

Cognitive Errors Rating Scales[®]

3rd edition

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(First edition by M. Drapeau, J.C.Perry, & D. Dunkley)

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Please note that this is a work in progress and is incomplete. We offer it in the spirit of making it easier to learn to use the method. PLEASE DO NOT DISTRIBUTE without the authors' permission.

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1. INTRODUCTION

In psychology, as in other social, medical, and human sciences, self-report methods or questionnaires offer a number of benefits including economy, ease of use and, in some instances, standardization and the availability of normative data. However, self-report measures are also known to be vulnerable to various distortions by participants, as well as to present a number of other limitations. This is particularly true in psychology where participants are often requested to reflect upon their assessment or appraisal of self, others, and events.

To date, for example, it remains unclear to what extent an individual's ongoing cognitive activity can be "punctuated" while still providing an accurate picture of its flow (Blankstein & Segal, 2001). Being asked to fill out a questionnaire introduces reflectiveness which in turn may alter naturally occurring thoughts (Coyne & Gotlib, 1983). Furthermore, as outlined by Glass and Arnkoff (1997), item endorsement in a questionnaire might reflect processes or contents unrelated to the actual items. As such, subjects who report the frequency of a thought or behaviour may actually be reporting on the importance this thought or behaviour has for them. Concurrent with this, Nisbett and Wilson, as early as 1977, have shown that individuals may report cognitive activities on the basis of their *likelihood* of occurrence rather than their actual occurrence, and that a decision to endorse an item may actually reflect that the thought matches one's view of oneself, rather than the actual experience of that thought. In other settings, participants fail to endorse an item because they cannot relate to the content (Floyd and Scogin, 1998). In completing self-report questionnaires, participants might also censor the strategies that they "should not" have implemented, and instead report those that they "should" have used, or they may simply not be aware of the characteristic being measured (DeRubeis et al., 2001). Another limitation is that questionnaires are often content or population-specific. As such, the validity of a given questionnaire cannot be assumed in another context or setting or with a different population. Finally, it is not unlikely that prime specificity varies greatly from one questionnaire to the next, or from one item or subscale to the next, hence yielding uneven levels of construct activation.

These limitations have often been cited and bemoaned. Over a decade ago, Clark (1997) outlined a number of challenges confronting researchers and clinicians in the area of cognitive assessment. One of these included the need to develop new, innovative ways of assessing cognitive products. Concurrent with this, Blankstein and Segal (2001) and Dozois and Dobson (2004) stated that relying exclusively on self-report methodologies is clearly insufficient. Gunthert, Cohen, Butler, and Beck (2005) have argued that our dispositional (self-report) measures are too far removed from what actually happens in stressful situations, and that "A more direct strategy would be to assess participants' *actual* thoughts in response to naturally occurring stress rather than to request their more *general* reports of underlying dysfunctional attitudes" (p. 78). Researchers have addressed these limitations and developed various observer-rated methods to assess a wide variety of key constructs in psychodynamic and psychoanalytic theory and intervention, including

defense mechanisms, elaboration and regulation of affect, interpersonal templates, transference and counter-transference, and others. However, little had been accomplished to address these limitations in the field of cognitive behavioural psychology.

The development of a rating method

The ***Cognitive Errors Rating Scales*** (CERS) and the ***Coping Action Patterns Rating Scales*** (CAPRS) were designed to offer clinicians and researchers with the means necessary to observe rate two key constructs in cognitive behavioural psychology: cognitive errors and coping. Cognitive errors (CE) and coping action patterns (CAP) are two psychological constructs which we may wish to consider together, as errors in cognition often temporally precede, lead up to, or influence the subsequent choice of coping mechanisms, or follow mechanisms that were used. CEs affect perception and its interpretation, while the CAPs function as “strategies of adaptation” (White, 1974).

The first edition of the rating system we developed, referred to as the Cognitive Error and Coping Action Patterns (CECAP) method (Perry, Drapeau, & Dunkley, 2004) included instructions on how to rate both cognitive errors and coping action patterns. In the second edition, the method was expanded and divided into two distinct and separate rating systems, one for coping, referred to as the Coping Action Patterns Rating Scales (CAPRS; Perry, Drapeau, & Dunkley, 2006) and one for cognitive errors, referred to as the Cognitive Errors Rating Scales (CERS; Drapeau, Perry, Dunkley, & Blake, 2006). As such, this manual, which is the third edition of the CERS (Drapeau & Perry, 2008), only covers the assessment of cognitive errors. Instructions for rating coping action patterns can be found in a second manual (Perry, Drapeau, & Dunkley, 2005) available upon request. The CERS and the CAPRS have been translated into French.

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2. ERRORS IN COGNITION: A REVIEW

Emily Blake

The development of cognitive behavioural therapy began in 1961 when Beck analyzed the dreams of his depressed patients to test the psychoanalytic theory that depression was “anger turned inward”. What he found were themes of self-deprecation, punishment, loss, and deprivation. In 1963 he furthered his analyses by examining the verbal reports and free associations of his depressed clients (Sacco & Beck, 1995). No longer believing that emotional disturbances were caused by intra-psychic conflicts as defined in the dynamic tradition, he contended that psychological turmoil resulted from erroneous thinking in the form of irrational beliefs, and misperceptions of oneself and reality (Weissman & Beck, 1978). This led to the development of his cognitive theory of depression, and the development of cognitive therapy in 1979 (Sacco & Beck, 1995).

Cognitive therapy, also commonly referred to as cognitive-behaviour therapy (Beck Institute, 2008) rests on several main tenants, one of which is that people have pre-existing attitudes, beliefs, or assumptions which function as schemas. Schemas are relatively tacit, stable “cognitive structures through which events are processed [...]. They screen, code, categorize, and evaluate stimuli” (Sacco and Beck, 1995, p. 330). Schemas are also involved in the generation of cognitions, which are verbal or visual conscious material (Beck, Rush, Shaw, & Emery, 1979). When schemas are activated, they give rise to specific cognitive errors (CEs). These CEs are relatively unstable “systematic errors in the (...) individual’s information processing, which reflect the activity of dysfunctional cognitive schemas” (Sacco and Beck, 1995, p. 330), and are thought to cause and maintain depression and other disorders.

Beck (1976) initially outlined six different cognitive errors including *arbitrary inference* (i.e., drawing a conclusion based on insufficient or contradictory evidence), *selective abstraction* (i.e., focusing on one piece of evidence and not taking the whole picture into account), *overgeneralization* (i.e., making sweeping conclusions that go far beyond the current situation), *magnification / minimization* (i.e., incorrectly evaluating the degree of severity of a situation), *personalization* (i.e., believing that external events were caused by oneself when in fact they were not), and *absolutistic dichotomous thinking* (i.e., seeing things as either all-good or all-bad). In 1999, Burns re-named “arbitrary inference” as “jumping to conclusions” and divided it into two types: *mind reading* (i.e., assuming and concluding about how others are thinking or feeling without sufficient information), and *fortune telling* (i.e., believing that a negative outcome will occur). Also renamed were Beck’s “selective abstraction” as “mental filter”, and “absolutistic dichotomous thinking” as “all-or-nothing thinking”. Burns also added *should statements* (i.e., inflexible rules about how the world and/or oneself should be), *disqualifying the positive* (i.e., not counting positive information as valid), *emotional reasoning* (i.e., thinking that how one feels represents reality the way it really is), and *labelling and mislabelling* (i.e., labelling rather than describing an event and giving undue emotional tone to an event).

In addition to the above mentioned methods of information *processing*, individuals, including those suffering from depression, are thought to have negative thought *content* about themselves, the world, and the future (collectively referred to as the negative cognitive triad; Sacco & Beck, 1995). As these negative thoughts are often conscious, automatic, and repetitive, they are referred to as *negative automatic thoughts* (ATs; see Table 1 for a summary of the constructs). Automatic thoughts and cognitive errors are similar in that all automatic thoughts are presumed to be negative in content, but not all of them are sufficiently negative to the point that they become *distortions* or *errors*. Time in therapy is devoted to the identification of automatic thoughts (ATs) as well as cognitive errors (CEs) because this helps the therapist to conceptualize the patient's underlying schemas or dysfunctional attitudes (Safran, Vallis, Segal, & Shaw, 1986). While modification of peripheral cognitions (i.e., CEs and ATs) may provide a patient with temporary relief, a therapeutic focus on changing the underlying central cognitive processes (i.e., assumptions, schemas, attitudes) is believed to be important and required for more lasting change (Guidano & Liotti, 1983).

The research in this area is convoluted for a variety of reasons. One is that the constructs are often inappropriately labelled. Automatic thoughts, cognitive errors, and dysfunctional attitudes (DAs) are often all referred to as indicators of cognitive distortion, thus making them seem interchangeable. There is also significant overlap among the constructs, making it difficult to tease them apart empirically. For example, the Automatic Thoughts Questionnaire (ATQ; Hollon and Kendall, 1980) purports to measure automatic thoughts (ATs), but a closer examination of the items reveals that some of the negative thoughts could also be viewed as examples of cognitive errors. For example, item 10 "I'm so disappointed in myself" could be a simple negative thought, while item 23, "I can't do anything well" could be seen as both negative and distorted (i.e., reflecting a cognitive error). From a research perspective, and from a clinical perspective, it is useful to separate out the negative thoughts (i.e., ATs) from the *distorted* negative thoughts (i.e., CEs), and to label exactly which cognitive errors are embodied in the specific automatic thoughts. As no known study has examined the data in this way, what is currently known about ATs might actually be about CEs to some unknown degree.

In developing the method described in this manual, the Cognitive Error Rating Scales (CERS), every effort was made to disentangle these key constructs in CBT, to then focus on cognitive errors. Table 1 summarizes the constructs and provides examples for Schemas, Automatic thoughts, and Cognitive errors. As can be seen in the table, **Schemas**, also referred to as dysfunctional attitudes, beliefs, or assumptions, can be defined as relatively tacit and stable "cognitive structures through which events are processed" (Sacco & Beck, 1995, p. 330). These cognitive structures are used to screen, code, categorize, and evaluate stimuli. **Automatic thoughts**, on the other hand, are negative, often automatic or repetitive thought *content* about oneself, the world, and the future (Sacco & Beck, 1995). Lastly, **Cognitive errors** are relatively unstable systematic errors in the individual's information processing, "which reflect the activity of dysfunctional cognitive schemas" (Sacco and Beck, 1995, p. 330). Cognitive errors are as such a "cognitive process that does not consist of content, (and that) contribute(s) to the

transformation of dysfunctional attitudes and environmental events into automatic negative thoughts” (Kwon & Oei, 1994, p. 334).

