Overview of Observational Procedures
And
Coding Manual for NIMH project R01 MH 073590
“Co-Rumination and Adjustment: A Multimethod Assessment”

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Project Aims

The following are the Specific Aims from the funded project.

I. SPECIFIC AIMS

Seeking social support and talking about problems are generally thought to be positive adaptive processes. Although some have suggested that there may be downsides to certain support styles or ways of talking about problems (e.g., Belle, 1989; Zahn-Waxler, 2000), this possibility is understudied thus compromising our understanding of social support processes. The proposed research offers a more nuanced view on disclosure processes by considering a type of disclosure about problems, “co-rumination” (a construct recently developed by the PI) that may simultaneously contribute to both positive and negative adjustment outcomes among adolescents.

In the proposed research, co-rumination will be studied in the friendships of 600 early and middle adolescents (in 300 friendship dyads) over one year. Co-rumination, which refers to excessively discussing problems with a relationship partner, has seemingly contradictory relations with adjustment. Specifically, two survey studies of co-rumination among children and adolescents conducted by the PI revealed social and emotional trade-offs of co-rumination (Rose, 2002; Rose, Carlson, & Waller, 2007) in that co-rumination was related to positive social adjustment (e.g., high-quality friendships) but also to problematic emotional adjustment (e.g., internalizing symptoms).

The four primary aims of the proposed research that extend the prior research include: (a) Examining the intrapersonal and interpersonal characteristics that predict co-rumination. (b) Increasing our understanding of the effects of co-rumination on adjustment; including examining processes that may mediate the association of co-rumination with friendship and emotional adjustment. (c) Examining the roles of gender, developmental, and ethnic differences in co-rumination and associated outcomes. (d) Developing a multi-method assessment of co-rumination including an observational assessment and an event-sampling assessment (using palm pilots).

Importantly, the current proposal, describes a multi-method, longitudinal study that is unusual in peer relations research in which most studies include survey measures and a single assessment “snap shot” approach. Collecting observational and event-sampling data and following adolescents over time is challenging methodologically and is time and resource intensive. However, the triangularization of proposed methods has the potential to provide textured detail and temporal information about adolescents’ friendships in general, and co-ruminative processes in particular, that is rare in the study of peer relations and unique in its potential to provide information regarding the implications of friendships for youth’s well-being.
Coding Overview

The project described in this manual involved three primary methods: observational, survey, and event-sampling (using palm pilots). This manual focuses on the observational methods.

The project involved two main types of coding.

“Global Coding” resulted in co-rumination scores for each friendship dyad. This type of coding primarily involved assigning the dyad scores on 5-point Likert scales that represented aspects of co-rumination. To create an overall co-rumination score, dyads’ scores on these scales were combined with a measure of the amount of time the dyad spent talking about problems during the observational segment. As an alternative approach to assigning overall co-rumination scores to each dyad, a single overall co-rumination score also was assigned each to dyad using a single 5-point Likert scale that represented the degree to which the dyad engaged in co-rumination.

“Thought-Unit Coding” was a more micro-level approach to coding the content of youths’ speech. This approach was not used to assign co-rumination scores. Instead, this approach was used to gain information regarding how the friends talked to one another about their problems. These data were then used to provide information regarding the problem-talk styles of co-ruminators as well as to address more general research questions (e.g., regarding gender differences in how youth talk about problems).

In the following sections, procedures for Thought-Unit Coding are described before procedures for Global Coding because one component of assigning overall co-rumination scores (i.e., obtaining the measure of how much time the youth spent talking about problems) involves information gained from the Thought-Unit Coding.
Procedures Overview for Collecting Observational Data

The data collection occurred in the summers with youth who had just completed their seventh-grade or tenth-grade year in school.

After obtaining consent and assent, the youth were separated to complete a series of questionnaires primarily regarding their friendship and their emotional well-being.

Then they were brought together in a room with a table and two chairs. On the wall, three cameras were mounted. One camera captured each friend’s face and the third captured the entire dyad.

The observation involved the friends (a) planning a party and (b) talking about problems.

After seating the youth in the observation room, the experimenter put an index card that said “Plan A Party” on the table. The experimenter gave the friends instructions making these points:
- Next you are going to plan a party that would be fun to have
- You can talk about whatever you want to about the party, like who to invite and what to do
- You will have 7 minutes to plan the party, and then I will come back to the room when it is time to move on to the next part of the project

After 7 minutes, the experimenter returned and the friends were separated to complete a few surveys about their interaction. They also generated a problem to discuss with their friend (see questionnaire on page 7). Before reuniting the friends, the experimenter worked with each youth to ensure that the youth was willing to talk about the problem using the following script:
“I see you wrote down a problem that you answered the questions about. Would you feel comfortable talking with your friend about the problem?”
• (If participant answers yes) “OK, well, remember what this problem is, then, because in the next part, you will talk with your friend about this problem”
• (If participant answers no) “OK, well, let me get you another questionnaire. On this one, you should write out a problem that you would feel comfortable talking with your friend about and answer the questions about that problem”

