Coping Efficacy - Coding Manual

1   Annotations and Threads

For this coding scheme, we are assigning codes per user, per thread. A thread is a sequence of turns in a dialogue that are all connected by a common theme or topic. These threads may be as short as a single line - a topic that someone attempts to bring up but which is abandoned - or they can span for tens of lines as more speakers elaborate on their own opinions, adding their own related stories, or slowly shifting the topic without a clear separation. Assigning labels per thread gives us a more coherent label for a speaker for a given stretch of a conversation, compared to the ambiguity of a speaker's behavior over an entire conversation; but it also gives us needed context compared to assigning labels per line.

2   Self-Efficacy

Efficacy is a person's belief in their capability to effect changes in a given context. For the purposes of this coding scheme, we are particularly interested in coping efficacy, which we define here as a person's belief that they have **the ability to impact their own well-being, as it pertains to their illness, either physically or emotionally, through their own actions.**

We look both at a speaker's **self-efficacy** - their comments on their own ability to effect change - and **other-efficacy** - the comments that a speaker makes about the efficacy of others, either the other speakers in the conversation or external speakers, such as family members. Our first task is to judge, for a given speaker in a given thread, whether commentary is being made on efficacy at all. If it is not, a speaker's efficacy is marked 0.

Once we identify speaker efficacy, we also wish to assign a **valence** to each of these types of efficacy. This takes the form of either positive (1), waffling/uncertainty (2), or negative (3) attitude. Positive attitudes indicate a speaker explicitly marking their belief in efficacy of the target (self or other). Negative indicates an explicit marker that the speaker does not have faith in the efficacy of the target (self or other). When both positive and negative attitudes are expressed roughly in balance over the course of a thread, this should be considered waffling and marked as a 2. **The default, if there is no indicator of attitude, should be 1.**

Self-efficacy and other-efficacy need not always match in valence. The most obvious case of this is when drawing an explicit contrast, for instance, by commenting on the ability of another speaker to manage their life while deriding their own.

3   Sentiment

Sentiment is a person's emotional or affective attitude towards their content. We mark this as 1 (positive sentiment), 2 (neutral sentiment), or 3 (negative sentiment). This is

orthogonal to efficacy - speakers can show positive sentiment without making any comment towards efficacy, for instance, or they can assert their efficacy negatively (commenting on their inability to effect change) while still indicating positive sentiment towards the topic being discussed.

4 Clarifications

In some threads, grey areas will arise. Below are certain heuristics to follow when annotating.

- **Timing:** Speakers will occasionally give conflicting indicators of their opinion towards self-efficacy, other-efficacy, or sentiment. In general, **later** utterances take priority over earlier utterances.

- **Mixed polar and neutral** sentiments or efficacy indicators should be marked as the polar label.

- **Relatedness to Illness:** Efficacy towards life events, relationships, or other parts of a person's life should be marked as related to the speaker's illness **so long as there is a credible way to draw a connection** between the illness's impact and the topic of the utterance.

- **Questions:** Topics about efficacy or sentiment that are brought up in questions are not evidence of efficacy or sentiment. These things aren't actually asserted, so they should not be taken as markers. However, information that's entailed or assumed in the question can be used as evidence for both efficacy and sentiment.

- **Hypotheticals and Empathy:** Talking about your own hypothetical reaction to other circumstances ("I would have a hard time if I had to give up salads") are not self-efficacy in themselves, since they are not describing the circumstances a person is currently facing.

- **Circumstances:** Negative circumstances do not mean that there is a negative efficacy. For instance, a bad reaction to a new drug is not an indicator of negative self-efficacy - efficacy applies only to those things which the speaker is in control of or could impact.

- **Hope:** Messages of hope or fixed expressions ("hope things are going well!") directed towards other people are usually positive sentiment, but should not be considered indicators of other-efficacy.

- **Negative Supportive Moves:** Showing support through negative affect ("geez") is not by itself enough to show negative affect, because it is just being empathetic and supportive. **Complaining in a joking manner is a 2 for waffling.**

- **Advice:** Given to others, with no direct indicators that you're confident or doubtful of their ability to follow through on that advice, should be marked as other-efficacy 2.

- **Attribution:** Attributing threats or problems to external factors, without saying anything direct about personal ability, does not count as efficacy.

- **Sarcasm:** Be careful about sarcasm in this domain. It's easy to get caught up in how positive these groups are all of the time, and not notice when people are being sarcastic.

- **First person plural:** Making references to the group, in first person, as a sign of solidarity, should be considered both other- and self-efficacy.

- **Narrative:** If there's a story that turned out for the better, lean towards positive self-efficacy. The present takes precedence over the past.

- **Explicit Markers:** In light of everything else, there should be a **text evidence span** in order to mark either efficacy or sentiment. Inferring either from context or reading into the actions or speech of others should be minimized.