In the the Cognitive Error Rating Scales (CERS), *Cognitive Errors* (CE; also referred to as *errors in cognition* or *cognitive distortions*) refer, congruent with the Cognitive Behavioral tradition, to verbal statements which suggest or indicate ways of evaluating information that reflect errors or biases away from the average or normative evaluation of the same material. They may include logical errors, but in most cases it is the evaluation of the information itself that is aberrant, for instance by ascribing an unwarranted negative (or positive) implication to the meaning of information. The resulting evaluation is often deleterious to how the patient subsequently perceives, thinks, feels, plans, and/or behaves, and may lead to maladaptive coping.

STRUCTURE	DEFINITION	EXAMPLES
Schemas (or dysfunctional attitudes, beliefs, assumptions)	Relatively tacit, stable “cognitive structures through which events are processed [...]. They screen, code, categorize, and evaluate stimuli” (Sacco & Beck, 1995, p. 330).	<i>Beck, 1976, p. 255.</i> <ol style="list-style-type: none"> 1. In order to be happy, I have to be successful in whatever I undertake 2. To be happy, I must be accepted by all people, at all times 3. If I make a mistake, it means that I am inept
Cognitive Errors	Relatively unstable “systematic errors in the depressed individual’s information processing, which reflect the activity of dysfunctional cognitive schemas” (Sacco and Beck, 1995, p. 330), and are thought to cause and maintain depression (Beck, 1967, 1970). “Cognitive errors [are] a cognitive process that does not consist of content, [and they] contribute to the transformation of dysfunctional attitudes and environmental events into automatic negative thoughts” (Kwon & Oei, 1994, p. 334).	<i>Beck (1976):</i> <ol style="list-style-type: none"> 1. Arbitrary inference 2. Selective abstraction 3. Overgeneralization 4. Magnification (catastrophizing) and minimization 5. Personalization 6. Absolutistic dichotomous thinking <i>Burns (1999):</i> <ol style="list-style-type: none"> 7. Mind reading 8. Fortune telling 9. Mental filter 10. All-or-nothing thinking 11. Should statements 12. Disqualifying the positive 13. Emotional reasoning 14. Labelling and mislabelling
Automatic Thoughts	Negative thought <i>content</i> about oneself, the world, and the future (collectively referred to as the negative cognitive triad). They are often conscious, automatic, and repetitive (Sacco & Beck, 1995)	<i>Examples taken from the Automatic Thoughts Questionnaire (Hollon & Kendall, 1980)</i> <ol style="list-style-type: none"> 1. The world doesn’t like me 2. I’m no good 3. Why can’t I do anything right? or I have let people down 4. No one understands me

3. ASSESSING COGNITIVE ERRORS USING THE COGNITIVE ERROR RATING SCALES (CERS)

3.1 *The CERS: Manual*

Cognitive Errors are grouped into 5 major clusters (clusters A, B, C, D, and E), each of which contains specific errors ranging in number from 1 to 8. This manual contains a short list of the errors with brief definitions of the clusters as well as a longer list with greater description and differentiation for help in correct identification of each individual CE. The longer list includes not only the definition of each CE, but its functional aim, synonyms as found in the scientific and clinical literature, a brief background, differentiation from near-neighbor or similar errors and examples.

In the Cognitive Error Rating Scales (CERS), *Cognitive Errors* (CE; also referred to as *errors in cognition* or *cognitive distortions*) refer, congruent with the Cognitive Behavioral tradition, to verbal statements which suggest or indicate ways of evaluating information that reflect errors or biases away from the average or normative evaluation of the same material. They may include logical errors, but in most cases it is the evaluation of the information itself that is aberrant, for instance by ascribing an unwarranted negative (or positive) implication to the meaning of information. The resulting evaluation is often deleterious to how the patient subsequently perceives, thinks, feels, plans, and/or behaves, and may lead to maladaptive coping.

Following each definition there are one or more examples using text taken from real interviews or therapy sessions. Some examples demonstrate that the cognitive error may span more than one or two sentences, especially when the interviewer makes comments or questions about it. The subject's cognitive error is italicized and bracketed for ease of recognition. Additional text before or after the CE may be included in the example to help readers understand how one delineates where a CE begins and ends.

3.2 *The Valence of Cognitive Errors*

Emily Blake & Martin Drapeau

Cognitive Errors (CEs) are often thought of as negative in valence, implying a bias toward something bad, poor, weak or otherwise negative for the individual. However, CEs can also have a positive valence or direction, biasing the individual toward a view of something that is overly, perhaps unrealistically, positive, strong, successful or pleasant for that same individual. The importance of documenting positive biases and distortions

is supported by findings derived from studies involving contingency tasks used to assess the degree to which participants believe they have control over their environment. During contingency tasks, participants are encouraged to perform an action (e.g., to push a button) and to assess the degree to which they are responsible for producing an outcome (e.g., a light bulb being turned on). In zero-contingency tasks, there is no relationship between the action and the outcome, in this case between pushing the button and the light bulb going on. Contextual information that may influence the *perception* of control over the light bulb is inter-trial interval length (e.g., 3 vs. 15 seconds), or total frequency of positive outcomes (e.g., a light bulb turning on 25% vs. 75% of the time that a button is pressed; Msetfi, Murphy, Simpson, & Kornbrot, 2005). This research began in 1979 with Alloy and Abramson. Based on findings from their zero-contingency tasks, they concluded that depressed individuals might be “sadder but wiser” than their non-depressed counterparts who mistakenly believed that they had control over the light bulb. The phenomenon was termed *depressive realism*. Since 1979, a number of researchers have investigated this phenomenon because of the important implications that it has for the treatment of mental disorders, especially depression.

According to a review by Taylor and Brown (1988), there is a body of work that suggests non-depressed people have positive illusions that enhance their wellbeing. According to a second review by Ackermann and DeRubeis (1991), there are an approximately equal number of studies for and against the depressive realism hypothesis. Reasons for the inconsistent findings are that the depressive realism hypothesis might only be true at low levels of depression (McKendree-Smith & Scogin, 2000), that experimental results are dependent on the type of task administered, and that experiments are measuring the phenomenon inaccurately (Ackermann & DeRubeis, 1991), that the findings are a “fluke” and therefore not repeatable, that laboratory procedures do not generalize to real-world conditions, or that the participants were not truly depressed (Haaga & Beck, 1995). However, the results from a recent study by Msetfi, Murphy, Simpson, and Kornbrot (2005) suggest that depressive realism may indeed be consistent with Beck’s cognitive distortion theory of depression. In a series of two experiments, depressed participants were found to consistently underestimate their degree of control over a light bulb, even when contextual cues (i.e., inter-trial interval time and positive outcome density) should have increased their perceptions of control as it did for non-depressed participants. Though the experiments used zero-contingency tasks, the depressed group’s underestimations of control were viewed to be accounted for by a lack of ability to integrate all available contextual information, rather than a tendency to make more negative but accurate guesses.

Thus noting the valence of the error is as important as the error itself, in some cases. For example, think of overhearing someone buying a lottery ticket and uttering a phrase like “I know I’m going to win this time”. While this statement is positive, there may be no evidence in support of it, just like there may be no evidence in support of a negative statement such as “I will fail my exam tomorrow”. As such, although there is a difference in the valence of each of the two statements, they both indicate the same cognitive error which involves making a prediction about the future on the basis of no evidence or relevant information. For these reasons, amongst others, the CERS

documents the valence of the implication of each individual cognitive error for the individual.

To determine the valence of the CE in the CERS method, the rater must take the perspective of the subject making the CE, and follow the valence of the result from the subject's perspective. A negative valence means that there is a negative consequent feeling, consequence, or conclusion, whereas a positive valence indicates a positive consequence for the person.

3.3 Rating CEs

To locate a CE, keep the following in mind: *A CE refers to a verbal statement that suggests ways of evaluating information that reflect errors or biases away from the average or normative evaluation of the same material. They may include logical errors, but in most cases it is the evaluation of the information itself that is aberrant, for instance by ascribing an unwarranted negative (or positive) implication to the meaning of information.*

When rating CEs, it can help to imagine that you are a cognitive behavioral therapist and that you are listening to the patient. Could and would you challenge what seems to be a distortion? If so, then chances are it should be rated as a CE. If not, then it is probably just a figure of speech, just a negative "fact", or maybe even a coping strategy, and therefore not a CE.

While we have had raters reliably rate CEs directly from the videotape (or live), the use of verbatim transcripts of the interview or therapy session increases the accuracy of the ratings and thus the robustness of the assessment. This is particularly important in the context of research.

To rate CEs using a transcript:

1. Bracket the text which contains the cognitive error [error starts ... error ends]. Include the thought unit that is needed to identify the CE (See the next section in this manual for a discussion of issues regarding bracketing and thought units). This may vary in length depending on the error. For example, labeling may be as short as one word or be an entire sentence.

If there is a CE embedded within another CE, use different brackets to differentiate the two. Likewise, if you are rating CEs and coping patterns (CAP) (using the CAPRS) at the same time and there is a CE or CAP embedded within another CE or CAP, use different brackets to differentiate the two; e.g.: {I started honking my horn at this [jerk] who was blocking traffic}. In this example, the rater may rate a coping strategy (honking at the person who is blocking traffic) as well as a cognitive error (jerk).

2. Next, identify the specific error by number from the list [1-16] or using its abbreviation;
3. Score the valence of the error (N=Negative or P=Positive);
4. After scoring and checking your ratings for the whole interview, enter the total count of each type of CE broken down by valence on the scoring sheet.

3.4 Rating Conventions

1. CEs. The 16 specific cognitive errors are divided among 5 clusters. However, when the ratings are made one does not need to specify the cluster; because each individual CE is numbered sequentially, the cluster is automatically included (e.g. Cluster A includes CE-1; B includes CE-2 and 3, etc.).