The friends were then reunited in the observation room. Next, the experimenter explained the problem talk segment using the following points:
- It’s time to move onto the next part of the study. This part of the study involves talking about problems.
- Remember how you each came up with a problem? These are the problems you will talk about now.
(Put the problem-talk index cards on the table so that each card is in front of the appropriate
participant. Each card should have one participant’s name on it and the word “problem,” e.g., “Mary’s Problem.”)
- You should talk about each friend’s problem, but it doesn’t matter whose problem you talk about first.
- You can talk about anything you want to about the problems.
- You can talk about the problems as long as you want for up to 16 minutes when I will come back.
- If you are done talking about the problems before I come back, you can talk about something else or you can work on this puzzle if you want to. (there was a puzzle on the table the friends were sitting at)

The experimenter returned to the room after 16 minutes. The youth were then separated to complete a few more questionnaires about their interaction. For the last part of the laboratory visit, they were trained to use the palm pilots for the event-sampling portion of the research.
Problems

List a problem that you have and answer the following questions about the problem.

PROBLEM:_______________________________________________________________

1. How upsetting is this problem?

1 2 3 4 5
Not at All Upsetting
Very Upsetting

2. How important is this problem?

1 2 3 4 5
Not at All Important
Very Important

3. How hard would it be to solve this problem?

1 2 3 4 5
Not at All Hard
Very Hard

4. How hard would it be to feel better about this problem?

1 2 3 4 5
Not at All Hard
Very Hard

5. How much do you want to feel better about this problem?

1 2 3 4 5
Not At All Much
Very Much

6. How much do you want this problem not to bother you?

1 2 3 4 5
Not At All Much
Very Much

7. How much do you want to not be upset about this problem?

1 2 3 4 5
Not At All Much
Very Much
Transcribing

The entire observational segments including the plan-a-party task and the problem-talk task were transcribed. The table below lists the transcription symbols used and was adopted from West and Zimmerman (1985). After the entire observation segments were transcribed, they were checked for accuracy by a second transcriber. The observational segments lasted 23 minutes in real time (7 minutes for the plan-a-party task and 16 minutes for the problem-talk task) and typically took 8 to 12 hours to transcribe. Checking each transcript typically took between 30 minutes and 2 hours.

<table>
<thead>
<tr>
<th>Transcription language/symbol</th>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brackets</td>
<td>But really, [I don’t know] that. [What?]</td>
<td>Words in brackets are spoken at the same time. Brackets should be lined up as indicated.</td>
</tr>
<tr>
<td>Repeated Colon</td>
<td>We:::ll, I don’t care.</td>
<td>Colons indicate that the syllable that immediately precedes the colons is extended, or drawn out.</td>
</tr>
<tr>
<td>Hyphen</td>
<td>But wait—</td>
<td>A hyphen indicates that a person’s speech was cut short and that the next speaker interrupted.</td>
</tr>
<tr>
<td>Underscoring</td>
<td>I can’t stand her.</td>
<td>Underscored words are emphasized more heavily than normal.</td>
</tr>
<tr>
<td>Equal signs</td>
<td>‘Swat I said= =No you didn’t.</td>
<td>Equal signs mean that the first speaker finished his or her thought, but that there was no time in between his or her speech and the next line, spoken by his or her partner.</td>
</tr>
<tr>
<td>Pause indicators: Numbers or words in parentheses</td>
<td>(35) (pause) *sometimes, transcribers have written things like, “ten second pause” in parentheses, and that’s okay too.</td>
<td>Numbers in parentheses indicate the number of seconds for a pause greater than 30 seconds. If less than 30 seconds, the word pause, italicized, in parentheses is sufficient.</td>
</tr>
<tr>
<td><strong>Inaudible utterances</strong></td>
<td><em>(inaudible)</em></td>
<td>This indicates that the subject said something, but neither the transcriber nor the checker could figure out what he or she said.</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Double parentheses—</strong></td>
<td></td>
<td><strong>Adjectives for speech; descriptions of actions; non-verbal behaviors; laughter</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>((sings)), ((mockingly)), etc.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>((stands and stretches))</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>((rolls eyes)) ((coughs))</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>((laughs)) ((both laugh))</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Words in double parentheses explain how something was said or explains an action.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>(((both laugh)))</em> gets its own line of the transcript. It is not ascribed to anyone in particular.</td>
</tr>
<tr>
<td><strong>Stuttering</strong></td>
<td>I (x) did.</td>
<td>One x indicates the preceding word was repeated once. Stuttering can also be indicated by just writing out the word again.</td>
</tr>
<tr>
<td></td>
<td>I, I did.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I—I did.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>He, he, he went away.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>He, he—he went away.</td>
<td></td>
</tr>
<tr>
<td><strong>Punctuation</strong></td>
<td>Wow! —excitedly</td>
<td>Punctuation is used to indicate intonation and feeling, not necessarily grammar.</td>
</tr>
<tr>
<td></td>
<td>Really?! —incredulously</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seriously? —questioning</td>
<td></td>
</tr>
</tbody>
</table>
Thought-Unit Coding

Thought-unit coding was done only for the problem-talk observation segment. The thought-unit coding involves several phases. Each of these is described on the following pages. Briefly, they include:

1. Identifying the thought units.
2. Coding individual thought units in terms of whether they are about one’s own problems (own-problem-statements), about a friend’s problems (friend-problem-statements), or neither.
3. Coding friends’ responses to youths’ own-problem-statements.
4. Coding the topic of each own-problem-statement
Thought-Unit Coding: Identifying Thought Units

Thought units are utterances that comprise a single unit of thought. A thought unit has been defined as “one expressed idea or fragment” and a thought unit can be “one utterance or several...and either a phrase or a sentence” (Gottman, 1983, p. 9; also see Gottman, 1997). It is important to keep in mind that thought units are not necessarily grammatical sentences. Thought units can be incomplete sentences but make up a single thought. The beginning point and ending point of a thought unit are defined by the speaker’s intonation, NOT by ordinary grammar/sentence structure. Thought units are denoted by pauses, a change or shift of idea or thought, or another speaker’s turn (Leaper, 1991; Strough & Berg, 2000).

Note: Thought units are denoted with { }. Nonverbals are denoted with (( )).

Some examples:
{Well you know} {sometimes she’s just} (pause) {like a little annoying.}
{Yeah I thought about that.} {Man,} {I need to get a job!} {Like now.}
{Yeah.} {We should probably have like some snacks or something} {I mean,} {you know,} {we gotta feed people!}

Important things to note:

A) All verbal utterances are coded as a thought unit. This includes, for example, singing and humming.
Ex: {This puzzle is hard.} {La la la la la hmmm hmmm hmmm.}

Laughing is not coded as a thought unit.

B) Nonverbals are coded as a thought unit if they contribute important meaning to what is being said, or if they are used in place of a verbal response.
Ex: A: {Do you like him?}
   B: {((nods))}
   A: {I thought so.}

Otherwise, nonverbals are NOT coded as thought units.
Ex: A: {I’m not sure what I’m doin tomorrow}
   B: {((plays with notecard on table))}
   A: {I’ll probly go over to John’s house.}

C) Stuttering/repeating words are coded as the same thought unit when spoken together.
Ex: {I was I was like so surprised by that.}
   {I (x) I was like so surprised by that.}

Stuttering/repeating words are coded as separate thought units when there is a clear break in speech.
Ex: {I just} (pause) ((sighs)) {I just don’t know.}
Stuttering speech that is stopped short and changes meaning/conversational direction is coded as separate thought units.
Ex: {I was- } {he was like so surprised by that.}

D) Inaudibles may be included in a thought unit with other words if it is clear from the speaker’s intonation that the inaudible “went with” the other words. However, inaudibles may be coded as separate thought units if part or all of the speaker’s turn is inaudible and intonation also is unclear.
Ex: A: {I told him I didn’t think that (inaudible) is a good idea.}
    B: {I don’t know} {(inaudible)} {maybe he will}

E) Speech that is quoting another person is coded as a single thought unit.
Exs:
   {She was like, why don’t you just tell him}
   {Remember that movie?} {That one guy goes, “I lost my leg! Lost it in battle!”}
Thought-Unit Coding: Coding Own-Problem-Statements and Friend-Problem-Statements

Own Problem Statements (OPS) are any thought units that are on the subject of the participant’s own problem(s). Refer to the participant’s problem questionnaire to determine what the participant listed as his/her problem. Statements about the listed problem are coded as OPS. In addition, any statement about a problem that the participant has (even if the problem is not listed on the problem questionnaire) is coded as OPS. When coding problems, look for things that are stressful, upsetting, frustrating, or annoying to the participant, or that the participant specifically deems a problem.

Friend Problem Statements (FPS) are any thought units about the friend’s problem. These can be about the problem that the friend listed on his/her questionnaire, or about any other problem that the friend talks about.

Example:
A: {My problem is that I need to get a job.} \textit{OPS} {Cause I don’t have any money.} \textit{OPS}
B: {Where are you gonna get a job at?} \textit{FPS}
A: {I dunno.} \textit{OPS} {Probly HyVee or something.} \textit{OPS}

Important things to note:

A.) Statements related to the participants being at the study are NOT coded as problem statements. For example, statements such as “I’m cold/tired/bored/hungry” are not coded as problem statements. If participants make these statements in reference to a problem outside the study context (e.g., they say they are hungry or cold due to insufficient resources at home, or they say they are tired because they stayed up all night studying), then the statement counts as a problem statement. However, if the statement is made in reference to participating in the study, it does not count as a problem statement.

