

# Social Cognition and Interaction Lessons (SCIL)

## Treatment Manual

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## Introduction

*Social cognition* refers to the mental processes that people use to make sense of social situations, including others' thoughts and feelings. Individuals with psychotic disorders show problems with social cognition (Penn, Sanna, & Roberts, 2008), problems that are related to dysfunction in community living (Couture, Penn, & Roberts, 2006). Social Cognition and Interaction Training (SCIT) is one of several psychosocial treatment approaches developed to improve social functioning in psychosis by improving social cognition.

Since its development in 2003, SCIT has been implemented widely in clinical settings and subjected to research scrutiny (e.g., Combs et al., 2006; 2007; Penn et al., 2005; 2007; Roberts et al. 2009; 2010). Social Cognition and Interaction Lessons (SCIL) reflects an attempt to streamline the most promising elements of SCIT within a flexible, user-friendly package.

The key changes from SCIT to SCIL are as follows. (1) The content has been streamlined and shortened to increase its user-friendliness (for both clinicians and clients), increase the flexibility with which it can be delivered and the opportunities for rehearsal of core lessons, and place greater emphasis on intervention techniques which have shown particular promise. (2) The order of presentation has been modified. (3) The underlying theoretical model has been modified and simplified, as described below. Overall, then, SCIL is meant to be leaner and easier to use, and to enable more practice with a small number of potent intervention techniques.

### **Theoretical model**

SCIL is based on a dual-process theoretical model that derives from normative social psychology (Chaiken & Trope, 1999) and social neuroscience (Lieberman, 2007). This approach deemphasizes the accuracy of social cognitive judgments due the fact that people can't actually perceive others' thoughts or emotions and must rely on guessing strategies. Thus, social cognitive judgments are referred to as "guesses," and we can distinguish between "good guesses" (those that are adaptive) and "bad guesses." The term "dual-process" refers to the fact that our social cognitive guesses result from a two-stage process. We first process social stimuli (say, a person's face, a gesture, or a comment) automatically, which means outside of our awareness, intention, and control. This produces an initial impression that is based on perceptual, emotional, and physiological systems, but not on conscious thought. After about half a second, our controlled processing ability comes online and enables us to intentionally apply strategic thought to adjust or replace the initial automatic impression. The trick is that controlled processing is a labor-intensive and scarce resource. Thus, when we are distracted, overloaded, emotional, or just lazy, we often fail to engage controlled processing, and therefore end up with a social judgment based entirely on automatic impressions. Sometimes this is fine, but very often it leads to a maladaptive response—such as when a bad mood causes us to snap at a co-worker or family member.

There is a second way in which automatic processing can override controlled processing in social judgment-making. Research has shown that controlled thought is accompanied by subjective experiences of ease or difficulty that are outside of our conscious intention or control. These experiences exert an automatic influence on our controlled judgment. Specifically, if we experience thinking to be difficult, then we judge the product of this thinking to be invalid or bad. In contrast, if we experience thinking to be easy and fluid, then we judge the product to be valid or good (Song & Schwarz, 2011). This research has important implications for clinical intervention research. For example, if you think that your boss hates you because she passed you in the hall without saying "Hi," your therapist may encourage you to generate alternative interpretations as to why your boss did not greet you. You may come up with ten alternatives (e.g., she was on a Bluetooth phone call, she was hurrying to the bathroom, she was lost in thought and didn't notice you, etc.). This technique is

intended to decrease your distress by drawing your awareness to the fact that there may be other explanations for your boss's behavior. However, if you experience the process of thinking up these alternatives to be difficult, this experience will itself reinforce your original judgment that your boss hates you. It is as if you are saying to yourself, "It was so hard for me to imagine those other possibilities that my boss must hate me—otherwise it should have been easy to think up alternatives."

Individuals with schizophrenia have dysfunction in both automatic and controlled processing. Regarding automatic processing, they have deficits in perceptual processes that prevent basic encoding of objective social information, such as facial expressions, gestures, and statements, which may lead to impoverished social impressions. Clients may also experience unusual feeling states (thought to be due to dopamine dysregulation) which generate aberrant automatic impressions (such as the feeling that one is the object of hostility).

Regarding controlled processing, deficits in executive functioning abilities combine with the distraction caused by aberrant salience experiences to handicap the ability of controlled processing to enrich impoverished automatic impressions or correct maladaptive automatic impressions, leading to poor social cognitive judgments, and poor social functioning. Further, these cognitive deficits make the process of challenging automatic impressions feel more difficult, which may reinforce initial distorted impressions.

### **SCIL treatment model**

Based on the theoretical model described above, clients' social cognitive functioning can be conceptualized along the orthogonal dimensions of deficit and bias. Deficit refers to impoverished social cognitive judgments. Bias refers to distorted social cognitive judgments. This latter may result from deficient controlled processing that prevents clients from realizing that automatic impressions are distorted, from distorted automatic impressions that are so salient that they override the ability of controlled processing to correct them (e.g., extreme feelings of paranoia in an otherwise capable and self-aware individual), and/or from the metacognitive experience of distorted judgments feeling more fluid and "right" than alternative interpretations.

SCIL is designed to work in four key ways: (1) By increasing clients' awareness of the impact of their feelings on their judgments so that they are more likely to catch themselves erroneously endorsing aberrant automatic impressions. (2) By teaching clients to evaluate their confidence in social guesses (using gradients-of-certainty judgments), and to use this information to modulate their social behavior. (3) By teaching two adaptive social interpretive strategies (*Separating Facts from Guesses* and *Mary/Eddie/Bill*) that can offset characteristic dysfunctions and are easy to use even among people with controlled processing deficits. (4) By creating conditions in which learning feels fun, easy, and non-threatening so that 1-3 can be practiced with sufficient comfort and repetition that they become relatively automatic aspects of clients' day-to-day social cognitive repertoires. The acronym "SCIL" reflects a dual-process model in which *skill* acquisition is conceptualized as the process of a desired routine moving from initially being difficult, slow and labor-intensive to eventually becoming easy, fluid, and nearly automatic. Thus, through SCIL, social cognitive skill is achieved when the core techniques become part of clients' habitual style of thinking.

### **Key techniques**

In addition to the core techniques associated with *Check-Ins*, *Separating Facts from Guesses*, and *Mary/Eddie/Bill*, several general techniques are used throughout SCIL.

Gradient judgments. Clients are frequently asked to attach a gradient rating to a response. Most typically, they are asked to rate the intensity of a feeling state from 1 (very mild) to 10 (very intense), OR to rate their confidence in a judgment from 0% (just guessing) to 100% (totally certain). This practice reinforces the concept that social cognition is a process of working with shades of uncertainty, rather than black and white facts. The practice is repeated so that clients develop the

introspective skill of gauging how strongly their feelings may be affecting their judgment and also how strongly they believe that a judgment they have made is correct.

