OVERVIEW OF TALK

- Background
- Intervention Development
- Research Plan
  - Open Trial
  - RCT
- Discussion
  - Conclusions
  - Limitations
  - Future Directions
Social anxiety (SA) and depression are prevalent among adolescents, often co-morbid, and resistant to change. Programs to prevent depression have been developed but no known prevention programs for adolescent SA. Work on SA has focused on preadolescents and has been treatment- rather than prevention-oriented. Given high co-morbidity between SA and depression, there is a need for a unified, transdiagnostic approach to the prevention of these co-occurring disorders. Our overall aim was to develop and test a school-based preventive intervention for adolescent SA and/or depression.

1 Kessler et al., 2005; Merikangas, 1995; Stein et al. 2001
Peer relations are critical during adolescence. Peer victimization (PV) contributes to adolescent social anxiety and depression, concurrently and prospectively, but is not addressed directly in prevention programs. Overt PV (being threatened, target of physical acts), Relational PV (being socially excluded), Reputational PV (being embarrassed; reputation damaged), Cyber forms of PV are also similarly harmful.

PV is frequent and hard to detect. Adolescents often don't disclose these events to adults.

We targeted PV as a peer-risk factor for the development of social anxiety and depression in our intervention.

\[^1\]La Greca & Harrison, 2005; Landoll, La Greca et al., 2013, 2015; Siegel et al., 2009; Storch et al., 2004; Vernberg et al. 1992
Frequency of PV in Community Sample of Adolescents

<table>
<thead>
<tr>
<th>Type of PV</th>
<th>Sometimes (more than 1-2 times)</th>
<th>Often (weekly or more)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overt</td>
<td>13.8%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Relational</td>
<td>23.3%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Reputational</td>
<td>20.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Cyber</td>
<td>15.4%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

\[a\] Frequency in the previous 2 months – Total PEERS Sample \( N = 1162 \)
Who Do Adolescents Tell?

- 50% of adolescents do not tell anyone about PV
- Among those who do disclose PV:
  - Friends were the most common informant
  - Teachers were the least common informant
  - Parents/teachers most likely to be told about Overt PV

<table>
<thead>
<tr>
<th>Disclosure to . . .</th>
<th>Overt PV</th>
<th>Relational PV</th>
<th>Reputational PV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>72%</td>
<td>79%</td>
<td>78%</td>
</tr>
<tr>
<td>Parents</td>
<td>52%</td>
<td>38%</td>
<td>44%</td>
</tr>
<tr>
<td>Teachers</td>
<td>42%</td>
<td>10%</td>
<td>25%</td>
</tr>
</tbody>
</table>
OVERALL GOAL

- Develop a school-based preventive intervention for “at risk” adolescents who:
  - Report elevated levels of relational and reputational PV
  - Report elevated (subclinical) levels of social anxiety and/or depressive symptoms

- Evaluate the intervention with respect to
  - Feasibility
  - Acceptability
  - Preliminary Benefit
INTERVENTION DEVELOPMENT
PEERS/UTalk Project: Funded by NIMH R34
- Collaborators: Jill Ehrenreich May, Laura Mufson

Interpersonal Psychotherapy Model seemed like an excellent fit for our goals
- Focuses on interpersonal skills
- Has a strong evidence base as a preventive intervention for adolescent depression

Adapt Interpersonal Psychotherapy-Adolescent Skills Training (IPT-AST)
- Incorporate peer issues, coping with PV
- Address social anxiety and social avoidance

¹Young, Mufson, & Davies, 2006; Young, Mufson, & Gallup, 2010
PEERS/UTalk Version of IPT-AST
  - 2 Individual Sessions (+ mid-program “touch base”)
  - 10 Group Sessions (2 added to IPT-AST program)

Intervention focused on
  - Interpersonal role disputes (conflict)
  - Interpersonal role transitions (change)
  - Interpersonal skills (communication)
  - Interpersonal insecurity (fitting in) – New!