2. Hypothetical Cognitions. When individuals state a CE as a hypothetical question for consideration, do not rate it as a CE unless they declare it is what they think. It may be scored separately as *Hypothetical*, if one decides to use that as a separate rating for research or clinical purposes.

Example 1. Do not score a CE present: “*Sometimes I wonder whether I am made out to work full-time. But....Well yesterday I was at work and I have a new office mate who...*” (changes to an unrelated story).

3. Ambiguous attribution of a CE to oneself. Whenever a subject makes a statement that might be a CE, but it is not clear whether he is reporting his or her thinking or that of another person, that is, it is ambiguous as to *who* displays the CE, do not score it, unless there is additional data before or following the example that makes it clear it is the subject’s own error. For instance, additional data might include that the individual took an action based on the CE, making it clear that it was his or her thought after all.

4. Dreams: We do not typically rate CEs in dreams. However, research purposes are different from what a clinician selects in the patient’s material to deal with it. As such, although cognitive behavioral therapists would not necessarily focus on a patient’s dream, they may nonetheless identify Cognitive Errors in the content of the dream. The dream content can be treated just like any other vignette for research purposes and rated if deemed necessary.

5. Feelings and symptoms: Statements about a feeling (“I got euphoric, ecstatic”) or a symptom (“I was anxious”) alone are not enough to be scored as cognitive errors, unless the subject gives enough context to allow the rater to determine what function it serves and by such can demonstrate that there is a distortion. A lack of such supporting data or context leaves us only with a clue that something might be in error, but this alone is not

enough to validate that an error has occurred, and if so, what type. The example below delineates a continuum from simple statement of a feeling, to a definite cognitive error involving a feeling. The middle example is the difficult one, in that it could be seen as purely reporting on one's past experience, or on reporting of a CE. We would tend to find that it represents reporting.

<i>Pure description:</i>	I am sad. I am sad because I haven't done well on my test.
<i>Middle:</i>	I am sad because I've always felt inferior when taking tests.
<i>Definite CE:</i>	I am sad at being always lousy at taking tests.

6. Cognitive Coping: Coping can also be achieved cognitively. For this reason, the *Coping Action Patterns Rating Scales* (CAPRS) also include subscores that differentiate behavioral, affective and cognitive means of coping. Because of this overlap in cognitive processes, it may at times, albeit rarely, be difficult to distinguish a cognitive error from cognitive coping. In Coping Action Patterns (CAPs) as assessed using the CAPRS the cognition is tied to the overall aim or motive. That is, there is a clear indication that the cognition is the way of coping. In cognitive errors, however, one cannot see the tie in to a specific motive. Rather the distortion just seems to stand on its own.

7. Interrupted CEs: At times, an example -which contains a CE- reported by the subject can be interrupted and then immediately revisited. For example, a subject may discuss a specific situation in which he or she displayed a CE, then briefly switch topics or make a side comment which could include another CE, and then return to the original topic and CE. In such cases, the rater must rate the first CE, and then rate the second CE found in the side comment. However, when returning to the main topic (where the first CE was found), the rater must not rate the first CE again so as to not overscore.

For example:

PATIENT: I tried to... and I did, I did study a lot. I worked hard. And last night, I think I had everything under control. I pretty much memorized the textbook! *[But I think I am going to fail that test tomorrow and I'll go blank and I'll fail... {Besides, the professor hates me}...*

THERAPIST: Why do you think he hates you?

PATIENT: I don't know. *The point is I think I am going to fail the test. Actually, I probably won't even make it there. The subway will probably break down or something crazy will happen and I won't make it there on time].*

In this example, the participant first uses *Fortune Telling*, predicting a negative

outcome to an event, in this case an exam. This first cognitive error, Fortune Telling, is in brackets [...] with *italicized* text, and begins with [*But I think I am going to fail...*, then ends with the last sentence of the example, ... *and I won't be there on time*]. While discussing the possibility of failing the exam, the participant also makes a side comment which contains a second cognitive error. This second error is in brackets {} with **bold** text. This second error, *Mind reading*, must also be scored by the rater. However, following that second error, the participant returns to his original topic and continues to display the same first error, Fortune Telling. This should not be scored again because it is a continuation of the first error rated.

In other situations, the participant may display a first error, then make a side comment which contains a second error, and then continue with the same first error but on another topic, in which case this last error is scored separately because the different stressor or event indicates a second distinct situation in which the CE was displayed.

For example:

PATIENT: My boyfriend is nice, we've been together for a while now. But all he wants to do is sleep all the time. So it's not very exciting. [*He doesn't find me attractive*].

THERAPIST: Is this something he said or is... (interrupted)

PATIENT: No, no, no. He never said that really... or anything like that in fact but I know. But huh, yeah... I think **{he's a lazy ass}**... [*Anyway this is boring for you, right? You probably think I am overreacting*].

In this example, the participant first uses *Mind reading* when discussing her boyfriend, assuming that he does not find her attractive when there is no evidence to that effect: [*He doesn't find me attractive*]. She continues to explain that she has no evidence in support of her conclusion, which confirms that she was mind reading. She then makes a side comment which also contains a cognitive error, labeling: **{he's a lazy ass}**. Following that second error, she states that the therapist must be bored, which is again *Mind reading*. This second event of *Mind reading* should be scored again because she is reading someone else's mind (first it was her boyfriend's, now her therapist's) and the two events are happening at clearly different moments (the first *Mind reading* was done in the past and is found in the vignette she reports, whereas the second *Mind reading* is happening in-vivo, during the session). This should not be confused with other situations in which a participant may provide multiple examples to demonstrate a same error.

For example:

PATIENT (angry): **{The whole place sucks}**. [*My boss, I just think she's an idiot, a real idiot. She has no understanding of what is going on in the department. She basically has the emotional I.Q. of a 12 year old. And she reports back to another idiot. Now that guy thinks he's some kind of monarch or a king or something. A*

complete idiot, even worse than my boss. And he reports back to this new person, who apparently hates our division and is also an idiot. She couldn't find her office on her first day... couldn't find an office! and she is supposed to run an entire division!]

In this example, the participant first uses *Overgeneralization*: **{The whole place sucks}**. In support of her assertion, she then provides multiple examples of superiors who are “idiots”, this indicating the use of *Labeling*. This is scored as one single cognitive error, *Labeling*, and should not be scored as three occurrences of the cognitive error, i.e. one rating for each person labeled.

8. Therapist interventions. There are times when the therapist’s or interviewer’s intervention suggests (i.e. the therapist *infers*) that the patient is using a given error, although the patient has not clearly used that error. These should not be scored unless there is evidence that the patient “owns” the therapist’s assertion. Simple acknowledgements are not enough.

For example:

THERAPIST: But I wonder if you tend to see it as very polarized, all white or all black and...

PATIENT: Uh-huh

THERAPIST: and... I think it’s not that clear cut really.

PATIENT: Uh-huh.

In the example above, the therapist suggests (infers) that the patient uses a cognitive error, *Dichotomous thinking*. However, there is no evidence that the patient identifies with or “owns” the therapist’s position, his comments being limited to a series of “Uh-huh’s”. In this excerpt, the *Dichotomous thinking* should not be rated. However, there are situations where the subject “owns” the therapist’s or interviewer’s comments. For example:

THERAPIST: But I think you tend to see it as very polarized, all white or all black and...

PATIENT: *[Yes, I know, I know, you are right*

THERAPIST: and... I think it’s not that clear cut.

PATIENT: *Yeah, you’re absolutely right.]*

In the example above, the therapist also suggests that the patient uses *Dichotomous thinking*. However, unlike in the previous example, the patient actively agrees with the therapist. As such, the *Dichotomous thinking* should be rated.

9. Cognitive restructuring: Patients may at times “cognitively restructure” themselves in therapy, sometimes on their own, other times as a result of the therapist’s intervention. For example, after the patient overgeneralizes by stating that he does not have any say in decisions at home, the therapist says:

THERAPIST: Is it true that you don't have any decisions at your home?

PATIENT: No, it's not true that I don't have any decisions.

In such a case, i.e. when the patient clearly and soon after displaying the error corrects him or herself, the CE "Overgeneralizing" should not be scored. Furthermore, the patient may report that he displayed a CE (in the past) but now have a different take on the situation. For example, a patient may use a "thought record" to document his cognitive functioning, and report different CEs to his therapist during a session. If the patient self-corrects during the session, the CE should not be scored.

10. "Process" and "Content" CEs: Both content and process CEs can be rated, depending on the intended use of the rating system. Content ratings occur when a patient is describing a situation or event and reporting CEs pertaining to this event. Process ratings occur between the therapist (or interviewer) and patient (or participant) in session.

Example of a Process CE: "You probably think I'm exaggerating". In this example, the patient makes an assumption about what the therapist is thinking in session.

11. Insufficient information: Cognitions that imply an error, but lack supporting information, are not rated.

3.5 Bracketing the text

When using a verbatim transcription of an interview to assess cognitive errors, the text first needs to be bracketed to highlight the presence of an error. This can be done in a number of ways, depending on the needs of the raters, researchers, or clinicians using the rating system. Evidently, raters must bracket the text which contains the cognitive error [error starts ... error ends] and include the thought unit that is needed to identify the error, as mentioned above. However, this thought unit may vary in length depending on how it is defined as well as on the type of error rated and the intended use of the ratings.

Generally, we recommend placing the brackets in such a way that the bracketed section could stand alone, separate from the transcript, and still be understood. Enough text should be bracketed so that the construct (i.e. the cognitive error) is clearly identifiable. Ideally, and wherever possible, the context or stressor can also be included.