Forced-choice responding. Clients frequently are asked, “If you *had to* pick one of these responses, which would it be?” This serves several purposes. First, it is a simpler alternative to gradient judgments. It is confusing to live in a world of uncertainty and relativity. Making judgments and statements about this world can be especially difficult for individuals with distracting symptoms and cognitive impairments. Forced-choice responding enables clients to make judgments by providing them with clear choices. Second, despite the fact that social situations are often ambiguous, people frequently have to make categorical decisions. (“Should I invite him to a movie or not?”) By using the “*if you had to*” construction, group leaders are acknowledging that forced-choice responses are imperfect, that clients’ may not otherwise have endorsed any response, and that all parties understand they are making judgments under constraint. This frees clients to respond with “best guesses” despite low confidence. Third, forced-choice responding can be integrated with gradient judgments to provide the blueprint for an effective form of social speech. For example, “I would guess that you are sad, but I’m not very confident.” SCIL clients can apply this blueprint as a concrete social cognitive skill in their day-to-day lives (as described in “From guesses to questions” below). Fourth, forced-choice responding can be used to increase engagement and self-disclosure among low-participation clients. As noted above, clients may exhibit low participation because of confusion. Forced-choice responding helps with this. In addition, clients may also exhibit low participation out of embarrassment, paranoia, low motivation, or habit. Forced-choice responding, when used skillfully, can be used to slowly increase engagement of such clients. For example, in the suggested Check-In for session 3, clients are asked to respond to the forced-choice prompt, “*If you had to say, are you feeling mostly good or mostly bad today?*” This construction enables easy responding, but requires clients who might otherwise endorse feeling “Fine” or “OK,” to endorse either a positive affective state or a negative affective state. As group trust grows, this provides a “foot in the door” to elicit further elaboration from such clients. For example, “I’m glad to hear that you are doing well today. What in particular do you feel good about?”

Group leader participation. Because the SCIL model assumes that social cognitive difficulties are universal, there is an opportunity for group leaders to disclose some of their own challenges in these domains and model their efforts to use SCIL skills to address these challenges. Group leaders should use sound clinical judgment, their own theoretical orientation, and their personal comfort level to decide the content and amount of self-disclosure in which they engage. Many SCIL group leaders participate actively in all activities and Check-Ins.

## **Nuts and bolts**

SCIL includes three core techniques: *Check-ins*, *Separating Facts from Guesses*, and *Mary/Eddie/Bill*. Check-ins take place at the beginning of each session, like check-ins in a typical treatment group. After check-in, *Separating Facts from Guesses* is introduced in the remainder of the first session, followed by *Mary/Eddie/Bill* in the second session.

The full content of this manual may be covered in as few as two sessions, or as many as 30 or more, depending on treatment constraints and client characteristics. The content of SCIL is designed to be like a jazz phrase—having a very simple basic structure that lends itself to extensive elaboration. Group leaders must work within the constraints of their treatment setting and timeline to maximize SCIL delivery. The key principle is to balance (1) keeping it fun, fluid, and fresh with (2) maximizing rehearsal of the core lessons. The main way this is achieved is by using a wide range of stimuli (pictures, videos, stories, real-life and in-session examples) and challenging the group to elaborate and explore implications of the core themes.

In the pages that follow, *italicized font* represents messages to be delivered from the group leader to clients. (It is not necessary to use the words verbatim.)

Group leaders are encouraged to self-disclose as much as possible (within clinical judgment, theoretical perspective, and personal limits) regarding social cognitive phenomena in their own lives. SCIL is based on a *normative* model which assumes that all people have social cognitive difficulties.

You will need the following special materials to implement SCIL:

- 1) Television with DVD player and/or laptop computer and LCD projector.
- 2) *Guessing People's Emotions* slide show
- 3) *Emotions Attention Shaping* slide show
- 4) *Five Emotion Morph* slide shows
- 5) *SCIT Photograph Set* slide show
- 6) *Spotting the Characters in Pictures* slide show
- 7) *SCIT Videos DVD* (or a selection of your own videos, per #6, below)
- 8) Additional photographs and videos of social situations. (Depending on the number of sessions, you may elect to collect photographs and video of your own that depict social interactions including ambiguity, confusion, conflict, and misunderstanding.)

You will also need the following general materials:

- 1) Blackboard or dry erase board and markers
- 2) Poster paper and adhesive to make permanent wall posters for the group

## Check-Ins

Check-ins are designed to enhance clients' awareness of their own physiological and emotional state, their ability to articulate their state, and their awareness of how their state may affect their social inferences. Because introspection and emotional self-disclosure can be difficult, embarrassing, and even threatening, check-ins are graded so that they are relatively easy and non-threatening in early sessions, and more challenging in later sessions. Because of this, the impact of check-ins may only be significant for groups that last for five or more sessions.

The following text may be used to introduce check-ins:

*As in many groups, we will check-in at the beginning of each SCIL group. The purpose of these check-ins is for us all to practice noticing how we feel—both our emotions, and how our bodies feel—and to notice how these feelings affect the way we think and act in social situations.*

At the beginning of each group, the group leader initiates the check in by stating the probe, and then encourages each client to respond to the probe. Clients are shaped to respond relatively succinctly. The group leader may elect to participate in the check-in, and may find it useful to respond first in order to model appropriate responding.

The table below lists suggested Check-In probes by session number. Probes become increasingly cognitively challenging, require greater introspection, and greater degrees of self-disclosure. The aim is to gently push clients both cognitively and interpersonally, maintaining clients' sense of trust, ease, and enjoyment, and avoiding clients' feeling overwhelmed, confused or threatened. Group leaders should advance toward the Self Check-In as quickly as possible based on what is feasible and tolerable to group members. For example, in a high functioning group of clients who already trust one another, it may be possible to begin using the Self Check-In in session 2, while in other groups it may take a full 9 sessions.