B.) Singing is coded as problem talk if it clearly is an extension of own-problem relevant or friend-problem relevant talk.
Example:
A: {Man, I’m so bummed about it.} \textit{OPS}
B: {Don’t worry.} \textit{FPS} ((sings)) {Don’t worry, be happy.} \textit{FPS}

Singing is NOT coded as problem talk if it is unclear whether or how the singing contributes to the conversation on problems.
Example:
A: {I’ve been too worried about stupid boys.}
B: {I know.} {You have.} ((sings)) {Under my umbrella ella ella}

C.) Sometimes a youth’s response to a friend’s problem may be ambiguous in terms of whether the response is an OPS or an FPS. In order for problem-relevant talk in response to a friend’s problem to be coded as OPS, it has to be very clear that the statement is a problem for the youth, and the youth must clearly “take over” the problem. If the statement does not meet these criteria, it is coded as FPS.
Example:
A: {Oh I hate him!} \(\text{OPS}\)
B: {Me too.} \(\text{FPS}\) \{He’s been a real jerk to you.\} \(\text{FPS}\)

versus:
A: {Oh I hate him!} \(\text{OPS}\)
B: {Me too.} \(\text{OPS}\) \{He’s always talking bad about me.\} \(\text{OPS}\) {And it sucks cause I never did anything to him.} \(\text{OPS}\)

Note that it may seem unusual that the “Me too” statement is assigned a different code in each of these examples. These examples highlight the fact that the same statement could potentially be coded as OPS or as FPS, depending on the context. It may not necessarily be clear whether a thought unit is OPS or FPS when examining the thought unit in isolation. It is important to read ahead and assign OPS/FPS codes according to the context in which the statement is made.

D.) If two friends have the same problem and they are discussing it together, the problem statements are coded as OPS unless it is quite clear that the statement refers to the friend’s experience of the problem.

Example:
A: {I need a job.} \(\text{OPS}\)
B: {I need a job.} \(\text{OPS}\)
A: {I’m going to get a job at Target.} \(\text{OPS}\)
B: {I’m going to get a job at McDonald’s.} \(\text{OPS}\)

versus:
A: {I need a job.} \(\text{OPS}\)
B: {I need a job.} \(\text{OPS}\)
A: {I’m going to get a job at Target.} \(\text{OPS}\)
B: {Why do you want to work at Target?} \(\text{FPS}\)

E.) Statements that are related to the task of discussing problems in the study (e.g., “What did you write down as your problem?” “I’ll talk about my problem first.”) should be coded as OPS or FPS according to which friend the statement is focused on.

In cases that are more ambiguous, follow these guidelines:
1. If the statement is prompting for problem talk (e.g., “Talk about problems,” “Hmm, about these problems”) then it should be coded as FPS unless the context indicates that the speaker takes control of the conversation with his/her own problems (e.g., “Hmm about these problems. Man I need a job.”)
2. Prompts for problem talk that include references to us, we, or our problems (e.g., “What are we going to do about our problems?”) are coded as OPS.
3. Statements that are attempt to end the problem-talk situation (e.g., “Alright enough of talking about these problems”) are coded as FPS.
F.) Inaudible statements may be coded as problem statements if they occur in the context of other problem-relevant statements and it is clear that the inaudible “goes” with the other statements. Inaudible statements are not coded as problem statements if they stand alone or it is unclear whether they are part of other problem-relevant talk.

Example:
A: {My dad’s gonna be so mad when he finds out I got a C in that class} \(\text{OPS}\)
B: {Do you think he’ll take your phone away?} \(\text{FPS}\)
A: {I don’t know.} \(\text{OPS}\) {Maybe.} \(\text{OPS}\) {((inaudible))} \(\text{OPS}\) {But maybe he won’t take it.} \(\text{OPS}\)

versus:
A: {I can’t stand it when my sister takes my stuff without asking.} \(\text{OPS}\)
B: {Yeah.} \(\text{FPS}\)
A: {((inaudible))}
B: {Let’s work on the puzzle.}

G.) Statements that are joking dismissals of a problem are NOT coded as problem talk.

Example:
A: {What was your problem?} \(\text{FPS}\)
B: {I put down that I don’t know what to do about track this year.} \(\text{OPS}\) {But it’s not really a big problem.} \(\text{OPS}\) {Like oh my dead parent!}

However, joking about a problem that is problem-relevant is coded as problem talk.

Example:
A: {I don’t know what to do about my parents.} \(\text{OPS}\)
B: {There’s pretty much nothing you can do.} \(\text{FPS}\)
A: {Yeah unless I just get new ones} \(\text{OPS}\) {((laughs))} {And that’s not gonna happen.} \(\text{OPS}\) {So I guess I’m stuck.}

H.) Statements that refer jokingly to something being a problem are not coded as problem talk.

Example:
A: {Man this puzzle is hard.}
B: {Yeah, this puzzle is impossible.} {That’s our biggest problem right now.} {((laughs))}

I.) Discussion of a situation or “telling a story” about something that previously was distressing but no longer is distressing is NOT coded as problem talk.

Example:
A: {You know that Timmy kid?}
B: {Yeah.}
A: {That one time at that party,} {remember I got so mad at him} {He came up to talk to me,}
{and I was just like “You need to go away!”} {((laughs))} {That was so hilarious.}
Thought-Unit Coding: Coding Responses to Own-Problem-Statements

For this stage in coding, first, the coders identify any turn that includes an OPS. Then, every thought unit that is in the friend’s next turn (i.e., the turn that directly follows the turn with the OPS) is coded into one of the categories listed below. Each of these coded thought units are referred to as a Response to Own Problem Statement (an RPS). In addition, silences/no response and laughter are coded as RPSs too if they directly follow a turn with an OPS, even though they are not technically thought units.