Focus on friendship development and ways to manage challenging peer situations
Added Strategies for Reducing Social Anxiety

- Weekly ratings of social anxiety (and depressive sx$s)
- Made connections between interpersonal events and these feelings
- Psychoeducation for social anxiety
- Social approach exposures (inside and outside group)
- SUDS ratings during role-plays and group activities to enhance anxiety reduction
Added Strategies For Enhancing Friendships And Dealing With PV

- Closeness circle modified to obtain more information on peers/friendships and PV experiences
- Psychoeducation on friendships and how to handle PV
- Focused on peer examples throughout role-plays and group discussion
  - What to do if a friend leaves you out of an activity?
  - How to approach a peer you’d like to get to know better?
  - How to handle conflict with friends?
RESEARCH PLAN
OVERALL PROCEDURES

Year 1
- Focus Groups
  - Adolescents, school personnel (up to 16 each)
  - Strategies for recruitment, acceptability, program content
- Manual Development—PEERS/UTalk version of IPT-AST
- Open Trial with up to 16 adolescents

Years 2 – 3
- Manual refinement: PEERS/UTalk & Education Support
- Pilot Randomized Controlled Trial (RCT) of the Intervention
- RCT 6-month follow-up
Recruitment Flyer

University of Miami’s

Put a positive spin on your social life!

What: Research program!
Where: Your school
When: Group meetings once a week during the Spring Semester

This research is designed to create a group program in your school that will help improve social skills and communication. Students who sometimes feel worried, sad or unsure about their social relationships will qualify.

What else:
Receive up to $75 for participation!

For more information, call 305-238-9689 or email RESEARCH@Miami.edu
OPEN TRIAL
OPEN TRIAL: PARTICIPANTS

**SCREENING**
- 108 adolescents screened
- Ages 14-18 years ($M$ age = 15.45 yrs)
- 69% girls; 91% Hispanic
- 41 met initial eligibility criteria
- 31 evaluated with diagnostic interview

**OPEN TRIAL**
- 14 enrolled (2 groups of 7)
- Ages 14-18 years ($M$ = 15.64 yrs)
- 79% girls; 86% Hispanic
OPEN TRIAL: PRIMARY MEASURES

- **Revised Peer Experiences Questionnaire** (De Los Reyes & Prinstein, 2004).
  - Scores > 6 on relational and/or reputational PV required for eligibility
- **Social Anxiety Scale – Adolescents** (SAS-A; La Greca & Lopez, 1998)
  - 18 items assess social evaluative fears and social avoidance and distress
  - Total SAS-A score > 50 needed for eligibility.
- **Center for Epidemiological Studies – Depression** (CES-D; Radloff, 1977)
  - CES-D score > 16 for eligibility
- **Anxiety Disorders Interview for Children – DSM IV** (Silverman & Albano, 1996)
  - Rule out disorders (social anxiety, depression, conduct, eating disorders, SI)
  - Clinician Severity Ratings for SAD and DEPRESSION as a primary outcome
- **Clinician Global Improvement Scale – Severity** (CGI-S; Zaider et al., 2003)
  - Clinician rated change from first to last session a primary outcome
OPEN TRIAL RESULTS: Feasibility

Overall, good attendance at sessions

- 86% completed the intervention
  - 2 withdrew due to schedule conflicts
- 14% missed 1-2 sessions
- Overall mean attendance = 10.8 of 12 sessions
How would you rate the quality of the group you participated in?

How satisfied are you with the amount of help you have received?

Note: None answered “Poor” or “Fair”

Note: None answered “Quite dissatisfied” or “Indifferent or mildly dissatisfied”
## OPEN TRIAL: Baseline to Posttest Change for all Primary Outcomes

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baseline</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peer Victimization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational</td>
<td>2.17 (.61)</td>
<td>1.76 (.68)*</td>
</tr>
<tr>
<td>Reputational</td>
<td>1.81 (.68)</td>
<td>1.31 (.36)**</td>
</tr>
<tr>
<td>Cyber</td>
<td>1.45 (.35)</td>
<td>1.17 (.22)**</td>
</tr>
<tr>
<td><strong>Clinician Ratings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR (ADIS-C)</td>
<td>2.50 (1.29)</td>
<td>1.50 (1.16)**</td>
</tr>
<tr>
<td>CGI-Severity</td>
<td>2.57 (.85)</td>
<td>1.71 (.91)***</td>
</tr>
<tr>
<td><strong>Social Anxiety (SAS-A)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening</td>
<td>52.86 (8.48)</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>44.64 (10.08)</td>
<td>36.00 (13.18)**</td>
</tr>
<tr>
<td><strong>Depression (CES-D)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening</td>
<td>20.75 (7.76)</td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>16.71 (7.75)</td>
<td>11.42 (10.80)*</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001
PEERS/Utalk Version of IPT-AST is promising

- Good feasibility and acceptability
- Good preliminary benefit
- Schools enthusiastic about the intervention