### Suggested Check-In probe to use in each session

Session	Check-In Probe	Note
1	<i>How are you feeling today?</i>	Accept any response.
2	<i>Are you feeling mostly good or mostly bad?</i>	If an alternate response is given, say, "What if you had to choose mostly good or mostly bad?"
3	<i>Which "basic emotion" word best describes how you are feeling.</i>	Forced choice: Happy, angry, sad, surprised, or afraid
4	Same as 3, plus intensity rating	1 = very mild intensity; 10 = very strong intensity
5	<i>Are you feeling better or worse than this morning? How would you describe the difference?</i>	Clients may use words on the Emotion Poster, intensity ratings, aspects of how they are thinking, or things that have happened to describe the difference.
6	Current feeling & intensity & label a different emotion from today	
7	Same as 6, plus, <i>Why do you think your feeling/mood/emotion</i>	Foster recognition that change may result from a range of factors, including behaviors, thoughts, and

	<i>has changed?</i>	external factors.
8	<i>Do you feel most like Mary, Eddie, or Bill today?</i>	See Mary/Eddie/Bill description in subsequent section.
9-end	The Self Check-In	Described below

### The Self Check-In

The purpose of the Self Check-In is to help clients understand the causes of negative feelings, and to help them take action to shift negative social feelings. It can be introduced as follows:

*We have gotten very good at checking-in with how we are feeling, how it relates to our thinking, and how it relates to social situations. Now we are going to learn something we call the “Self Check-In” which you can use on your own outside of the group. It can help you figure out ways to feel better about a social situations in your life. We will practice it at the beginning of each session, and you can start using it whenever you notice a bad feeling in your day-to-day life.*

The Self Check-In works as follows:

For each step below, go around the room and get a response from each client before moving on to the next item. If desired, responses can be recorded on the board or flip chart as shown in the example below.

- 1) Are you feeling “mostly good,” “mostly bad,” or “somewhere in the middle” at the moment? How good on a 1 (bad) to 100 (good) scale?
- 2) If you’re feeling mostly bad, what is the word that would best describe how you are feeling. If you’re feeling pretty good, but less than 100, try to think about just the not-so-good part of how you are feeling now. For a moment focus on whatever is keeping you from being at 100. What word would best describe that negative feeling? (Refer to the Emotions poster for help labeling the emotion.)
- 3) Now think about why you have this feeling. Say in a few words where you think it’s coming from.
- 4) Does this issue have any social aspect to it? Are other people involved?
- 5) If Yes, can you use Separating Facts from Guesses or Mary/Eddie/Bill to see the broader picture of the situation, and to take action to feel better? Discuss.

#### **Example of a group Self Check-In, written on the flipchart**

<u>Person</u>	<u>Feeling</u>	<u>Feeling word</u>	<u>Why?</u>	<u>Social?</u>
Nancy	80	A little worried	Don’t know what’s for lunch	No
Jude	50	Angry	Psychologist isn’t trying to help me	Yes
Colin	25	Sad	Nobody wants to be my friend	Yes
Ambrose	60	Anxious	Meeting new roommate today	Yes
Ty	44	Paranoid	People are looking at me weird	Yes

Step 5, described above, should be treated as a group discussion for each person who answered Yes to step 4. For example, other group members helped Jude (see above) to see that it is a guess that his psychologist isn't trying to help him, and that if he approached the situation like Easy Eddie or My-fault Mary, he may come to a different conclusion. Jude role-played saying to his psychologist, "I have noticed that you don't return my phone calls. It makes me wonder if you are not committed to helping me in my recovery." He made a plan to bring this up with his psychologist in order to shift his negative feeling about the situation.

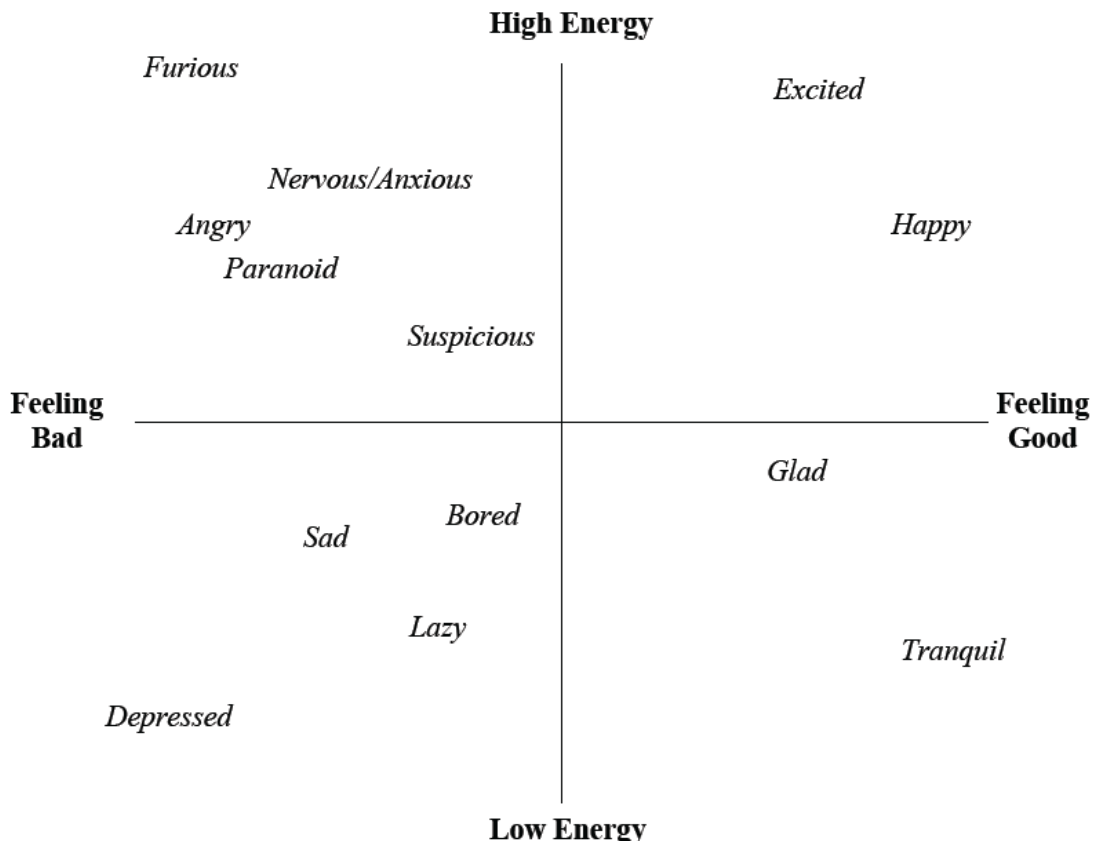
**Tips for Check-Ins**

Group leader self-disclosure during check-ins provides the opportunity to model appropriate responding to the probes and to normalize the experience of a range of mood/emotional states. Within therapists' comfort zone, we encourage disclosure of negative emotional states for the purpose of normalization (e.g., "I'm feeling mostly bad today.")

Clients vary in how difficult they find it to articulate their emotional state. Two techniques that may aid in this are the Emotion Poster and the Energy Diagram.