4. SUMMARY LIST (OVERVIEW) OF COGNITIVE ERRORS

Cluster A. Fortune-telling (FT)

1. Fortune telling (FT)

Cluster B. Over-generalization (OG):

2. Labeling (LAB)
3. Over-generalizing (OG)

Cluster C. Selective Abstraction (SA)

4. All-or-nothing thinking (A/N)
5. Discounting/dismissing the positive or negative (DIS)
6. Emotional reasoning (ER)
7. Magnification/Minimization of the negative or of the positive (MM)
8. Mental filter (MF)
9. Should and must statements (SM)
10. Tunnel vision (TV)
11. Jumping to conclusions (JC)

Cluster D. Personalizing (P)

12. Mind-reading (MR)
13. Personalization (P)
14. Inappropriate blaming/crediting of self, while ignoring the roles of others (IS)
15. Inappropriate blaming/crediting of other, while ignoring the role of self (IO)

Cluster E. Cognitive Error Not Otherwise Specified (NOS)

16. Cognitive error not otherwise specified (CENOS)

**5. DETAILED LIST OF COGNITIVE ERRORS: DESCRIPTION,
DIFFERENTIATION FROM OTHER CEs AND EXAMPLES**

Cluster A. Fortune telling (FT)

Cluster A - Fortune Telling only includes one cognitive error, also labeled *Fortune telling*.

1. Fortune telling (FT)

Synonyms

May also be called *Catastrophizing* or *Negative Prediction* when negative. Can also be referred to as *Arbitrary inference*, or the *Fortune Teller Error*. According to some authors, Fortune Telling is a subtype of Jumping to Conclusions.

Background and context

N/A

Definition

Fortune Telling is making the assumption that the worst or best possible outcome will occur in a situation. This assumption is not based on facts (or is based on partial facts). *Negative Fortune Telling* is also called *Catastrophizing*, in which one predicts that the future outcome of some situation will be negative without giving consideration to more likely outcomes, which may be less negative. *Positive Fortune Telling* is predicting that the future outcome of a situation will be positive or favorable, without considering less positive outcomes which may be more likely.

Valence

To determine the **valence**, the rater must take the perspective of the subject, and follow the valence of the result from the subject's perspective. Hence, a negative prediction (i.e. that is unpleasant, detrimental or unsatisfactory to the individual) should be scored as "negative" and reported as such on the score sheet, whereas a positive prediction (i.e. that is pleasant or satisfactory, from the individual's perspective) should be scored as "positive".

Examples

- **Negative Fortune-telling.**

Example 1.

SUBJECT: *[My big test is happening later today and I just know that I'm going to fail it].*

Example 2. This takes the form of a doubting question *[in italics]*.

SUBJECT: Uhm, well, I'm very artistic. I'm able to take things, rearrange them, fix them up a little bit. And make them better.

INTERVIEWER: You're talking about like interior design? Or (unclear)?

SUBJECT: Yeah.

INTERVIEWER: Yeah?

SUBJECT: Interior design. I guess, I could do that with just about anything. Anything aesthetic. Anything... *[But that, too, it's, it's, uh, it's not that easy anymore. Or maybe, it's cause I doubt it. You know? Oh, am I, am I still going to be able to do this?]*

INTERVIEWER: Uh huh. So,

SUBJECT: So, that, too, I haven't been venturing there yet.

Example 3.

SUBJECT: I have a l... I guess (unclear).

INTERVIEWER: Uh huh. [And you said you'd like a husband to look after you.

SUBJECT: *Uh huh. (laughs) Which will never happen].*

- **Positive Fortune-telling.**

Example 1.

SUBJECT: *[My application is so good. I am sure that they are going to accept me].*

Example 2.

SUBJECTS: *[This is the winning ticket. I know I will win the... tomorrow's big draw!]*

Differentiation

- *From Overgeneralizing.* Discrimination of Fortune telling from Overgeneralizing is based on how the subject presents the example. In Fortune Telling, the individual lacks evidence, or does not use evidence, including past experiences, in support of his or her prediction. If the subject describes an expected future outcome independent of linking it to past experience, it is Fortune telling. If the subject includes references to previous or present experiences with the same outcomes as he or she imagines the current example will have, then this linkage indicates that Overgeneralizing is used, even if it is about a future outcome.

Fortune Telling: "My aunt set me up for a blind date and it's tomorrow. The guy is not going to like me."

Overgeneralizing: “I have that date tomorrow. **Every time** I have a blind date, the guy doesn’t like me so it’ll happen again”.

There are other situations in which the individual may make predictions based on an overgeneralization. For example:

SUBJECT: “All men my age end up... will end up with a beer belly”

In the example above, the individual makes a negative prediction about the future. However, this prediction is based on an overgeneralization. In such cases, the rater must determine which of the two errors is most important. For example, if the subject went on to discuss other problems related to men his age, then the rater may choose to rate the overgeneralization because the fortune telling is clearly not as important and was only present to demonstrate and support the overgeneralization. However, if the subject went on to make other predictions about the future, then the rater may rate the fortune telling only because the overgeneralization was secondary to the negative prediction about the future and only served to support it. Finally, it is possible that both errors are present and equally important, in which case both should be rated.

- *From Jumping to Conclusions*. Discrimination of Fortune telling from Jumping to Conclusions is based on how the subject presents the example. First, Jumping to Conclusions *can* be about the future, whereas Fortune telling *is always* about the future. Second, in Fortune Telling, the individual lacks evidence, or does not use evidence in support of his or her prediction about the future. When the individual does have information in support of the prediction, it is only partial information or facts and, more importantly, *it is not used by the individual to demonstrate the validity of the prediction*. Jumping to Conclusions is always based on some fact (even partial) which is used *to demonstrate and support* a conclusion. Unlike Fortune telling, Jumping to Conclusions implies and is based on establishing a form of “causality”.
- *From Mindreading*. Discrimination between the two cognitive errors is again based on how the subject presents the example. In some situations, a subject may predict what others *will* think about him or her (or predict another individual’s thoughts). While this could be considered reading others’ minds, if the emphasis is on the prediction of the future, without evidence in support of it, then it should be scored as Fortune Telling; if the example involves the future, Fortune Telling thus takes precedence.

Fortune Telling:

SUBJECT: But um, no, I’ve definitely, I was interested in reading it and I showed it to my sister. I knew I

was going to get that kind of reaction, Like...

INTERVIEWER: What was her reaction?

SUBJECT: *[The same that I'm going to get from my other sister, like from my parents. Like "what is this?"]*

Cluster B. Over-generalization (OG)

Cluster B - Over-generalizing includes two specific cognitive errors:

- 2) labeling, and
- 3) over-generalizing.

2. Labeling (LAB)

Synonyms

May be referred to as *Mislabelling*. Occasionally, clinicians using an integrative approach or an approach influenced by dynamic constructs will use the terms *Devaluation* or, albeit more rarely, *Splitting*.

Background and context

N/A

Definition

The individual puts a fixed global label on him or herself, others or a situation without considering that the evidence might more reasonably lead to a less disastrous or less positive conclusion. It can be an adjective (e.g. I'm a loser; he's no good) or a phrase (e.g., "I am the kind of person who, no matter what I try, it will fail.").

Valence

When scoring the **valence** of the CE and reporting it onto the score sheet, raters must make sure they do not confuse the valence of the CE with the valence or connotation of the adjective or label used. For example, a label such as "idiot" has a definite negative connotation. However, the subject may feel better as a result of using this label (e.g. because it allows him or her to devalue others; because it allows him to feel less concerned about the other; or because it allows her to feel good about herself); if that is the case, then the CE should be scored and reported onto the score sheet as a positive CE. Likewise, if the resulting feeling is negative, then the CE should be scored as negative even if the connotation of the label used is positive. For example, if the subject feels bad (e.g. envious, neglected or incompetent) because his sister is a "genius", then the CE should be rated as negative, even though the label used has a generally positive connotation.

Examples

Example 1. Simple label of others, positive.

SUBJECT: Forget him. [*He's a loser*].

Example 2. Simple label of self, negative.

SUBJECT: After that, my (clears throat) brother-in-law and, uh, mother-in-law, they get involved and then, they do all... all of them, they complained. And they complained, eh, about my family. Because of my family, my brothers and sisters, who I helped, that is why I am in, financially, in trouble. So, that's how things... And when I came home from work, everyday, the same thing - my wife talks about money. And she calls her mother again. And again, they talk hours and hours, discuss these things.

INTERVIEWER: So, it makes you feel bad.

SUBJECT: Yeah.

INTERVIEWER: It makes you feel like a failure?

SUBJECT: *[Yeah. Is, uh, a useless... like a useless man.]*

Example 3. Discussing a label of self, negative.

SUBJECT: So what else is there to talk about... *[Uh, what I, what I had a problem with, uh, is, yeah, being... thinking of myself as a bi-polar... or having bi-polar disorder, or...]*

INTERVIEWER: Uh huh. Yeah. I guess there's a difference between thinking of yourself as a bi-polar,

SUBJECT: *(slight laugh) Yeah.*

INTERVIEWER: and having a bi-polar disorder.

SUBJECT: *Yeah (laughing slightly)*

INTERVIEWER: *(laughing slightly)* Cause you, hopefully, have another identity that is not this...

SUBJECT: *Exact... Yeah. And it's funny that I said that. Ey?*

INTERVIEWER: Yeah. So, maybe, uh,

SUBJECT: *Yeah.*

INTERVIEWER: that's what you're afraid of, is that's going to become your new identity.

SUBJECT: *Yeah. And it's... You wonder, uhm... Cause I know, for example, a lot of artists are bi-polar.*

INTERVIEWER: Uh huh.

SUBJECT: *So, how much is... of, of that... - how can I say it? - is, is you?]* Anyway, I guess I learned that you can't have it, you can't be way too high or way too low.

Example 4.

SUBJECT: I really don't know, *[I just feel like there's something wrong with me, and I just feel like I'm different from other people].*

Differentiation

- *Labeling versus simply using an adjective.* People can describe someone's behavior with an adjective, without necessarily using labeling. For example, "that was rude" is descriptive and adjectival, as opposed to the examples above.
- *Labeling versus Emotional reasoning.* The two CEs can at times look alike, for example if a participant says "I feel like a moron" or "I feel like an idiot". It is the context that will indicate which of the two errors should be scored: what does the subject emphasize? In most cases, it will be the label, thus leading to a rating of "Labeling". However, if the individual emphasizes the fact that he or she concludes, decides, acts, or behaves based on that emotional feeling (including a label), then Emotional reasoning should be scored

For example:

SUBJECT: *I just feel like a bitch, like it just doesn't feel right, so he must be right when he says I am crazy.*

In the example above, the participant uses her emotions (which she equates to feeling like a bitch) to conclude that her partner is right. Hence, it is the *Emotional reasoning* that should be scored.