Next step: Pilot RCT
RCT: Adolescent Participants

- 4 high schools in Miami-Dade County (grades 9 – 11)
- 49 students randomly assigned to UTALK versus ES
  - 2 groups at each school; 5 to 8 adolescents in each group
  - Age: 14-18 years (mean = 15.02 years)
  - 71.4% Girls; 83.7% Hispanic
- Adolescents in RCT reported more distress and PV than adolescents in a comparable community sample
  - No differences between UTALK vs. ES at Baseline for any demographic or primary study variables
RCT Participants More Distressed (Baseline) Than Those In A Community Sample (PEERS)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adolescents</th>
<th>PEERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Victimization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overt</td>
<td>1.27 (.35)</td>
<td>1.32 (.50)</td>
</tr>
<tr>
<td>Relational</td>
<td>2.34 (.57)***</td>
<td>1.63 (.63)</td>
</tr>
<tr>
<td>Reputational</td>
<td>1.95 (.66)***</td>
<td>1.51 (.70)</td>
</tr>
<tr>
<td>Cyber</td>
<td>1.58 (.47)***</td>
<td>1.34 (.39)</td>
</tr>
<tr>
<td>Social Anxiety (SAS-A)</td>
<td>53.67 (15.47)***</td>
<td>37.68 (13.30)</td>
</tr>
<tr>
<td>Depression (CES-D)</td>
<td>22.37 (8.23)***</td>
<td>13.77 (9.72)</td>
</tr>
</tbody>
</table>

Note: *p<.05, **p<.01, ***p<.001
# UTALK (IPT) vs. ES: What’s the Difference?

<table>
<thead>
<tr>
<th>U Talk (IPT)</th>
<th>Education/Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills-based Group</td>
<td>Support-based group</td>
</tr>
</tbody>
</table>

- **Education about anxiety and depression**
- **Emphasis on learning and implementing communication skills**
- **Emphasis on discussing peer relations and strategies to improve these relationships**
- **Education about many different emotions**
- **Emphasis on discussing the parts of an emotion: thoughts, feelings, behavior**
- **Emphasis on providing support around generally distressing events**
RCT Feasibility: Attendance

Total number of sessions: 2 individual & 10 group

- No group differences in attendance \( (p = 0.467) \)
- Of the 42 adolescents who began the group intervention, 95% completed the intervention
  - 7 withdrew before the group intervention, mainly due to schedule conflicts
  - 2 withdrew after the groups started due to schedule conflicts
- 79% missed only 0-2 sessions
- Overall mean attendance = 8.98 of 12 sessions
How would you rate the quality of the group you participated in?

- Good
- Excellent

None answered “Poor” or “Fair”

How satisfied are you with the amount of help you have received?

- Indifferent or Mildly dissatisfied
- Very satisfied

None answered “Quite dissatisfied”
RCT: Treatment Satisfaction

Has the group helped you to deal more effectively with your peers?

Has the group helped you to deal more effectively with other important people in your life?

None answered “No, they seemed to make things worse”
RCT Clinician Ratings:
CSR for Primary Diagnosis (ADIS-C)

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTALK</td>
<td>2.04</td>
<td>1.45</td>
<td>26</td>
</tr>
<tr>
<td>ES</td>
<td>2.30</td>
<td>1.64</td>
<td>23</td>
</tr>
</tbody>
</table>

- CSR decreased significantly over time ($p<0.01$)
- Change did not differ by group
RCT: Adolescent Ratings of Social Anxiety (SAS-A)

Social Anxiety decreased over time \( (p<0.001) \)

Change did not differ by group

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTALK</td>
<td>44.36</td>
<td>34.84</td>
<td>26</td>
</tr>
<tr>
<td>ES</td>
<td>48.35</td>
<td>39.42</td>
<td>23</td>
</tr>
</tbody>
</table>
RCT: Adolescent Ratings of Depression (CES-D)

- Depression decreased over time (p<0.001)
- Change did not differ by group
  - Pattern suggests greater decrease for UTalk
RCT: Relational Victimization

- Relational Victimization decreased over time ($p<0.001$)
- Change did not differ by group

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTALK</td>
<td>1.91</td>
<td>1.75</td>
<td>26</td>
</tr>
<tr>
<td>ES</td>
<td>2.19</td>
<td>1.85</td>
<td>23</td>
</tr>
</tbody>
</table>
RCT: Reputational Victimization

- Reputational Victimization decreased over time ($p<0.05$)
- No group differences

