotional Reaction, Action Tendency, and Situation in EE coding.
Emotional Processing

- Emotional Processing refers to the "process of getting in touch, introspecting and making sense of what they (patients) feel, and of how their feelings and experiencing are connected to their life and personality" (Fitzpatrick et al., 1999)

- Emotional processing has been linked to treatment outcome in a variety of treatment modalities:
  - **Cognitive Therapy for Depression**
    - High levels of emotional processing was related to decreased depression symptoms at the end of treatment (Castonaguay et al., 1996)
  - **Experiential Treatment of Depression**
    - Early and late emotional processing was related to reductions in depression symptoms and increases in self-esteem (Pos et al., 2003)

- Similar levels of emotional processing between Psychodynamic-Interpersonal and Cognitive-Behavioral Therapies (Wiser & Goldfried, 1993)
Measuring Emotional Processing

The Experiencing Scale (EXP) (Klein, Mathieu, Gendlin & Kiesler, 1969)

- Seven-point (1-7) rating system used to measure patient’s emotional and cognitive involvement in therapy using transcripts, videotapes, and audiotapes of therapy sessions
- Change from lower to higher stages represent increases in elaboration and integration of emotions
- **Mode**: General level of emotion processing in a segment
- **Peak**: highest level reached in a segment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Stage 1</td>
<td>The focus is external; The content is impersonal</td>
</tr>
<tr>
<td>Stage 2</td>
<td>The focus is still external; The content is personal; No description of feelings</td>
</tr>
<tr>
<td>Stage 3</td>
<td>The focus is mostly external or behavioral with added remarks about feelings or private experiences</td>
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<tr>
<td>Stage 4</td>
<td>The focus is internal; The content is a clear presentation of feelings/inner perspective</td>
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<td>Stage 5</td>
<td>Purposeful exploration of feelings/experiencing with 1.) a defined problem about self in terms of feelings and 2.) exploration of problem</td>
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<tr>
<td>Stage 6</td>
<td>The content is a synthesis of readily accessible and newly recognized feelings to resolve issues</td>
</tr>
<tr>
<td>Stage 7</td>
<td>The content is expanding awareness of immediate internal processes that lead to further exploration</td>
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Emotion Episodes

• First and sixth sessions coded
• 325 sessions coded across treatment arms
• Positive and negative emotions coded during episodes
Results

• 324/325 sessions had at least one emotional episode
• 77% of the episodes contained negative emotions (fear and sadness)
• Positive - Joy
• Majority focused on cancer topic
• The remaining were positive (17%) and mixed (5%)
• Least common emotion - love
Change between Early and Late Sessions and Arms

- Total episodes higher in first vs sixth session
- Positive emotions increased significantly from first to sixth session (17 to 21%)
- Proportion of cancer-related emotion episodes decreased from first to sixth session (65 to 55%)
- No differences between CCI and SC
Predictors of EEs

SC intervention
More distress pre-intervention
More emotional expressivity
More patient-reported session progress
Holding Back Sharing Concerns with Friends and Family and Dispositional Emotional Expressivity Predicting Cancer related Distress

The effects of holding back are stronger for women who are more emotionally expressive.
Holding Back Sharing Concerns with Friends and Family and Dispositional Emotional Expressivity Predicting Emotional Well-Being

The effects of holding back are stronger for women who are more emotionally expressive.
Trajectories of global fear of progression, role worry, health worry, and womanhood worry
Fear of Progression

Membership was in three main groups
- 25% Low and stayed low
- 25% High and decreased
- 50% High and stayed high

Who is at risk?
- Initially highly depressed/IES high
- Poor coping efficacy
- Held back sharing concerns
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