3. Over-generalizing (OG)

Synonyms

Some use the term *Sweeping conclusion* instead of overgeneralization.

Background and context

N/A

Definition

The individual makes a sweeping negative or positive conclusion that goes far beyond the situation. When subjects say that something is always or never true, only rate it as *Over-generalization* when there is some additional material that indicates the patient is not simply meaning a lot or rarely, as a manner of speaking. Not every generalization is an over-generalization. It has to give clear evidence that it is a distortion.

Valence

When the generalization makes the subject feel bad, then it should be rated as negative. When the generalization makes the subject feel good, then it should be rated as positive.

Examples

Example 1. Simple over-generalization, negative.

SUBJECT: *[My wife, when I say something, she always shouts and says something negative like that, so that is what it is like to try to talk to her.]*

Example 2. Over-generalizing in making a contrast. This example actually includes two over-generalizations, one positive and one negative.

SUBJECT: I really enjoyed the new job. It's all new faces, new people.
 INTERVIEWER: Really?
 SUBJECT: *[Uh, I think the Toronto people have more of a, uh,*

*business style of thinking, than back here in this area.
Here the way people are is 'if you're too good, I will stab
you in the back'.]*

Example 3.

INTERVIEWER: So, having had such a bad experience with, with one...
SUBJECT: [I try to avoid doctors. And even after that, uh, I've had
to change gastrologists. I just... They're people. You
know ?
INTERVIEWER: Uh huh.
SUBJECT: And, uh, I tend to - I don't trust them, I just...]

Example 4.

INTERVIEWER: Uh huh. You said you were fighting with him a lot.
SUBJECT: Uh huh.
INTERVIEWER: Or he fought with you. What were the fights about?
SUBJECT: [Everything.]

Differentiation

- *Differentiating Overgeneralizing from Fortune telling.* Discrimination of Fortune telling from Overgeneralizing is based on how the subject presents the example. In Fortune Telling, the individual lacks evidence, or does not use evidence, including past experiences, in support of his or her prediction. If the subject describes an expected future outcome independent of linking it to past experience, it is Fortune telling. If the subject includes references to previous or present experiences with the same outcomes as he or she imagines the current example will have, then this linkage indicates that Overgeneralizing is used, even if it is about a future outcome.

Fortune Telling: "My aunt set me up for a blind date and it's tomorrow. The guy is not going to like me."

Overgeneralizing: "I have that date tomorrow. **Every time** I have a blind date, the guy doesn't like me so it'll happen again".

There are other situations in which the individual may make predictions based on an overgeneralization. For example:

SUBJECT: "All men my age end up... will end up with a beer belly"

In the example above, the individual makes a negative prediction about the future. However, this prediction is based on an overgeneralization. In such cases, the rater must determine which of the two errors is most important. For example, if the subject went on to discuss other problems related to men his age, then the rater may choose to rate the overgeneralization because the fortune telling is clearly not as important and was only present to demonstrate and support the overgeneralization. However, if the subject went on to make other predictions about the future, then the rater may rate the fortune telling only because the overgeneralization was secondary to the negative prediction about the future and only served to support it. Finally, it is possible that both errors are present and equally important, in which case both should be rated.

Cluster C. Selective Abstraction (SA)

Cluster C - Selective abstraction includes eight cognitive errors, numbered as follows:

- 4) All-or nothing thinking,
- 5) Discounting or dismissing the positive or negative,
- 6) Emotional reasoning,
- 7) Magnification of the negative or minimization of the positive,
- 8) Mental filter,
- 9) Should and must statements,
- 10) Tunnel vision, and
- 11) Jumping to conclusions.

4. All-or-nothing thinking (A/N)

Synonyms

This is also called *black-and-white, polarized, absolutistic or dichotomous thinking*.

Background and context

N/A

Definition

The individual views a situation as fitting into one of only two opposing categories, rather than as a mixture or on a continuum between the two.

Examples

Example 1. All-or-nothing, negative valence

INTERVIEWER: So you did well at your competition yesterday? Because you had said you thought it wouldn't work out and...

SUBJECT: *[Yes I did, I guess... I mean I got a mean score of 8 on, it's on 10 points... huh, but it wasn't perfect so in the end, it doesn't matter and... because I had worked hard and... now I see it was a waste of time and I just, I- I just, huh... it was just useless, a complete waste of time.]*

Example 2. All-or-nothing, negative valence

INTERVIEWER: So, but... but you had mentioned you huh... were supposed to meet that guy from what's it called huh?

SUBJECT: From Lavalife? Yeah, yeah, I huh... I did meet up with him, a couple of times actually. Hum, he was, *[I mean he was very nice and sweet and actually smart and cute and huh he said... he is an engineer and... he is French and huh, well, you know what they say about the French (laughs, nervous giggle)! So anyway, he has a good job and he even volunteers for this thing for the elderly but huh...*

INTERVIEWER: But what?

SUBJECT: *He's shorter than I am not huh, not by much but maybe half an inch to an inch? So this isn't going to work, it's to bad I guess.]*

Differentiation

- *From Labeling or Overgeneralizing.* To clearly demonstrate all-or-nothing thinking the individual has to show some awareness of both sides or valences of an issue, for example: "If it's not everything I want, it's no good". If only one side or category is shown, then the individual may be labeling or overgeneralizing instead.

5. Discounting the positive or negative (DIS)

Synonyms

May be referred to as *Disqualifying* or *Dismissing the positive* (or negative).

Background and context

N/A

Definition

The individual selectively dismisses, disqualifies or discounts information that is positive or negative, thus keeping only one valence of information as true, relevant or important.

Valence

The valence of the CE should not be scored based on the valence of the information discounted or dismissed but always on the resulting feeling or conclusion of the subject. For example, if a participant feels good as a result of dismissing negative information, then the CE should be scored and reported onto the score sheet as *Discounting the negative, positive valence*.

Examples

Example 1. Discounting the positive, negative valence

SUBJECT: *[Well everyone pitched in and helped and it was a nice party, and she, I mean what she did, she huh... you know she said huh, I asked her "what are you doing", this is the night before the party, huh... when I called her, I asked "what are you doing" and she said "I am cooking for the surprise party tomorrow". And then she brought fruits, OK, I mean OK, they were sliced but that doesn't qualify as cooking!]*

Example 2. Discounting the negative, positive valence

THERAPIST: But didn't you just say it was practically falling apart?

SUBJECT: *[Yes, yes I did but it's a Mustang! You know what I mean? Who cares if it's leaking and what not, it's a Ford Mustang!]*

Differentiation

- *From Tunnel Vision.* Differentiation is based on the extent to which the individual can see different and/or opposite aspects of a problem, person or situation. In *Tunnel Vision*, the subject only sees or acknowledges one aspect (valence) of the situation (positive or negative), and can even transform the valence of the stressor, whereas in *Discounting*, the subject can see both aspects or sides of a situation but dismisses one, claiming it is irrelevant or not important, or that it makes no difference. In *Discounting*, the individual does not change the valence of the stressor.
- *From Magnification/Minimization of the Positive/Negative.* Differentiation is based on the extent to which the individual can see different and/or opposite aspects of a problem, person or situation. In *Magnification/Minimization*, the subject can see both the positive and the negative, but magnifies or minimizes one aspect, whereas in *Discounting or dismissing*, the subject can also see both aspects but simply dismisses one aspect -positive or negative- of the situation.

For example:

- “I know I contribute a lot at work, but in the end, it doesn’t matter” would be *Discounting* the positive;
- “ I know I contribute a lot at work, but I think it is not enough” would be *Minimizing* the positive.
- “I don’t do enough at work”, when there is evidence of the opposite (the subject is working hard, etc.) would be *Tunnel Vision*.

6. Emotional reasoning (ER)

Synonyms

N/A

Background and context

N/A

Definition

The individual thinks something must be true because he or she feels and believes it to be true, while ignoring or discounting evidence to the contrary: *"I feel it therefore it must be true"*.

Examples

Example 1. Simple emotional reasoning, negative valence.

SUBJECT: *[I know I do a lot of things ok at work, but I still feel that I am a failure.]*

Example 2. Emotional reasoning, positive valence.

SUBJECT: My case is accepted (long pause)

INTERVIEWER: Okay, but huh... so if you know that, but huh, aren't they reviewing your file today, did they did it already I mean how do you know...?

SUBJECT: I haven't heard yet. But huh... *[This feeling I have (unclear)..., just this feeling I have...]*

Example 3. Emotional reasoning, negative valence

INTERVIEWER: Are there things that you would anticipate might make it difficult to keep this up?

SUBJECT: I mean the only thing that I see that would be difficult and you know I'd even mention, I was talking to

**Colleen about this last night is, you know what, [it's really weird because you know I have this, you know, I don't know what it is, it's just kind of a weird feeling that like that my marriage just it won't, I mean it's just not going to work].*

Differentiation

- *From Labeling.* The two CEs can at times look alike, for example if a participant says "I feel like a moron" or "I feel like an idiot". It is the context that will indicate which of the two errors should be scored: what does the subject emphasize? In most cases, it will be the label, thus leading to a rating of "Labeling". However, if the individual emphasizes the fact that he or she concludes, decides, acts, or behaves based on that emotional feeling (including a label), then Emotional reasoning should be scored

For example:

SUBJECT: I just feel like a bitch, like it just doesn't feel right, so he must be right when he says I am crazy.

In the example above, the participant uses her emotions (which she equates to feeling like a bitch) to conclude that her partner is right. Hence, it is the *Emotional reasoning* that should be scored.

7. Magnification and/or minimization of the negative or positive (MM)

Synonyms

Magnification of the negative may occasionally be referred to as *Catastrophizing*. Magnification or minimization can be referred to as the *Binocular Trick*.

Background and context

N/A

Definition

When evaluating oneself or another person or a situation, the individual unreasonably magnifies the negative or minimizes the positive, or the converse.

Minimization and Magnification are not rated separately (i.e. as two distinct CEs) in this version of the manual. Empirical data will be needed to determine if rating them as two separate CEs is warranted.