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UTALK</strong></td>
<td>1.52</td>
<td>1.33</td>
<td>26</td>
</tr>
<tr>
<td><strong>E/S</strong></td>
<td>1.62</td>
<td>1.53</td>
<td>23</td>
</tr>
</tbody>
</table>

Reputational Victimization

![Graph showing decreased reputational victimization over time for UTALK and E/S groups.](chart.png)
RCT: Secondary Outcome
Cyber Victimization

- Cyber Victimization did not change over time
- TREND: UTALK improved, ES did not
RCT: Secondary Outcome
Social Support-Friends

- Social support from friends increased over time \((p<0.001)\)
- Change does not differ by group
RCT: Summary

- Significant decreases over time
  - Social Anxiety
  - Depression
  - Relational Victimization
  - Reputational Victimization

- Significant increases over time
  - Social Support-Friends

- No Group Differences
  - TREND: Cyber Victimization UTALK decreases, ES does not
  - Patterns “suggest” that UTalk may have more impact on depressive symptoms and reputational PV
GENDER MODERATION
Adolescent Reported Depression

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MALE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTALK</td>
<td>15.43</td>
<td>16.39</td>
<td>7</td>
</tr>
<tr>
<td>ES</td>
<td>14.29</td>
<td>10.00*</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEMALE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTALK</td>
<td>21.24</td>
<td>12.02*</td>
<td>19</td>
</tr>
<tr>
<td>ES</td>
<td>17.5</td>
<td>18.28</td>
<td>16</td>
</tr>
</tbody>
</table>

- Depression decreases significantly over time
- Time * Group * Gender interaction (p<0.01)
Boys decreased in the ES condition
Girls decreased in the UTALK condition
No significant differences at Baseline
Adolescent Report of Social Anxiety

**BOYS**

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTALK</td>
<td>60</td>
<td>39</td>
</tr>
<tr>
<td>E/S</td>
<td>49.5</td>
<td>39</td>
</tr>
</tbody>
</table>

**GIRLS**

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTALK</td>
<td>60</td>
<td>39</td>
</tr>
<tr>
<td>E/S</td>
<td>49.5</td>
<td>39</td>
</tr>
</tbody>
</table>

Similar Pattern but Not Significant
Boys may benefit more in ES, Girls benefit more in UTalk
6 MONTH FOLLOW-UP ANALYSES

- Analyses are ongoing
- Initial findings suggest
  - No further “deterioration” for any of the primary outcome variables
  - Some continued benefit in outcome variables over time
RCT Follow Up: Clinician Ratings - Primary Diagnosis CSR

**ADIS Primary Dx CSR**

Significant decline from Baseline to Post and Post to Follow-up
Adolescent-Report
For Relational Victimization

Relational Victimization

Significant decline from Baseline to Post and Baseline to Follow-up
DISCUSSION
General (Preliminary) Conclusions

PEERS/UTalk version of IPT-AST:

- Shows promise as a transdiagnostic preventive intervention for adolescent social anxiety and/or depression with youth who report PV
- UTalk was able to engage socially anxious teens
  - OT and RCT enrolled more anxious than depressed youth
  - Most completed the intervention
- Girls may have benefitted from UTalk more than boys
  - Boys may have benefitted more from education/support
LIMITATIONS

- **Measurement Issues**
  - Structured Interview (ADIS-C) better at identifying anxious than depressed youth
  - Floor effect for clinician ratings (CSR, CGI-S) as any score > 3 led to outside referral for clinical problems
  - Transdiagnostic focus meant some teens were low in social anxiety or low in depressive symptoms, which makes it difficult to document change in some variables

- **School Implementation**
  - Challenges of a random assignment within schools
  - Schools may lack personnel for sustainability
FUTURE DIRECTIONS

- Gender - Further exploration of gender differences
  - Girls may have benefited more than boys
  - Small sample of boys; would results hold in larger sample?
- What are the underlying mechanisms?
  - Education/support fared as well for the most part
  - Group intervention sufficient for reducing social anxiety?
- Implementation – Alternate models of delivery?
  - Some schools may not be well resourced for implementation
  - Involve other peers/friends in the intervention?
- Cyber PV
  - Could this be an effective intervention for cyber PV?
- Populations - Focus efforts on important transitions?
  - 9th graders? Before transition to high school?
THANK YOU!
ACKNOWLEDGEMENTS

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Consultants: Jami Young, Mitchell Prinstein, Antonio Polo
Research Team:
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- Social Relations Project (R. Siegel, H. Harrison, L. Bailey)

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