The **Emotion Poster** (see Appendix I) is a poster that is created collaboratively while the group is applying the Separating-Facts-from-Guesses lesson to judgments of others' emotion. The Emotion Poster's primary purpose is to provide a useful list of facts about human faces that facilitate good emotion guesses (e.g., smile suggests happy). The Emotion Poster may also be elaborated to include collaboratively arrived-at definitions of basic emotions (e.g., "Happy is when something good has happened. You feel good, like things are going your way."). After it is collaboratively created, the Emotion Poster should be displayed on the wall of the group room throughout all remaining sessions, and it may be referred to as an aid for clients who struggle to identify their own emotional state.

**Energy Diagram**





The **Energy Diagram** is a tool to help clients use their sense of physiological arousal and basic bad/good distinction as aids in judging how they may be feeling. If your group includes a high proportion of individuals with basic difficulties identifying their feeling states, it may be a good use of time to collaboratively develop an Energy Diagram that can then be posted on the wall of the group room throughout the remaining SCIL sessions. As with forced-choice responding, clients are aided in introspection by answering questions such as, “If you had to choose one way or the other, would you say that your body has a lot of energy now or just a little energy? Do you feel more like standing up and moving or lying down and resting?” Some clients may need help in identifying concrete indicators of physiological arousal (e.g., taut muscles, subtle shaking, grinding or clenching teeth, feeling very awake).

## Separating Facts from Guesses

The purpose of this exercise is to help clients to overcome a common mistake in social cognition: assuming that one's judgments of others' thoughts and feelings are facts rather than guesses. This exercise teaches clients to distinguish facts and guesses in social situations by applying definitions of each. Facts are those things that are objectively, verifiably, unquestionably true. You can perceive them directly, and everybody agrees that they are facts. In contrast, guesses are those things that you cannot perceive directly, and therefore must imagine. Because others' thoughts and feelings cannot be perceived directly, judgments about these phenomena must always be considered guesses. The lesson here is that we err when we assume that we *know* how another person is feeling or thinking. And what this exercise teaches is to get into the habit of consciously distinguishing between those things that we can know in social situations and those things about which we can only guess.

An important implication is that to the extent that we are only guessing about something we should not react to it as if it were a fact. As we see when we review Mary/Eddie/Bill, this opens the door for us to entertain alternative guesses about a situation that may help us to feel and function better socially.

### Introducing Separating Facts from Guesses

The key to this exercise is developing a consensus definition of Facts vs. Guesses. The key distinctions are shown below:

Table 1. **Facts versus Guesses**

Facts	Guesses
100% sure	Less than 100% sure
You can see, hear, or touch it.	You cannot perceive it directly.
For example, faces, gestures, or words.	Others' emotions or thoughts are always guesses.
Everybody in the room agrees it is true.	If anybody is not 100% sure, it must be a guess.

In developing this consensus, it will be most effective for clients to arrive at it themselves rather than to have it fed to them. To accomplish this, we suggest presenting a photograph of a person (e.g., photograph #1 in the *Guessing People's Emotions* slideshow), asking group members how the person in the picture feels, and then guiding discussion with Socratic questioning to arrive at the distinctions in Table 1. Key questions include: *What emotion might this person be feeling? Are you 100% sure that she is sad, or is it possible that she is feeling another way? Does it ever happen that people are frowning but not feeling sad? Is there anything about this picture that we are sure about?* (e.g., Her hair is black, she is frowning, she is looking down.)

Through this type of questioning and consensus building, the goal is to arrive at the content of Table 1. Once these conclusions are agreed upon, write them on a poster and display the poster on the wall for each remaining group.

We suggest that you collaboratively develop this poster prior to providing full rationale for the value of separating facts from guesses. Once the poster content is finalized, you may then ask, *Why*

might it be useful to pay attention to the difference between facts and guesses in social situations? Guide this discussion to help group members recognize the risks associated with **jumping to conclusions**, or assuming they know how others feel, as well as the potential benefits of reminding oneself that others cannot know for sure how you feel, etc. Discuss personal examples of jumping to conclusions.

Once the “rules” poster is established, the core technique of separating facts from guesses is rehearsed as often as possible using increasingly complex, ambiguous, realistic, and personally salient social contexts. Thus, after using the picture of an individual expressing emotion, you may use a photograph of a social scene from the *SCIT Photograph Set*. You may also use the here-and-now group setting to practice applying the “rules” in Table 1. (e.g., *Based on the rules that we’ve come up with, what are some facts and guesses about this group meeting that we are having now?*) As with the Mary/Eddie/Bill technique, the key is to practice separating facts from guesses as much as possible while maintaining a feeling of ease, fun, and freshness within the group. Below we give tips on variations in this exercise.

### **Using facts to guess people’s emotions**

Build on the initial (face emotion) example by separating facts from guesses with many additional photographs (from the *Guessing People’s Emotions*, *Emotion Morph* and *Emotions Attention Shaping* slide shows). Specific instructions are provided within each slide show. The general aim is to identify facts on people’s faces (e.g., smile, raised eyebrows) and use these facts to inform guesses about pictured people’s mental states. While working through these slide shows, create an **Emotion Poster** that will be displayed on the group room wall for all remaining sessions. This poster includes the names of basic emotions and is collaboratively filled in with facial clues (i.e., facts) that are associated with these clues (e.g., smile and happy). An example of an emotion poster, including collaboratively developed emotion definitions, is in Appendix I.

The *Emotion Morph* slide shows provide continued practice in separating facts from guesses, and also provide practice in yoking confidence judgments to available facts, and modifying these judgments as the facts change. Use the *Updating Emotion Guesses* handout in Appendix II with the *Emotion Morph* slide shows.

### **Facts and guesses in social situations**

Build from pictures of people’s faces to pictures of social situations (from the *SCIT Photograph Set* slideshow, as well as other pictures that you provide). The general exercise is the same with several minor changes. First, facts should include not only aspects of the face, but also other socially-relevant phenomena pictured in the scene. This includes gestures, clothing, body position relative to others, as well as furniture, environmental surroundings, etc. Second, guesses should include not only guesses about people’s emotions, but also guesses about their thoughts and guesses about the social state of affairs. What is happening between the pictured people (e.g., an argument, a joke, a planning session, etc.)? Who are the people to one another (friends, lovers, cousins, etc.)? Third, Facts and guesses should be written by the group leader in separate columns on the board. Clients who provide guesses are prompted to provide a confidence judgment, which is written next to the guess.