Example:  
A: {and I just don’t like getting pulled into the middle of it}^{OPS} \{Like because they’re trying to take sides\}^{OPS} \{someone’s gonna get their feelings hurt.\}^{OPS}  
B: {Right.}^{RPS} \{They always do that\}^{RPS} \{but it changes every day.\}^{RPS} ((laughs))^{RPS}

In the example above, each of the four thought units produced by Friend B would be coded into one of the following categories.

RPS Codes

A) Acknowledgement  
Verbalization that simply acknowledges that the speaker has been heard; this verbalization is likely to convey that the listener is paying attention and waiting for the speaker to go on. Note that a response like “yeah” should only be coded as an Acknowledgement if it clearly is not possible that it could be coded as a Support/Agree.
- e.g., “uh-huh,” “yeah,” “hmmm,” “oh”

In addition, responses to questions are coded as Acknowledgement when the response is neutral in valence.
- e.g.,  
  A: My problem is Callie moving. Isn’t she moving next Tuesday?  
  B: Yeah I think so. (A)

However, if the response to a question clearly belongs in one of the other categories (e.g., Adding Information, Nonsupport/Disagree), then the Acknowledgement code is overridden and the statement should be coded accordingly.
- e.g.,  
  A: My problem is Callie moving. Isn’t she moving next Tuesday?  
  B: Yeah she’s moving with her stepdad to Alabama. (AI)  
  or  
  B: You’re stupid for not remembering that. (ND)

AI) Adding Information  
Verbalization that provides additional factual information related to the general problem topic. The information is new to the conversation (or an expansion on information previously stated); however, the information can be information that the listener already knows.
- e.g., “And her parents let her do whatever she wants.”
AG) Advice Giving (You) or Advice Giving (I)
Verbalization that involves giving advice either in the form of directly saying what the listener should do or in the form of telling what the speaker would do in the situation.
- e.g., “You should call her.” (Y) or “I would call her.” (I)

SA) Support/Agree
Verbalization that explicitly conveys support or that conveys agreement with the speaker. (But see note under the Nonsupport category.) Note that “yeah” will be coded as an agreement if it is possible that it is an agreement and will only be coded as an Acknowledgement if it cannot be coded as a Support/Agree. For example, in this exchange: A: “Why would he do that?” B: “Yeah. It was just because of her.” The “yeah” would be coded as an acknowledgement rather than as Support/Agree.
- e.g., “yeah” “That’s right.” “I think you did the right thing.” “awww (in a sympathetic tone)”

Another example of Support/Agree is when the speaker repeats what the partner just said, or completes the partner’s sentence.
- e.g., A: I just think he’s annoying.
   B: He’s annoying. Yeah. (SA, SA)

ND) Nonsupport/Disagree
Verbalization that is explicitly non-supportive. Note that sometimes a person can agree with a speaker in a nonsupportive way (e.g., “You’re right - That was totally stupid of you to go out with him”). If this happens, the thought unit should be coded as Nonsupport rather than Agree. Likewise, a person can disagree with the speaker in a supportive way (e.g., “I don’t think you are an idiot at all”). If this happens, the thought unit should be coded as Support not as Nonsupport.
- e.g., “I don’t think you should have done that.” Or “Everyone hates it when you say that.”

M) Minimization
Verbalization that conveys that the listener believes that the problem is less important than the speaker is portraying it to be. The tone of minimizations is negative, and in some cases it may be necessary to consider the neighboring thought units to determine the tone. For example, if a speaker says “I think it is going to be OK” in a way that conveys support, the thought unit should be coded as Support rather than as Minimization. Note too that Minimization might be seen as a sub-type of Nonsupport.
- e.g., “It’s not as bad as you are trying to get everyone to believe it is.” “That’s not a problem.”

CS) Changing Subject
Verbalization that changes the subject away from the general problem topic.
- e.g., A: “I don’t know what to do about school.” B: “I want cake!”

or A: “My parents won’t give my guitar back until I get ungrounded.”
   B: “I could really go for a Thickburger from Hardees right now.”
OE) Own Experience (Distracting) or Own Experience (Non-Distracting)
Verbalization on the general problem topic that is about the speaker’s own experience. This will be coded as distracting if it seems that the speaker is trying to draw the attention away from the other person’s problems. This will be coded as non-distracting if it seems that the speaker is not trying to draw attention away from the other person’s problems. The content of neighboring thought units, as well as the global tone of the interaction, may need to be taken into account in order to determine whether the code is distracting or not distracting. Note that Own Experience – Distracting might be seen as a subtype of Nonsupport, and Own Experience – Not Distracting might be seen as a subtype of Support/Agree.
- e.g., A: “I wish she would call me more.” B: “I’m the one who she never calls.” (D)
or A: “I wish she would call me more.” B: “I get sad when she doesn’t call me too.” (ND)

P) Prompting
Verbalization that explicitly encourages the speaker to say more about their problem. Prompting thought units are more explicitly encouraging than are Acknowledgement thought units.
- e.g., “Let’s talk about your problem first.”