Valence

Magnification can be in a positive or negative direction (e.g. good becomes great, bad becomes unbearable). Minimization can also be negative (as in minimizing the bad in something) or positive (as in minimizing the good in, or the value of something). This should *NOT* be confused with the valence of the CE as scored and reported onto the score sheet. When determining the valence of the CE, the rater must take the perspective of the subject making the CE, and follow the valence of the result from the subject's perspective (e.g. resulting feeling, consequence, or conclusion). As such, even when a participant magnifies the positive (e.g. "my colleague is so smart"), if he or she feels bad as a result of this, then the rater should score MM – negative.

Examples

Example 1. Simple magnification of a negative, negative valence.

SUBJECT: *[No I mean it's, it is fine. But we were tight on food, at*

one point I thought we hadn't ordered enough and we didn't actually.

THERAPIST: So that...

SUBJECT: *I mean it still went well. I mean I cant say people huh, I mean guests were happy, they were. But we ran out of food so that's like, it made look like it was not very professional.]*

Example 2. Simple magnification of a positive, positive valence.

SUBJECT: So that is what happened basically, and so I came to the hospital here for help.

INTERVIEWER: Un huh, un huh.

SUBJECT: *[So, since the moment I walked into this hospital, I've been taken care of.*

INTERVIEWER: Un huh..

SUBJECT: *and picked up and surrounded and I loved every second of it.*

INTERVIEWER: Really?

SUBJECT: *That's right.] But since the first few sessions I haven't had any more thoughts about harming myself.*

Example 3. Magnifying the negative effects of an otherwise positive attribute; this example should be scored as magnifying the negative, positive valence.

SUBJECT: I didn't like the back-biting at work. *[I was more of a get-things done person. That has always been my handicap working with them. It made me a very dangerous person for my bosses.*

INTERVIEWER: How so?

SUBJECT: *Because I was always very ahead of their way of doing things.]*

Differentiation

- *From Discounting the Positive/Negative.* The difference between the two cognitive errors is based on the importance the individual gives to the different, often opposite, aspects of a problem, person or situation. In *Magnification/Minimization*, the subject can see both the positive and the

negative, but magnifies or minimizes one aspect. In *Discounting or dismissing*, the subject can also see both aspects but simply dismisses one aspect - positive or negative- of the situation.

- *From Tunnel Vision.* In *Tunnel Vision*, the subject does not acknowledge (positive or negative) one aspect (valence) of the situation or transforms the valence of the stressor.
- *From Mental Filter.* In *Mental Filter*, the subject focuses on one detail of an event, person, or situation, giving that one detail more importance than the “big picture”. The emphasis is on the importance of that detail, which is blown out of proportion. In *Magnifying/Minimizing*, the emphasis is not on the importance and consequence of the detail, but on the valence of the situation, which is either magnified or minimized.

For example:

- “I know I contribute a lot at work, but in the end, it doesn’t matter” would be *Discounting* the positive;
- “I know I contribute a lot at work, but I think it is not enough” would be *Minimizing* the positive.
- “I don’t do enough at work”, when there is evidence of the opposite (the subject is working hard, etc.) would be *Tunnel Vision*.
- “I normally contributed a lot at work, but during this one meeting, I yawned and my boss saw me so it’s a terrible place to work at” would be *Mental Filter*.

8. Mental filter (MF)

Synonyms

In some publications, *Mental Filter* and *Tunnel Vision* are used interchangeably. *Tunnel Vision* is considered by some to be an extreme form of *Mental Filter*. However, in the CERS, they are considered to be two distinct cognitive errors.

Background and context

N/A

Definition

The individual pays undue and complete attention to only one aspect of an individual or situation without any acknowledgment of the other sides of the issue which would yield a whole picture. With Mental Filter, the individual focuses and dwells on a single (or very few) detail(s) instead of seeing the whole picture, somewhat like when one “sees the tree but not the forest”.

Seeing only ONE (or very few) negative details may be the more common form. But individuals may also focus on one positive detail of a person, event, or situation, to the point where that detail becomes the only thing that matters.

Valence

When rating the valence of this CE, raters must not confuse the valence of the CE with the valence of the information involved in the cognitive error. For example, it may be tempting to score Negative mental filter when the person only sees one negative detail in a situation. While this is possible, and might be one of the most common forms of this CE, the fact that the detail is negative should not be equated with negative valence.

Think of the following example, reported again below in the *Examples* section:

I played a good game but in the third period, I lost the puck and that ruined it all.

In this example, the subject dwells on one negative detail and feels terrible. The situation could have been the same if he was talking about someone else, for example someone he cares about:

He played a good game but in the third period, he lost the puck and

that ruined it all.

In the example above, the subject dwells on a negative detail. Because it involves someone he *cares* for, and as a result the subject feels badly, the CE has a negative valence and is scored as such. But imagine he is talking about someone else with whom he tends to compete and whom he would like to see fail at something:

He played a good game but in the third period, he lost the puck and that ruined it all.

In the example above, the subject focuses on a negative detail. However, because he derives satisfaction from this, the CE should be scored as having a positive valence.

Examples

Example 1.

SUBJECT: *[I played a good game but in the third period, I lost the puck and that ruined it all.]*

Example 2. Although the person's evaluation contained many high ratings, he states:

SUBJECT: *[I got one low rating on my annual evaluation. It means I'm doing a lousy job.]*

Differentiation

- *From Magnification/Minimization of the Positive/Negative.* Discrimination between the two cognitive errors is based on the extent to which the individual can see different and/or opposite aspects of a problem, person or situation. In *Magnification/Minimization*, the subject can see both the positive and the negative, but magnifies or minimizes one aspect. In *Mental Filter*, the subject does not acknowledge (somewhat like denying) many aspects of the situation and instead focuses on one detail.
- *From Discounting the positive/negative.* In *Discounting or dismissing*, the subject can see both aspects but simply dismisses one aspect -positive or negative- of the situation. *Discounting*, like *Magnifying/ Minimizing*, implies being able to see at least two, sometimes opposite parts or sides to a problem or situation, *Mental Filter* implies being able to see only one detail (and/or denying other parts or the big picture).
- *From Tunnel Vision.* It can be difficult to distinguish Mental Filter from

Tunnel Vision because both are close neighbors involving selective abstraction. The difference lies in the type and the extent of the information “selectively abstracted”. For example, with Mental Filter, the individual selectively abstracts *pieces* of information, such as numerous details or the big picture, to instead focus on one or very few details. With Tunnel Vision, the individual selectively abstracts information based on its valence, i.e. leaving out information or aspects of a situation that are negative or positive.

For example:

- “I know I contribute a lot at work, but in the end, it doesn’t matter” would be *Discounting* the positive;
- “I know I contribute a lot at work, but I think it is not enough” would be *Minimizing* the positive.
- “I don’t do enough at work”, when there is evidence of the opposite (the subject is working hard, etc.) would be *Tunnel Vision*.
- “I normally contributed a lot at work, but during this one meeting, I yawned and my boss saw me so it’s a terrible place to work at” would be *Mental Filter*.

9. Should and must statements (SM)

Synonyms

Also referred to as *Imperatives*, or *Should statements*.

Background and context

N/A

Definition

With *Should and must statements*, the individual has a precise and fixed idea of how others or oneself should behave. As a result, whenever these expectations are not met, the individual over-estimates how bad the consequences are.

Examples

Example 1.

SUBJECT: I have always been demanding of myself. [*Very, uhm, always had to be up there, always had to be the best, always had to be perfect, umh...*]

INTERVIEWER: So you drove yourself, as we would say.

SUBJECT: *Yeah, I was driving myself a lot. And, uh...*

INTERVIEWER: Uh huh.

SUBJECT: *... never could be weak, not allowed to be sick, and uh, never negative. Everything had to... was just perfect for me]*

Example 2.

SUBJECT: [*No, no, I absolutely, definitely, huh, I have to work harder. That's all. Just work harder and then it'll work. And they shouldn't see that I am having trouble with this.*]

Example 3.

SUBJECT:

When I stay in bed and I'm aware I didn't have to face the world but maybe, then I probably go down and have lunch of something and I start to feel the guilt, starts coming on like *[I should have went to my grandmother's, I should have cleaned out one of the closets or you know, there's a lot of things, you know, I should have done my dishes. And that's where it really starts].*

10. Tunnel vision (TV)

Synonyms

Some authors use *Mental filter* and *Tunnel vision* interchangeably. Others, while this is rare, occasionally borrow from the psychodynamic literature and use the term *Splitting*.

Background and context

N/A

Definition

With *Tunnel Vision*, the individual sees only the negative (or positive) aspects of a situation, or fails to see, or denies any positives (or negatives) in a situation.

Tunnel vision may involve only positive aspects, such as when one sees everything “through rose colored glasses”, focusing on positive features while not acknowledging negative features, and thus yielding an overly positive rather than a more balanced picture. Tunnel vision may also involve negative aspects, such as when one sees only the bad and the negative in a situation, person, or event.

Valence

While in most cases, “negative” Tunnel vision will have a negative valence and “positive” Tunnel vision will have a positive valence, the valence of this CE, as scored and reported onto the score sheet, should not be confused with the valence of the information involved. For example, it is possible for a subject to derive satisfaction (i.e. positive valence) from seeing only the negative aspects of a situation involving someone else.

Examples

Example 1. Tunnel Vision, positive valence

SUBJECT:	A lot of things that I did for people were at my expense.
INTERVIEWER:	Sure, at your expense.
SUBJECT:	So that is what I've learned now. <i>[And I don't regret anything.]</i>
INTERVIEWER:	Uh-huh.
SUBJECT:	<i>Uh-huh, because a lot of things that I did were good.</i>
INTERVIEWER:	Un huh.