The group leader displays the picture and asks clients to first just list facts. For each one, the leader checks with other group members to ensure that it meets criteria as a fact. When a client proffers a guess as a fact (e.g., “They are happy.”), the aim is for peers to correct one another rather than for the group leader to correct the client.

Below is an example of a completed Facts vs. Guesses table corresponding to the first picture in the *SCIT Photograph Set* slideshow.

### Facts

Two women in a hallway  
One is holding three boxes  
Has her arm stretched out  
Is looking toward door handle  
Other woman is looking at first woman

### Guesses

First woman is trying to open door – 75%  
She is having trouble holding the boxes – 70%  
Second woman is coming to help – 65%  
Second woman won't help – 30%

As clients become comfortable with the basic technique, encourage them to articulate the factual basis for their confidence ratings. Higher confidence ratings should be made for guesses that are supported by more facts and lower ratings for guesses supported by fewer facts. For example, “I think that she is trying to open the door, and I am 75% confident. Facts that support this are that her arm and fingers and eyes are pointing toward the door handle.”

Appendix III provides the “true facts” behind each picture. It is often fun to reveal the truth after group members have made guesses and assigned confidence levels to the photos.

### Tips

Discuss the pitfalls of jumping to conclusions to ensure that clients appreciate the value of separating facts and guesses. Jumping to conclusions is a well-known concept that most clients will appreciate and be able to link to their own lives. Bring up the concept frequently throughout SCIL sessions.

If clients struggle to generate facts, help them with shaping suggestions, such as, “Do you see anything in the room? Is there any furniture? [Pointing at the desk:] What's this? Is it a fact that this is a desk?”

If members struggle to generate guesses, prompt them with possible categories of guesses:

- *What the characters are about to do*
- *What they just did*
- *What they want*
- *What their relationship is to each other*
- *What they are thinking*
- You may also prime clients with a guess or two of your own. For example:

*I can see that one of them is sitting at a desk with a computer, and there are books and papers around. Also, it looks to me like they are college aged. So I am going to guess that they are college students.*

If a client proffers a guess as a fact and nobody corrects him, initiate a check based on the posted definitions of facts and guesses. This can be followed-up with questions such as, “Does it ever happen that somebody is smiling but is not feeling happy? Is that possible?” It is often effective to have the group vote on questions such as these to determine whether there are any dissenters. If any members vote that it is not a fact, then it must be considered a guess because everybody agrees on facts. It is also effective to elicit the observation that any judgment about another's feelings or thoughts must be a guess.

Separating facts and guesses can also be done using video instead of photographs. We find that situation comedies and prime-time dramas work very well. Especially in groups that have had ample opportunity to practice with photographs, videos enliven the practice in a fun and engaging way. Verbal statements and tone of voice can be listed as facts.

## From guesses to social questions

As clients develop skill at describing the factual basis for their guesses and confidence judgments, encourage them to practice using this skill to articulate questions in social situations. This can be practiced through an extension of the basic *Facts vs. Guesses* exercise.

Prior to group, create a poster with the following content:

<u>How sure am I?</u>	
<i>Use words instead of numbers to tell people how sure you are that your guess is right.</i>	
<u>How sure you are</u>	<u>Words to use</u>
99%	I'm pretty sure...
75%	Probably... I'll bet....
50%	Maybe... It could be... Perhaps...
25%	I wonder...

This exercise may be introduced as follows:

*To make new friends and have good social relationships we need to practice listening carefully and asking questions based on what people say. Today, we are going to use skills from SCIT to ask good questions of each other. We are going to separate facts from guesses, and we are going to tell people how sure we are of our guesses.*

*You can get to know somebody by first stating a fact that they have said about themselves, and then making a guess based on that fact. To show them that you are interested in learning from them, use words that show you are not sure whether your guess is right. For example, if somebody says that they had pizza for lunch, you could ask them a question like this, "You said that you had pizza for lunch, I wonder if you also like other kinds of Italian food?" See how this includes a fact, a guess, and says that you're not too sure.*

Write this on the board:

### FACT

*You said that you had pizza for lunch.*

### NOT SURE

*I wonder...*

### GUESS

*...if you also like other kinds of Italian food.*

*To say how sure we are in guesses, we have been choosing a number from 0 to 100. Instead of numbers you can also use words, like "I wonder." Here is a poster that shows how different words go with different numbers.*

Post the *How sure am I?* poster on the wall.

The exercise proceeds as follows:

One group leader says three things about himself or herself. These should be general autobiographical facts, such as where you are from, what kind of food or activities you like, or something funny that happened to you recently. The other group leader then models how to ask a fact-based question. Initially, use only “I wonder” to express uncertainty. After asking the fact-based question, the asker then poses a free-form follow-up question on the same topic. After this example, clients take turns repeating the exercise. One says three things about themselves, then another asks (1) A fact-based question, and then (2) a free-form follow-up question.

### Notes on administration

The key to this exercise is for clients to rehearse fact-based questioning until it becomes easy. Clients likely will struggle at first with the structure of fact-based question, but within 15 minutes, they should gain fluency with it. Try to move briskly through the exercise to allow as much rehearsal as possible.

Initially encourage clients to use “I wonder” to express uncertainty. As clients gain mastery, they should feel free to use other certainty phrases from the *How sure am I?* poster.

It is important to shape client self-disclosure and question-asking to prevent discussion of topics that are too personal or inappropriate. Model this in your self-disclosure and question asking, and state explicitly to clients that they should not bring up sensitive facts about themselves nor ask sensitive questions of others.

Here is an example:

Clinician: OK, now it's Dennis' turn to say three things about himself, and Evelyn, it's your turn to ask Dennis a fact-based question—so be sure to listen carefully to what he says.

Dennis: I don't know what to say.

Clinician: Well, you could tell us what kind of food or TV shows you like, or what you did this weekend, or maybe where you grew up. Any little facts about yourself.

Dennis: Um. I like to watch *Judge Judy*. This weekend I mostly watched TV. I grew up in Tampa.

Clinician: Great. OK, Evelyn, now you can ask a fact-based question.

Evelyn: Have you been to Cleveland? That's where I'm from.

Clinician: Evelyn, remember to do it like it says on the board. First, say a fact—repeat one of the things that Dennis told us. Then say, “I wonder if,” and ask a question based on the fact.

Evelyn: OK. You're from Tampa. I wonder if you've been to Cleveland.

Dennis: No, never.

Clinician: [To Evelyn] Now that you know a little more about Dennis, you can ask him another question about where he's from.

Evelyn: OK. Do you want to go to Cleveland?

Dennis: I guess so. There's a song about Cleveland that I like.

Evelyn: Really?! Which one?