Q) Question (Information) or Question (Encouragement)
Verbalization that asks a question. If the question is asking for more information, it is coded as Question – Information. If the question is providing encouragement to the speaker to keep talking, or to repeat what was just said, it is coded as Question – Encouragement. Question – Encouragement thought units can be similar to Prompting thought units and Acknowledgement thought units, but they are in the form of a question.
- e.g., “When did that happen?” (QI)
  “Oh yeah?” “Really” “You know?” “Do you want to talk about your problem first?”
  “What?” “Huh?” (QE)
Note that not all questions are coded as QI or QE. If the message conveyed in the question clearly fits in one of the other categories, then the Q code can be “overridden.”
- e.g., “Are you an idiot?” (ND)
or A: I’m always fightin with my mom, I mean cause she’s always naggin.
  B: Hey do you know when summer school starts? (CS)

H) Humor/Sarcasm
Verbalization that conveys a joking or non-hostile sarcastic tone. Although Humor/Sarcasm statements may be used to disagree with the speaker (e.g., A: “I can’t stand that girl anymore.” B: “Oh, c’mon, you know you love her!”), the tone of Humor/Sarcasm is playful rather than harsh or negative. If sarcastic remarks are directed at the speaker in a harsh/negative way, then the statements should be coded as Nonsupport/Disagree (e.g., “Wow, you’re a real genius for doing that.”)

L) Laughing
The listening friend laughs following an OPS, either alone or along with the speaker.
**SN)** Silence/No Response
This code is used when there is no response from the listener, and the listener’s silence is accompanied by a break in the conversation from the speaker.
- e.g.,  
  A: I just need to get a job so that way I can have money. No job, no money.  
  *(pause 15 sec)*  
  (SN)  
  A: But anyway, I don’t know, maybe I’ll just try to get an application from Target or somewhere.

Long pauses in conversation following an OPS are coded as SN when the listener does not resume problem talk in his/her next turn. Coding “ends” at the SN code, subsequent thought units are not coded.
- e.g.,  
  A: I just need to get a job so that way I can have money. No job, no money.  
  *(pause 15 sec)*  
  (SN)  
  B: It’s cold in here.

vs.  
A: I just need to get a job so that way I can have money. No job, no money.  
*(pause 15 sec)*  
B: How many job applications have you got so far? *(QI)*

**OP/C** Opinion/Problem-Related Commentary
Any other verbalizations related to the general problem topic that do not fit into one of the other categories. These include verbalizations that give one’s own opinion about the speaker’s problem but cannot be coded into another category such as Support/Agree or Nonsupport because they are relatively neutral in valence. Another example would be the speaker’s thoughts about his own comments about the problem.
- e.g., “I don’t know.” “I don’t know what you should do.”
  “You should tell her no. No, that’s a bad idea” (“That’s a bad idea” would be coded as OPC)

Additionally, “you know” statements are coded as OPC when they are embedded within a speaking turn and it is clear the speaker is not prompting for a response from the other speaker.
- e.g., “It’s crazy. You know? It’s like one minute he’s ok then the next he’s so mad.

**O** Other
This code is used for thought units for which the substantive meaning cannot be determined and for thought units that are serving primarily as “space fillers”.
- e.g., “Well” “See” “Um”

Additionally, if a speaker’s turn contains a shift from OPS to non-OPS, then, in some cases, all thought units in the partner’s response are coded as Other.
- e.g.,  
  A: I don’t know what to do about school. Oh well, let’s work on the puzzle.  
  B: Oooh, I like puzzles! *(O)*

or A: So Jessica taking my stuff is my problem. Now you tell me your problem.  
B: Well my problem is fighting with my brother. *(O)*
Thought-Unit Coding: Coding the Topics and Length of Own-Problem-Statements and Friend-Problem-Statements

Topics

Each own-problem-statement and each friend-problem-statement was coded into one of the following topic categories (see p. 21-24 for detailed examples):

CF = close friends (can double code as peer pressure)
RP = romantic partners (can double code as peer pressure)
PG = peers in general (can double code as peer pressure)
PT = parents (can double code as autonomy development)
OR = other relatives (can double code as autonomy development)
AC = academics
AT athletics
EX = extra-curricular activities other than athletic
HT = health (can double code as psychological)
JB = job
MO = money
AP = appearance
ET = ethnicity
OT = other

Timing

Each own-problem-statement and each friend-problem-statement was timed and the time was recorded to the .50 second.