SUBJECT: *And I don't regret any of it.]*

Example 2. Tunnel Vision, negative valence

SUBJECT: *[No, things weren't ok at work this week. It was a bad week. My boss is huh... insensitive and doesn't want to fix the problem. He's not very competent to tell you the truth, and he doesn't listen, he's a lousy administrator, and huh, I could go on forever. And I couldn't get work done because it was too cold huh, the heating broke down.]*

Example 3. Tunnel Vision, positive valence

SUBJECT: I mean if our marriage didn't work out, I don't see it as something bad.
 INTERVIEWER: Hum...
 SUBJECT: *[I mean it wouldn't be bad; it would be good and then you know. It wouldn't, you know what I mean...]*
 INTERVIEWER: Not really. I thought you would be worried that...
 SUBJECT: *No, it's just I don't see it as negative. I never have because it's positive. So it's not like I can get, I don't get bad about that, you know.]*

Differentiation

From Mental Filter. It can be difficult to distinguish Mental Filter from Tunnel Vision because both are close neighbors involving selective abstraction. The difference lies in the type and the extent of the information “selectively abstracted”. For example, with Mental Filter, the individual selectively abstracts *pieces* of information, such as numerous details or the big picture, to instead focus on one or very few details. With Tunnel Vision, the individual selectively abstracts information based on its valence, i.e. leaving out information or aspects of a situation that are negative or positive.

For example:

- “I know I contribute a lot at work, but in the end, it doesn't matter” would be *Discounting* the positive;
- “I know I contribute a lot at work, but I think it is not enough” would be *Minimizing* the positive.
- “I don't do enough at work”, when there is evidence of the opposite (the subject is working hard, etc.) would be *Tunnel Vision*.
- “I normally contributed a lot at work, but during this one meeting, I

yawned and my boss saw me so it's a terrible place to work at" would be *Mental Filter*.

11. Jumping to conclusions (JC)

Synonyms

Can be referred to as *Arbitrary inference*. According to some authors, Jumping to Conclusions includes *Mind Reading* and *Fortune Telling*.

Background and context

N/A

Definition

The individual takes one or two facts and draws unwarranted conclusions.

Examples

Example 1, negative valence

SUBJECT: *[It's like I'm scared... If I'm laughing too much is this another manic episode?]*

Example 2, negative valence

SUBJECT: When, (slight laugh) when he left,

INTERVIEWER: Uh huh.

SUBJECT: *[my mother gave me a plant. And I, I started to grow it. Cause when he was there, they wouldn't grow (slight laugh). And when she gave me a plant, and I just decided I was going to start growing plants. And it would show my growth.*

INTERVIEWER: Huh.

SUBJECT: *So, if there's a bad... like if there's a leaf that's dying, it means there's something I have to change.*

INTERVIEWER: Uh huh.

SUBJECT: *Something that I need to do for myself. Or...*

INTERVIEWER: So, the plants, for you, give you a message].

Example 3, negative valence.

SUBJECT: *[Now, he has some problems with his health. And that's when he realized... he found that out in September. And, uh, that's when he really, really started a campaign (slight laugh) to try and get me back. With all the "I love you's". And sending flowers... and says he needs me. He has, basically, he has reflux very bad. And he has to have an operation. An ulcerating esophagus which, the doctor told him, could possibly lead to cancer in ten years if it continues that way. So, he's scared.*

INTERVIEWER: Uh huh.

SUBJECT: *And I think it's more...*

INTERVIEWER: So, you think he's recruiting you for

SUBJECT: *I think it's...*

INTERVIEWER: caretaker?

SUBJECT: *Yes, I've thought about that. Yeah. I think it's more a need. I think he... that if he was the way he was before... - he's very restricted now. You know, no coffee, no alcohol, and, you know, certain foods... many foods are not allowed. Uhm, a raised bed. [sighs] A... and, and he's scared. You know, it's always in his mind what's going on. You know? [sentence unclear]*

INTERVIEWER: How old is he?

SUBJECT: *Forty-three. And so, the message came across strongly, that, you know, I need you. But I'm also being wary].*

Differentiation

- *From Fortune Telling*. Discrimination of *Fortune telling* from *Jumping to Conclusions* is based on how the subject presents the example. First, *Jumping to Conclusions* can be about the future, whereas *FT* is always about the future. Second, in *Fortune Telling*, the individual lacks evidence, or does not

use evidence in support of his or her prediction about the future, whereas *Jumping to Conclusions* is always based on some fact (even partial) which is used to demonstrate and support a conclusion. Unlike *Fortune telling*, *Jumping to Conclusions* implies establishing a form of causality.

Cluster D. Personalizing (P)

Cluster D - Personalizing includes four forms, numbered

- 12) Mind-reading,
- 13) Personalization,
- 14) Inappropriate blaming or crediting of oneself, while ignoring the role of others,
- 15) Inappropriate blaming or crediting of others, while ignoring the role of self.

12. Mind-reading (MR)

Synonyms

Can sometimes be referred to as *Arbitrary inference*. According to some authors, Mind Reading is a subtype of *Jumping to Conclusions*.

Background and context

N/A

Definition

With mind-reading, the individual believes he or she knows what others are thinking (positive or negative), failing to consider other more likely possibilities.

Valence

The “content” of the “other’s mind” can be positive or negative. While in most cases, “reading” positive thoughts in others’ minds will be associated with a positive outcome and valence for the subject and vice versa for negative thoughts, the positivity or negativity of the content should not be confused with the positivity or negativity of the valence. When rating this CE, the rater must determine, just like for any other CE, if the outcome for the subject is positive or negative in order to rate the valence of the error.

Example

Example 1. Mindreading, negative valence

SUBJECT: *[Like they think like, it’s like... it’s almost like “are you trying to excuse yourself and get away with it?”]*

Example 2. Mindreading, negative valence

SUBJECT: But why can’t these people understand? *[Because they only understand science, and facts, and...*

INTERVIEWER: Uh huh.

SUBJECT: *what they’ve learned.]*

Example 3. Mindreading, positive valence

SUBJECT: *[He went ahead and cleaned the entire house! He wanted to make me happy. He thinks I'm too good for him so he needs to work a bit to keep me.]*

Differentiation

- *From Fortune telling.* Discrimination between the two cognitive errors is based on how the subject presents the example. In some situations, a subject may predict what others *will* think about him or her (or predict another individual's thoughts). While this could be considered reading others' minds, if the emphasis is on the prediction of the future, without evidence in support of it, then it should be scored as Fortune Telling; if the example involves the future, Fortune Telling thus takes precedence.

13. Personalization (P)

Synonyms

N/A

Background and context

N/A

Definition

The individual takes things overly personally, believing that others are behaving positively or negatively or events/situations are happening because of him or herself, without considering more plausible explanations for their behaviors or for the events, which may not involve oneself.

Examples

Example 1, negative

SUBJECT: *[My boyfriend was really cranky that day. I must have done something wrong.]*

Example 2, negative

SUBJECT: *[He just looked really upset, I mean, pissed and I, huh... the others thought it had nothing to do with us but I think it's because I messed up that experiment huh...]*

INTERVIEWER: Did he tell you this or did? Or did someone, I mean...

SUBJECT: *No, in fact the others think it doesn't make sense.]*

Example 3, negative

SUBJECT: *First, my apartment burned down. Then I moved to this other place and the neighbors' apartment burned down. I wasn't there luckily but I saw it on the news. So anyway, I had to order new diplomas 'cause the*

*first copy burned obviously, and the second copy was put into the
envelop folded, and the third copy was printed with the wrong degree.
It's like: why me?*

14. Inappropriate blaming or crediting of self while ignoring the role of others (IS)

Synonyms

N/A

Background and context

N/A

Definition

In *Inappropriate blaming of self, while ignoring the roles of others*, the individual takes blame for something that has gone wrong upon him or herself, while inappropriately leaving out the contributions of others to the same problem. Examples of this include putting oneself in the scape-goat role. In *Inappropriate crediting of self, while ignoring the roles of others*, the individual takes undue credit for something, while inappropriately leaving out the contributions of others.

Valence

Valence must always be assessed from the subject's perspective. In most cases, however, the *Inappropriate **blaming** of self, while ignoring the role of others* has a negative valence. As such, a negative valence score indicates that the individual blames him or herself, or that the outcome is generally negative from the subject's perspective. On the other hand, *Inappropriate **crediting** of self generally* has a positive valence. As such, a positive valence score indicates that the individual takes undue credit or that the general outcome is positive from the subject's perspective.

Examples

Example 1. Inappropriate blaming of self (negative valence)

SUBJECT: *[It's all my fault I, I, I really messed up then it all went wrong!]*

INTERVIEWER: You make it sound like you were alone in this but I thought, I thought you said you were part of a team and that everyone had a specific job to do so that...

SUBJECT: *Yes, that's true! But I am the senior one so!*

INTERVIEWER: But are you the boss or the manager or did I miss something here?

SUBJECT: *No, but, no... there is a team leader and that's not me huh...]*

Example 2. Inappropriate crediting of self (positive valence)

SUBJECT: *[I practically run the place. I don't know how they would do it... how the business would survive if I weren't there!]*

INTERVIEWER: Well, ok, let's talk about that for a minute because I am surprised to hear this. This is, this is the job you started what?... this new position you took what three weeks ago or maybe four, so? And huh, I don't recall you saying they had problems before or did I...

Differentiation

- *From Personalizing.* Inappropriate blaming of self and Personalization can sometimes be similar. The difference is that the former involves truly blaming oneself whereas the latter does not. Furthermore, Inappropriate blaming of self involves self-flagellation or putting oneself in a scape-goat position or role, thus with great emphasis on blaming or faulting oneself. Inappropriate blaming/crediting can somewhat be like an exaggeration of Personalization: in the former, the individual completely ignores others' contribution.

15. Inappropriate blaming or crediting of others while ignoring the role of self (IO)

Synonyms

N/A

Background and context

N/A

Definition

In *Inappropriate blaming of others, while ignoring the role of oneself*, the individual blames others for something that has gone wrong, while inappropriately leaving out his or her own contribution to the same problem. In *Inappropriate crediting of others, while ignoring the role of self*, the individual gives undue credit to others for something, while inappropriately leaving out his or her own contribution.

Valence

While it may be tempting to rate *Inappropriate blaming of others, while ignoring the role of self* as a negative CE because it has a generally pejorative or negative connotation, like for all CEs, the valence must be assessed from the subject's perspective. For example, blaming others can be a way to feel good about oneself or to remove oneself from a conflict by making others fully responsible. In such a case, it could be rated as positive in valence. In other situations, such as in *Example 1* below, it could be rated as negative in valence. Likewise, *Inappropriate crediting of others* can be positive or negative in valence.