Clinician: It sounds like you two might have something in common. I need to cut you off there so we can keep doing the exercise, but great job Evelyn. OK, Dennis, now it's your turn to ask a fact-based question of Diego...

### Extensions of this exercise

Once clients are comfortable with the basic skill, you may extend this exercise in the following ways:

- Instead of repeating a fact that was stated by another person, state a fact about the world, the news, recent events, or the room in which you are sitting, and then ask a follow-up question. For example, “The radio said it will rain today. Do you think we will get wet on the way home?” or, “That picture on the wall shows people skiing. Have you ever gone skiing?”
- Ask follow-up questions that link the fact to the asker’s own life. For example: Albert: “You said that you come from a musical family. I wonder if you play an instrument.” Callie: “Yes, I play the clarinet.” Albert: “I play the trumpet. I like to play Jazz music.” Callie: “Me too!”
- For clients interested in developing closer relationships, this exercise can be used to practice asking permission to discuss personal or emotional content. Instead of listing three facts about himself, the first person describes a recent problem or concern. The second person repeats the fact of the problem, expresses sympathy, and asks permission to talk more about the issue. For example, “You say that you had an argument with your mother. I’m sorry to hear that. Would you like to spend a few minutes talking with me about what happened?” The second person practices being sensitive to the possibility that the first person will not want to talk more deeply.

## Mary/Eddie/Bill

The purpose of this lesson is to provide clients with an adaptive social guess-making strategy. The strategy, called Mary/Eddie/Bill (MEB), is not adaptive because it furnishes clients with *correct* answers about others' thoughts and feelings (this is impossible), but rather because it helps clients to easily imagine multiple perspectives. By doing this it combats the two big problems of social cognition in schizophrenia: deficient ability to imagine others' inner states, and biased tendency to get in an attributional rut in which one always attributes the same kind of thoughts and emotions to others. MEB combats deficit by giving clients an easy way to imagine at least three distinct ways that a person could be thinking and feeling in any situation. And MEB combats bias by enabling clients to toggle fluidly between three attributional styles in any situation.

MEB is a form of the more general technique, *generating alternatives*. MEB is different in several key respects that derive from dual-process research. As noted above, research has shown that the experience of ease or difficulty when thinking about a topic affects the conclusions one draws about that topic. If thinking feels easy, the content of thought feels *right* or *correct*, but if thinking is difficult, the content feels *wrong*. Because of thinking difficulties in psychosis, there is a risk that traditional generating alternatives techniques may feel too difficult and therefore may backfire and reinforce distorted judgments.

MEB is simple because one must only generate three alternatives, and the form of the alternatives is well known to the client. MEB is potent because the three alternatives represent the three general attributional styles that people most often use to explain confusing or upsetting social situations: external/personal (Blaming Bill), internal/personal (My-fault Mary), and external/situational (Easy Eddie).

In MEB, these common attributional styles are made memorable to clients in the form of stereotypic characters who not only embody the cognitive aspects of each style, but also the associated emotional and behavioral aspects. Clients are taught to use these three characters as a template for understanding people in social situations.

### Introducing MEB

MEB can be introduced, as follows, using the concept of **jumping to conclusions**, which has already been discussed while reviewing *Separating facts from Guesses*:

*We've discussed the pitfalls of jumping to conclusions. Now we're going to talk about the three most common ways that people jump to conclusions in social situations, and how we can recognize it and avoid it in ourselves. People jump to conclusions most often when something confusing or upsetting has happened. And people usually jump to one of three conclusions:*

1. There's something wrong with me.
2. There's something wrong with you.
3. It's just bad luck.

*For example, imagine that you call a friend on the phone, and leave a message on their answering machine, but they never call you back. You don't know why they never called you back, but you might jump to a conclusion. You could assume that they didn't call you back because they are mean. That would be blaming them, or saying that there's something wrong with them. You could assume that they didn't call back because they don't like you and you are no fun to talk to. That would be blaming yourself, or thinking that there's something wrong with yourself. Or you could assume that they didn't call back because their answering machine was broken. That would be blaming bad luck.*



(If MEB is being delivered as a stand-alone intervention, it can be introduced prior to the above text by discussing what it means to jump to conclusions, if it is a common thing that people do, and if it has drawbacks. Typically, clients are willing and able to describe the drawbacks of JTC.)

Explain that an easy way to remember these three ways of jumping to conclusions is to think of three imaginary characters who always jump to conclusions in the same way. Introduce Blaming Bill, My-fault Mary, and Easy Eddie using the descriptions below.

## Character

## Typical Thoughts, Feelings, & Actions

### **Blaming Bill**



**Thoughts:** Blaming Bill always finds somebody else to blame when bad things happen. He blames the weatherman for bad weather. When he stubs his toe on a table, he yells at the person who owns the table. He blames people even when he shouldn't.

**Feelings:** When bad or confusing things happen, Bill usually feels angry.

**Actions:** Blaming Bill has a very angry facial expression. He glares and points his finger at people. He says things like, "This is all your fault!"

### **My-fault Mary**



**Thoughts:** My-fault Mary always blames herself when bad things happen. If somebody cheats her out of money, she gets upset at herself for trusting them. If somebody acts mean towards her, she thinks she deserves it.

**Feelings:** When bad or confusing things happen, Mary usually feels sad and upset with herself.

**Actions:** Mary has a sad expression on her face, looks down, shakes her head, and holds her hand to her head. She says things like, "I'm so stupid" and "I always mess-up everything."

### **Easy Eddie**



**Thoughts:** Easy Eddie assumes that bad things happen because of bad luck and accidents. He thinks bad things are nobody's fault, and so he never acts upset. When people are mean to him, he assumes that they are only acting that way because they've had a bad day. Easy Eddie never blames other people... even when he should.

**Feelings:** When bad or confusing things happen, Eddie tries to push away bad feelings. He tries to feel relaxed and easy.

**Actions:** Easy Eddie shrugs his shoulders, raises his palms, cocks his head to one side, and raises his eyebrows. He says things like, "Oh well. I guess it's just bad luck."

Up front, acknowledge that that these characters are made to be simple and silly so that they are easier to remember. (This point is important to avoid clients feeling condescended to by use of childish-seeming characters.)

After describing each character's typical ways of thinking, elicit input from the group, and use the Emotion Poster to decide how these characters typically feel and act. Discuss the example of the un-retuned phone message. Have the group members decide how each character would react to the situation. Help members to appropriately link each character to the correct reaction. Make sure that all members understand the basic idea.

Use another example, such as a fender-bender. "Imagine that Blaming Bill get's into a fender bender. Who would he blame? How would he feel? What would he act like? Can somebody show me? Now what about Easy Eddie?" Playfully encourage clients to acting out the behaviors of the different characters while describing their characteristic thoughts and feelings. Shape the group toward the emotions and behaviors described in the table above.