Scoring

The above information can be used to assign various scores including scores representing the number of thought units devoted to particular topics, the amount of time youth spent discussing their own and their friends’ problems, and the amount of time youth spent discussing various topics. Note that in order to compute the amount of time spent discussing various topics information from the topic coding needs to be integrated with information from the timing coding.
<table>
<thead>
<tr>
<th>Code</th>
<th>Abbreviation</th>
<th>Subcode</th>
<th>Subcode Abbreviation</th>
<th>Example</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close friends</td>
<td>CF</td>
<td>---</td>
<td></td>
<td>“My friend moved away.”</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>“My family friend has a health problem.”</td>
<td>This would not get coded as HEALTH because it is a concern of another person, not the youth</td>
</tr>
<tr>
<td>Close friends; peer pressure</td>
<td>CFPP</td>
<td></td>
<td></td>
<td>“My friend wants me to drink with her.”</td>
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<td></td>
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<td></td>
<td>“My buddy is making fun of me because I won’t play basketball.”</td>
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<tr>
<td>Romantic partner</td>
<td>RP</td>
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<td></td>
<td>“I broke up with my boyfriend.”</td>
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<td></td>
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<td></td>
<td></td>
<td>“My ex-boyfriend and I are fighting.”</td>
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<td></td>
<td>“My girlfriend cheated on me.”</td>
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<tr>
<td>Romantic partner; peer pressure</td>
<td>RPPP</td>
<td></td>
<td></td>
<td>“He wanted to go farther than I wanted to.”</td>
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<td></td>
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<td></td>
<td>“She was bugging me to stop hanging out with my friend.”</td>
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<tr>
<td>Peers (general)</td>
<td>PG</td>
<td>---</td>
<td></td>
<td>“Kids on the bus make fun of me.”</td>
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<tr>
<td>Group</td>
<td>sowie</td>
<td>Problem Category</td>
<td>Issue Description</td>
<td></td>
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<tr>
<td>Parents</td>
<td>PT</td>
<td>---</td>
<td>“My parents are getting divorced.”</td>
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<td></td>
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<td>“My dad doesn’t have a job.”</td>
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<td></td>
<td>This doesn’t get coded as JOB because it’s not the youths’ job.</td>
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<td></td>
<td>It also doesn’t get coded as money because the youth themselves isn’t having money problems.</td>
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<tr>
<td>Parents; autonomy development</td>
<td>PTAD</td>
<td>“My parents won’t let me drive.”</td>
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<td></td>
<td></td>
<td></td>
<td>“My mom doesn’t like my friends.”</td>
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<tr>
<td>Other relatives</td>
<td>OR</td>
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<td>“I miss my grandma.”</td>
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<td></td>
<td></td>
<td></td>
<td>“My uncle drinks too much.”</td>
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<tr>
<td>Other relatives; autonomy development</td>
<td>ORAD</td>
<td>“My sister is always hanging around me and my friends.”</td>
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<tr>
<td>Category</td>
<td>Code</td>
<td>Topic</td>
<td>Transcription</td>
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<td>-------------------------------------------------------------------------------</td>
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<tr>
<td><strong>Academics</strong></td>
<td>AC</td>
<td>---</td>
<td>“I’m not getting my guitar back because of grades.”</td>
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<tr>
<td></td>
<td>AC</td>
<td>---</td>
<td>“I’m flunking English class.”</td>
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<tr>
<td></td>
<td>AC</td>
<td>---</td>
<td>“I want to get into a good college.”</td>
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<tr>
<td><strong>Athletics</strong></td>
<td>AT</td>
<td>---</td>
<td>“What will I do when cross-country starts?”</td>
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<td></td>
<td>AT</td>
<td>---</td>
<td>“I’m not on varsity.”</td>
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<tr>
<td><strong>Extracurricular activities</strong></td>
<td>EX</td>
<td>---</td>
<td>“My dance teacher taught us the dance right before the performance.”</td>
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<tr>
<td>(not athletic)</td>
<td>EX</td>
<td>---</td>
<td>“What should I do for fun?”</td>
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<td></td>
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<tr>
<td><strong>Health</strong></td>
<td>HT</td>
<td>---</td>
<td>“I have diabetes.”</td>
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<tr>
<td></td>
<td>HT</td>
<td>---</td>
<td>“I don’t feel well.”</td>
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<tr>
<td><strong>Health; psychological</strong></td>
<td>HTP</td>
<td>---</td>
<td>“I’m nervous all the time.”</td>
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<td></td>
<td>HTP</td>
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<td>“I have anxiety.”</td>
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<tr>
<td>Category</td>
<td>Code</td>
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<tr>
<td><strong>Job</strong></td>
<td>JB</td>
<td>“My boss is mean.”</td>
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<tr>
<td></td>
<td></td>
<td>This is about the youth’s job, not a friend’s or parent’s.</td>
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<tr>
<td></td>
<td></td>
<td>“I need to find a job.”</td>
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<tr>
<td><strong>Money</strong></td>
<td>MO</td>
<td>“My allowance is too small.”</td>
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<td></td>
<td></td>
<td>This is about the youth’s money, not parents’ money.</td>
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<td></td>
<td></td>
<td>“I haven’t got my paycheck yet.”</td>
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<tr>
<td></td>
<td></td>
<td>While this is job-related, it would be coded as money.</td>
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<tr>
<td><strong>Appearance</strong></td>
<td>AP</td>
<td>“I’m overweight.”</td>
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<td></td>
<td></td>
<td>This could be coded as HEALTH if the reason they are upset is health-related (e.g., have Type II diabetes because of weight).</td>
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<td></td>
<td></td>
<td>“I hate my braces.”</td>
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<tr>
<td><strong>Ethnicity</strong></td>
<td>ET</td>
<td>“People make fun of me because I’m Asian.”</td>
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<tr>
<td></td>
<td></td>
<td>This is not PEERS (GENERAL) because the reason they are making fun is because of ethnicity.</td>
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<tr>
<td></td>
<td></td>
<td>“People get mad that my girlfriend is white, and I’m black.”</td>
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<td></td>
<td></td>
<td>Again, could be PEERS or even PARENTS but because of the ethnicity issue it’s coded as ETHNICITY.</td>
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</tbody>
</table>
Global Coding

Global coding for co-rumination was done for the problem-talk segment of the observation. Coders read the transcript and watched the interaction before assigning global codes. Coders were allowed to review the transcript and watch the interaction as many times as they needed to before assigning codes.