Examples

Example 1. Negative valence

SUBJECT: *[I think they foster too much competition within the team. Then they wonder why I am not happy. I mean huh, they, they have everyone compete with everyone and they think it will improve performance.*

INTERVIEWER: I can see that but I remember you saying that you were competing with this other person in the team and that you wanted to beat her, I mean outperform her so that... I wonder I mean huh, it seems like some of this comes from you too and it really just depends on your mood

how you see it.

SUBJECT: *But he's the boss! And I didn't make those decisions for him.]*

Example 2. Positive valence

SUBJECT: *[No, no, no, I actually have nothing to do with, with huh... He's just great and so calm and so we, we huh, we have great kids huh...]*

INTERVIEWER: But you're a couple! There are two people in a couple! So two parents! The two of you!

Differentiation

N/A

Cluster E. Cognitive Errors Not Otherwise Specified (CE-NOS)**16. CE not otherwise specified.**

This should be used rarely if at all. Whenever it is used, write out a description of the CE. This will then be reviewed by the investigators to see if constitutes a new type or is truly a CE but unspecifiable.

6. USING THE DATA

The data collected using the CERS can be used in a number of different ways which require conversion into prevalence scores or corrected raw count scores.

Prevalence (or proportions)

Researchers and clinicians can work with the overall prevalence (or proportions) of the cognitive errors. This can be done at a number of different levels.

- ***At the level of the valence.*** When the researcher or clinician is interested in an overall indicator of the valence of the participants' cognitive errors, he or she may calculate the overall prevalence, across an entire session or interview, of the positive versus negative CEs.

To do this, add up the number of positive CEs in the interview and divide that number by the total number of all (positive and negative) CEs. Subtract that number from 100 to obtain the prevalence of the negative CEs.

- ***At the level of the 5 clusters.*** The prevalence of each of the 5 clusters (Fortune telling, Over-generalizing, Selective abstraction, Personalizing and Not otherwise specified) can also be calculated.

To do this, add up the number of CEs rated in each cluster and divide this number by the total number of CEs. For example, if you rated 20 CEs from the first cluster, 5 from the second cluster, none from the third and fourth clusters and 1 from the fifth cluster, then the overall prevalence of the first cluster is 77%. It is 19% for the second cluster and 4% for the fifth.

- ***At the level of the 5 (or 4*) clusters, taking valence into consideration.*** The overall prevalence of each cluster can also be calculated taking valence into consideration. Instead of having five possible scores as in the example above, we will now have 10 (5 clusters X 2 valences).

To do this, add up all positive CEs from each cluster and divide by the total number of CEs (across all clusters and all valences). Repeat for each cluster and for the negative valence.

- ***At the level of the 16 (or 15*) cognitive errors.*** The overall prevalence of each CE can be computed to provide a more detailed picture of the participant(s).

To do this, add up each individual CE and divide by the total number

of CEs. Repeat for each CE.

- ***At the level of the 16 CEs, taking valence into consideration.*** When sample size permits, or when there is a need for a fine grained analysis, each individual CE can be examined, taking valence into consideration, hence yielding a total of 32 (or 30*) possible variables.

To do this, add up each positive individual CE and divide by the total number of CEs. Repeat for each CE and for the negative CEs.

** If the researcher has no interest in the Other CE category or if no Other CE was rated, it may be removed from the analyses, thus yielding a total of 4 clusters, or 15 individual cognitive errors when valence is not taken into consideration, or 30 cognitive errors when valence is taken into consideration.*

Corrected raw count (or corrected frequency)

Researchers and clinicians can also work with the corrected raw count or frequency of the cognitive errors. The frequency of each CE needs to be corrected in order to control for the length of an interview and for participant verbal productivity. To do this, first take the total number of words spoken by the *participant* and divide this total by 1000. Then add up each individual CE (or CERS variable of interest) and divide by the number obtained in the previous division. This too can be done at the different levels (individual errors, considering or not considering valence; clusters, considering or not valence, etc.) described above.

For example, if a participant uses 35 Fortune telling CEs, 20 Jumping to conclusions CEs, 10 Personalization CEs, etc., and speaks a total of 2'000 words, first divide the 2'000 words by 1'000 ($2'000 / 1'000 = 2$), then divide the observed frequency or count of each CE by this number to obtain $17.5/1000_{\text{words}}$ ($35 / 2 = 17.5$) for Fortune telling; $10/1000_{\text{words}}$ ($20 / 2 = 10$) for Jumping to conclusions; $5/1000_{\text{words}}$ ($10 / 2 = 5$) for Personalization, etc.

7. TRAINING OF RATERS

Training to use the CERS proceeds in three phases: the introductory phase, expert consensus phase, and trainee consensus and reliability calculation phases. The first two phases take about two months of weekly 1.5 hour meetings. The third phase takes about one month, again with weekly meetings. Consensus ratings from phases 2 and 3 are usable ratings for data analyses on the projects from which they are taken.

Phase 1: the introductory phase. The trainer distributes the CERS manual and gives an introductory lecture on the method. Materials covered include going over key cognitive behavioral constructs such as cognitive errors (CE), automatic thoughts, and schemas. The definition of “cognitive error” is given, followed by the definition of the different cognitive errors. The distinction between positive and negative cognitive errors is described. Using the teaching examples from the manual, the trainer goes over each CE and discusses the examples, addressing questions as they come up. How to score a transcript and then transfer scores to the scoring sheet is described. Finally, the trainer describes how to use the manual. Trainees are encouraged not to try to memorize it, but rather to use it as a reference, referring as needed to the definitions, examples, and discrimination sections to help make a differential list of tentative possibilities for a given text to be scored, and then to choose the best fit.

For the ensuing meetings, trainees are given an interview to score in which the text for each CE has been highlighted (e.g. with brackets), but not scored. They then score the transcript, keeping track of their differential choices for each CE. The trainer discusses each example with them based on a “criterion rating” previously scored by a consensus of experts. After four transcripts have been rated like this, trainees will have gained sufficient experience and understanding to go on to phase 2.

Phase 2: the consensus training with expert phase. In the second phase, the trainees will score transcripts which have not had CE text highlighted. Prior to each consensus session, each trainee rates the transcript for the session. The trainees meet as a group with the expert and together the group will form a consensus rating. In this phase they will learn to identify CE relevant text itself on their own, in addition to improving their skill at identifying the individual CE categories. They learn to work with others, providing a rationale for their scores and negotiating the final answers, in a context in which there is no previously scored criterion rating to refer to. This phase takes from 2 to 4 transcripts, doing 1 per week. The resulting consensus rating of each transcript is usable for any data analysis purposes on the project from which it was obtained. At the end, trainees are able to begin working with other trainees in consensus, and have their inter-rater reliability determined.

Phase 3, the trainee consensus and reliability determination phase. In this phase, trainees are paired off to do an individual rating on a transcript. The inter-rater reliability is then determined vis a vis a second rater (generally another trainee). The two raters then meet to discuss their ratings and make a consensus rating for each CE. The

reliability criterion for being trained is when the rater pairs consistently score above intraclass $R(2,1) > .70$ for their reliability of the individual CE scores for each session. The consensus ratings from these transcripts are then used for any data analyses on the project from which they were taken. During phase 3 and continuing into any subsequent post training rating, there are periodic meetings to discuss difficult text scoring issues that arise. Here the relevant transcript examples are presented and the differential is discussed with an expert. These calibration sessions serve to keep raters from drifting toward favorite ratings in the face of difficult examples.

Post training: individual and consensus scoring and calibration. All raters, new and expert, require occasional consensus ratings to ensure calibration to the manual and minimize the potential of rater drift. Thus, on any project, when the transcripts are chosen for rating, each rater is assigned to do one consensus rating session every 4th or 5th transcript. For the consensus session, the two raters first hand in their scores and inter-rater reliability is determined. They then make a consensus rating which is then used for any subsequent data analyses, in lieu of the individual ratings. In the case that reliability falls below the general criterion level of Intraclass $R(2,1) = .70$, the two raters make a second consensus rating on another transcript. For purposes of most studies, then, there is one consensus rating for every 3-4 transcripts in which only individual ratings are made. Again, periodic calibration sessions are held with an expert during which all raters can discuss the difficult examples. Sometimes these meetings result in useful additions of non-prototypical examples which can be added to the manual to improve its coverage.

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9. Appendix A: Example of bracketed transcript used for training

Please contact the first author for examples and rated transcripts:
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10. Appendix B: Score sheet

Cognitive Errors Rating Scales - Rating Sheet

M. Drapeau & J.C. Perry

Subject I.D. _____

What is rated? The CEs of : Patient Therapist

Actual (de-randomized) Session No.: _____

Session Randomized number: _____

Rater 1 name and number: _____

Rater 2 name and number: _____

Note: 1= 1st of 2 raters, 2= 2nd of 2 raters; 9=consensus or single rater only

Consensus date (rating date if only 1 rater): DD/MM/YY: _____/_____/_____

NOTES:

I.D.:	Rater 1	Rater 2	Consensus
1. Fortune telling A. Positive B. Negative	_____	_____	_____
2. Labeling A. Positive B. Negative	_____	_____	_____
3. Over-generalizing A. Positive B. Negative	_____	_____	_____
4. All-or-nothing thinking A. Positive B. Negative	_____	_____	_____
5. Discounting the +/-: A. Positive B. Negative	_____	_____	_____
6. Emotional reasoning: A. Positive B. Negative	_____	_____	_____
7. Magnif. /min. of the +/-: A. Positive B. Negative	_____	_____	_____
8. Mental filter A. Positive B. Negative	_____	_____	_____
9. Should and must statements A. Positive B. Negative	_____	_____	_____
10. Tunnel vision A. Positive B. Negative	_____	_____	_____
11. Jumping to conclusions A. Positive B. Negative	_____	_____	_____
12. Mind-reading A. Positive B. Negative	_____	_____	_____
13. Personalization A. Positive B. Negative	_____	_____	_____
14. In. blaming/crediting of self A. Positive B. Negative	_____	_____	_____
15. In. blaming/crediting of others A. Positive B. Negative	_____	_____	_____
16. CE-NOS A. Positive B. Negative	_____	_____	_____