Discuss these three characters' ways of jumping to conclusions. The following discussion probes may be used:

- *What are the pro's and con's of each character's style?*
- *Do you know any people like Bill, Mary, or Eddie?*
- *Are there situations in which you have been like Bill, Mary, or Eddie?*
- *Which character would you like to be more like? Why?*
- *Which character would you like to be less like? Why?*
- *Which character would you rather have as a friend/neighbor/boss?*

Shape the discussion and use Socratic questioning to help clients understand that each character's approach has benefits and drawbacks, and none of them works in all situations. Some clients may be tempted to conclude that Easy Eddie's way of being is the best. Be prepared to emphasize the drawbacks of Easy Eddie's approach. These include:

- Not holding others responsible when they mistreat him
- Not taking responsibility for his own mistakes
- Trying to push away natural, useful feelings that come from negative events
- Being passive in life; Not taking control/ownership of his life; Not standing up for what he believes in

Conclude the discussion with this point: *None of these three characters is always right. It's easy to get stuck being like any of them. By practicing making guesses like all three of them, we can avoid jumping to conclusions like they do.*

### **Working with Mary/Eddie/Bill**

After introducing MEB, the goal is to rehearse it extensively by applying it (a) to a broad range of social phenomena, and (b) in an increasingly deep and layered fashion. Regarding breadth, MEB should be applied to verbal vignettes, photographs, television shows, movies, audio recordings, experiences in clients' lives, and, if possible, group process. Suggestions are provided below. After working through these, group leaders are encouraged to use their imagination for further elaboration. Regarding depth, the group should critically discuss the range of human social/emotional experience that can be fitted to the MEB model (see below).

## **Getting started: Identifying the characters**

In early work with MEB, practice identifying the MEB characters in pictures of social scenes, including the *Spotting the Characters in Pictures* and *SCIT Photograph Set* slide shows. After displaying a picture, say, “Do any of the people in this picture remind you of any of the three characters we just talked about?” To the extent that one or more pictured individuals is not connected to an MEB character by clients, ease it into a forced-choice. Point at the pictured person and say, “If you had to pick one of our three characters—Mary, Eddie, or Bill—which one is s/he feeling most like?”

Practice MEB with a large number of photographs with fairly strongly expressed emotion. The goal is for clients to develop a sense of ease, fluency, and mastery with the heuristic. Initially move through the photographs briskly, providing clarification as necessary, but avoiding much discussion. Look for opportunities to create humor, such as by imitating facial expression of pictured people. Show clients that this is a fun, lively game, and one that they are good at. Here, and throughout MEB training, if there is uncertainty or disagreement, encourage the use of gradient judgments (e.g., “That looks to me like My-fault Mary, but I’m not so sure, maybe 60%.”).

## **Generating attributions**

After clients are comfortable identifying the MEB characters in pictures and vignettes, practice generating emotional and mental state attributions. Instead of asking clients to identify the MEB characters in social stimuli, ask questions in the form, “If that person is like My-fault Mary, then what might he be thinking/feeling?” This may be used in photographs and video vignettes.

You may also use verbal scenarios to consider what each MEB character might think in specific situations. Group leaders can make up examples, such as the following:

- 1) Tasia said she would go to Betty’s party. But on the night of the party, Tasia didn’t come. What does Betty think? (What would Mary/Eddie/Benny think in her shoes?)
- 2) Marco is standing on the street minding his own business. Shirley bumps into Marco and knocks him down. Shirley rushes away. What does Marco think? (What would Mary/Eddie/Benny think in his shoes?)
- 3) Evette bought a soda. She put it on the table before drinking it. Sam picked up Evette’s soda and drank it. What does Evette think? (What would Mary/Eddie/Benny think in her shoes?)

## **Flipping it**

The point of this exercise is to use MEB as a tool for social cognitive flexibility and to reinforce the view that all judgments of others’ thoughts and emotions are always guesses.

Start by reminding the group of this fact. Note that an implication of this is that any person at any time may be feeling like Mary, Eddie, or Bill. Although we can make good guesses based on the situation and their behavior, we can’t be sure. In order for us to avoid jumping to conclusions, it is good to practice “flipping it.” To flip it is to make an initial character assignment and attribution (e.g., “She looks like Blaming Bill. She’s probably thinking, ‘You’re a fool for dropping your ice cream!’), and then to *flip* the judgment and instead imagine the same vignette/picture character as one of the other MEB characters (e.g., “If I flip it, maybe instead she’s like My-fault Mary. She could be thinking, ‘I should have told you there was a stairway coming. It’s my fault that you dropped your ice cream!’”).

Once introduced, flipping it may be applied to most MEB judgments.

## **Applying MEB to the self**

MEB is used not only to interpret others’ thoughts and feelings, but to help clients understand themselves. One of the main ways that people draw inferences about others is by extrapolating from

their own thoughts and feelings. This has long been seen as a basis for empathy, and it has gained recent support from neuroscience research.

The aim in applying MEB to the self is for clients to notice their own habits of thinking and feeling, and how these habits may affect their social judgments and behavior. Because this sort of self evaluation can be difficult and threatening, it is important to titrate it gently and slowly. Begin by using MEB as a basis for check-ins (see Check-In session 8, above): “If you had to say, which of the three characters do you feel most like today?” Repeat this form of check-in, using variations. For example, “For today’s check-in, which one of the three characters do you think you are most like.” OR “Which of the characters are you least like?” OR “Which one of the characters would you like to be more like?” OR “Think of the character that you are least like, and then interpret a recent event in your life from that character’s perspective.” As clients become more comfortable and adept at applying MEB to themselves, you may use entire SCIL sessions working through extended MEB check-ins. For example:

*For check-in today, I’d like each of us to think of a person in our lives. Now, try to answer these questions in terms of Mary/Eddie/Bill. Which character do you think that person is most like? Which character does that person think s/he is most like? Which character does that person think you are most like? And which character do you think you are most like?*

This probe requires high-level self-reflection and mentalizing. It also highlights that there are often discrepancies between the way a person sees herself and the way others see her. This exercise typically leads to laughter as well as thoughtful discussion. In many cases, it also opens the door to applying MEB to in-session process and dynamics (e.g., “Bob, I’m not surprised that your mother thinks you are like My-fault Mary. We all see it that way too. You’re the only one who thinks you’re like Easy Eddie!”)