Global coding was done to assign dyads scores for the following aspects of co-rumination:
1. mutual encouragement of problem talk
2. rehashing problems
3. speculating about problems
4. dwelling on negative affect

An additional global score was given for overall co-rumination.

These five scores were all based on a 5-point Likert scale with 1 representing “not at all/very little” and 5 representing “very much.”

More detailed information about global coding is given in the following sections.
Global Coding: Assigning Global Codes

Co-rumination is defined as talking extensively about problems with a relationship partner and is characterized by a) a large amount of time spent talking about problems, b) mutual encouragement of problem talk, c) rehashing problems, d) speculating about problems, and e) dwelling on negative affect (Rose, 2002).

The following four aspects of co-rumination were coded using the following 5-point Likert scale:

1: Not at all / very little
2: A little
3: A moderate amount
4: A lot
5: Very much

1) Mutual encouragement of problem talk: One or both members of the dyad keeps the problem talk going instead of talking about other issues. One or both may also try to the other to talk about the problem again after the topic has been switched.
   Alice: We have been talking about this forever! Oh well, it’s okay.
   Jane: I know; it’s important. So what happened with [the problem] yesterday?

2) Rehashing problems: One or both members of the dyad talks about the problems or parts of the problems over and over again.
   Daniel: I mean I know I’ve said this already, but she freaking stole his wallet!!
   Josh: Right, dude. She freaking stole it. And remember how she said she didn’t do it?

3) Speculating about problems: One or both members of the dyad ponders the origins of the problem or parts of the problem, why people did what they did, what may happen as a result, etc.
   Jennifer: Why do you think he did that? He can’t be that mean.
   Sarah: I don’t know. I mean, maybe he was having a bad day?

4) Dwelling on negative affect: One or both members of the dyad focuses on the experience of negative emotions like feeling worried, nervous, irritated, sad, anxious, angry, depressed, low, scared, distressed, anguished, shameful, embarrassed, frustrated, etc.
   Bill: It sucks man. It really sucks.
   Henry: Seriously. You must feel like crap.

General Score
Additionally, a single co-rumination score was assigned to each dyad using the same Likert scale listed above. This score reflected the coder’s general sense of the combination of the four aspect scores and also took into account the total time spent talking about problems.
Additional Notes

Similar to other interpersonal processes (e.g., conflict or support), co-rumination is best conceptualized as occurring along a continuum. That is, conversations cannot simply be labeled as “co-rumination” or “not co-rumination.” Instead conversations vary in the degree to which they involve the different aspects of co-rumination:

Some conversations involving problems may not involve co-rumination. For example, a youth may tell a friend that he is free on Friday night because his girlfriend broke up with him, and then the friends begin to make plans for Friday without discussing the break up further. (low co-rumination score)

On the other hand, a youth might tell her friend that she is free on Friday because her boyfriend broke up with her, and, in this case, the friend prompts the youth with questions, the girls rehash details of the break up, speculate about the causes and social repercussions of the break up, and talk a lot about how bad the youth feels. (high co-rumination score)

Furthermore, it is possible for a conversation to involve some co-rumination (a moderate amount) but not as much as the extreme example. For instance, the conversation might involve some aspects of co-rumination (e.g., speculating) but not others (e.g., dwelling on negative feelings) or involve all aspects of co-rumination at a lower intensity than in the extreme example.

A moderate score for particular aspects of co-rumination may be obtained in one of two ways. For example, one youth may exhibit a large amount (e.g., a “4” or “5”) of one aspect while the other youth exhibits a small amount (a “1” or “2”). In this case a moderate score of “3” may be given for the dyad on that particular aspect. Alternatively, both youth may exhibit moderate amounts of a particular aspect. In this case, the dyad may also score a “3” for that particular aspect.

Information from the Timing Coding (see p. 20) can be used in analyses to take into account the degree to which each friend spends time talking about problems and whose problems are the focus of conversations.
Global Coding: Assigning a Global Co-Rumination Score

Dyads receive two overall co-rumination scores.

As stated, after reading the transcript and watching the interaction, coders assign a single, general co-rumination score.

In addition, another co-rumination score is computed using the four coded aspects of co-rumination plus information from the Timing Coding (see p. 20).

Specifically, these five scores are used:
1. mutual encouragement of problem talk (1-5 score from Likert scale)
2. rehashing problems (1-5 score from Likert scale)
3. speculating about problems (1-5 score from Likert scale)
4. dwelling on negative affect (1-5 score from Likert scale)
5. total time dyad spent talking about problems (number of seconds the two friends spent producing own-problem statements plus the number of seconds the two friends spent producing friend-problem-statements)

The above five scores are standardized within the sample and averaged to create an overall co-rumination score.