Ultimately, self-conceptualization in terms of MEB helps clients become aware of their own biases and to remediate their mentalizing deficits. From the standpoint of our dual-process theoretical model, this enables some clients to be aware of their tendency to jump to a certain kind of conclusion in social situations, and helps them to catch it and flexibly use the MEB heuristic to consider alternatives and take corrective action. For clients with mentalizing deficits, MEB furnishes them with ready-made initial guesses that they can then elaborate upon and reason through.

### **MEB discussions**

Depending on group participants and the length of SCIL treatment, entire sessions can be spent beneficially discussing MEB themes. To appreciate the value of this, think of MEB as a “theory of mind” in the sense of being a guiding model that clients may use to interpret the social world. The more engrained, elaborated, and flexible it is, the more useful it will be. Common discussion themes are:

- **Inside/Outside**: Sometimes a person’s outward behavior resembles one of the MEB characters, but belies another character underneath. Most commonly, this takes the form of an Easy Eddie “face” or “mask” with Bill or Mary underneath. When Mary is underneath, this may be called “Tears of a Clown.” Why is it that people sometimes show a happy face when they are actually feeling sad?
- Do we all have all three characters inside of us?
- **Blind spots**: People often do not see their own habits of thinking as well as others do. Why is this? Does this cause problems? What can be done about it?
- What is the optimal proportion of Mary, Eddie, and Bill to have within oneself?
- **Dyadic dynamics**: When a person takes on an MEB character, it may predictably elicit an MEB character reaction in his/her conversation partner. For example, if Person A behaves like Bill

toward Person B, Person B often will initially respond like Mary, and then flip into acting and feeling like Bill.

- Links with other models: Group facilitators may consider this on their own or in conversation with some client groups. How does the tripartite MEB model relate to Freud's Ego/Supergo/Id model or Eric Berne's Parent/Adult/Child model?

## Appendix I

### Sample Emotion Poster Content

**Happy** You feel good, cheery, glad, joy.

Clues on your face:

- Grinning mouth
- Lips turned up
- Teeth may be showing

**Sad** You feel unhappy and blue. It may feel like you have lost something.

Clues on your face:

- Frowning mouth
- Eyebrows turned up in the middle
- Forehead clenched or furrowed
- Looking down
- Eyes welling with tears, crying

**Angry** You feel mad, like somebody did something unfair to you.

Clues on your face:

- Eyebrows clenched or turned down in the middle
- Frowning
- Face scrunched up
- Teeth clenched
- Red face

**Afraid** You are scared of frightened. It feels like something bad is going to happen.

Clues on your face:

- Wide eyes and no smile
- Eyebrows lifted
- Mouth open, but more tense than in surprise

**Surprised** When you are surprised, something unexpected just happened. It could be good or bad.

Clues on your face:

- Wide eyes and no smile
- Eyebrows lifted
- Mouth hanging open

**Ashamed** When you are ashamed, you are embarrassed and feel bad or guilty about something you did.

Clues on your face:

- Face tilted down
- Eyes looking up
- Eyebrows slanted up a little bit in the middle
- Mouth relaxed

## Appendix II

### *Updating Emotion Guesses:* Handout

For each picture, decide what emotion the person is showing. Then rate how confident you are that your guess is right. You can use the following as a guide:

- 100% Totally sure. No doubt.
- 75% Very sure.
- 50% Pretty sure.
- 25% Kind of sure.
- 0% Not sure. Just a guess.

**Write the name of the person shown in the slides here:** \_\_\_\_\_

1. He/She is probably feeling \_\_\_\_\_ (circle one). How sure are you?: \_\_\_\_%

**Happy Sad Afraid Angry Surprised Ashamed**

2. He/She is probably feeling \_\_\_\_\_ (circle one). How sure are you?: \_\_\_\_%

**Happy Sad Afraid Angry Surprised Ashamed**

3. He/She is probably feeling \_\_\_\_\_ (circle one). How sure are you?: \_\_\_\_%

**Happy Sad Afraid Angry Surprised Ashamed**

4. He/She is probably feeling \_\_\_\_\_ (circle one). How sure are you?: \_\_\_\_%

**Happy Sad Afraid Angry Surprised Ashamed**

5. He/She is probably feeling \_\_\_\_\_ (circle one). How sure are you?: \_\_\_\_%

**Happy Sad Afraid Angry Surprised Ashamed**

6. He/She is probably feeling \_\_\_\_\_ (circle one). How sure are you?: \_\_\_\_%

**Happy Sad Afraid Angry Surprised Ashamed**

## Appendix III

### The facts behind the *Facts versus Guesses* slide show pictures

#### 1. Woman Holding Boxes

**Facts:** The two pictured women are coworkers in an office building. They are also friends. It is a normal business day, and the one holding boxes is trying to open the door to their office suite. Her friend has noticed that she is struggling, and is approaching with the intention of helping her. The boxes contain envelopes.

#### 2. Cookie Joke

**Facts:** The women are friends who met in a coffee shop to talk. The one on the right arrived first and ordered cookies for them to share. The woman on the left was late. While waiting, the woman on the right put salt on a cookie. The late woman took a bite and is disgusted by the salt in this picture. The other woman is laughing and pointing because she feels for the joke.

#### 3. Dressing on Hands

**Facts:** They are friends in a kitchen. The woman on the right opened some ranch dressing and it spilled all over her hands. (The open dressing bottle is sitting on the counter.) She is disgusted and showing the other woman, who is shocked to see all the dressing. The woman with dressing on her hands is asking for help turning on the sink to wash her hands.

#### 4. Awkward Moment

**Facts:** The man and woman are old friends. She just told him that she was recently fired from her job as a waitress in a sports bar. He responded by saying that she is probably too old to for that job anyway. This made her feel hurt, sad, and angry at him. He is just realizing his gaffe, and feels ashamed.

#### 5. You won't believe what happened!

**Facts:** The man and the woman are neighbors in an apartment building. He is telling her a story about a fellow neighbor whom he saw fall into the swimming pool dressed in a business suit. She is shocked and amused to hear the story. He also thinks it is funny.

#### 6. I'm hungry too!

**Facts:** The two women at the table are co-workers taking a break in the kitchen at their job. The one on the right is eating crackers. The one on the left is hungry, but does not have crackers. She is hoping that the one on the right will notice that she looks hungry and offer her some crackers, but the one on the right does not notice.

#### 7. Trip

**Facts:** The women are in a doctor's waiting room. The seated woman has been waiting for a while. The standing woman just arrived and is walking straight back toward the doctor's office. The seated woman does not want her to see the doctor first, so she quickly stuck her foot out to trip the woman. The seated woman is trying to pretend that she is just reading and relaxing and that she does not realize she is tripping the other woman.