# **Communication Assessment Guide**

## **Communication and Optimal Resolution Toolkit**

**Purpose:** To help you identify members of your organization who are effective at delivering disclosure communications.

**Who should use this tool?** Communication and Optimal Resolution (CANDOR) Implementation Team, Disclosure Lead(s), Disclosure Communicators.

**How to use this tool:** Use the Communication Assessment Guide (CAG) to help you identify effective communicators who can participate in disclosure conversations as Disclosure Leads and/or Disclosure Communicators. The guide includes the Communication Assessment Questionnaire (CAQ) (see Appendix 1.) The CAQ is a two-part instrument that uses two measures (cognitive complexity and message design logic) to provide a way of assessing an individual's level of communication competence. Once completed, the assessments can be used to provide individualized feedback about each participant's current level of communication competence for further improvement and to identify highly competent communicators. The CAG is structured in the following order and can be used chronologically.

## **Table of Contents**

Overview	2
Limitations	2
How to Administer the Communication Assessment Questionnaire	
Using and Sharing Results from the Communication Assessment Questionnaire	
Appendix 1: The Communication Assessment Questionnaire	4
Appendix 2: Scoring Rubric and Examples	9
Appendix 3: Results Template	
Appendix 4: References	



### **Overview**

Communication is at the heart of the CANDOR process. Effective communicators who participate in conversations with patients, families, and caregivers following an adverse event must demonstrate the following characteristics and competencies consistently and naturally. Individuals who are effective Disclosure Leads or Communicators will:

- Demonstrate empathy, sincerity, and honesty
- Demonstrate active listening skills
- Demonstrate patience during stressful situations
- Demonstrate tact and diplomacy
- Demonstrate emotional maturity and self-awareness/intelligence by withstanding anger, criticism, accusations, blame, combative, or defensive behavior without taking criticism personally
- Adapt non-verbal expressions and body language to the situation
- Speak without using medical jargon and non-technical language
- Focus entirely on the patient's and family's interests
- Understand when to seek additional support and help during a conversation with a patient and/or family

Individuals who are effective Disclosure Leads or Communicators will be experienced members of the organization who portray a professional demeanor and authority. These individuals should demonstrate:

- Experience in communicating with patients and families about bad news, complaints, and grievances
- Understanding that s/he speaks for the organization, not an individual unit or department, and thus conveys a "we" message, avoiding criticism or blame of other individuals or departments
- Sufficient clinical knowledge and experience to answer relevant questions
- Familiarity with the organization's risk, safety, claims, and quality operations
- An understanding of the individual and systemic bases of patient harm
- Genuine professional commitment to the principles of just culture and the CANDOR process

Most health care team members exhibit some of the skills and competencies listed above. Only those team members who demonstrate all of the skills and competencies should be involved in delivering communication about adverse events to patients, families, and caregivers. Strong communicators are usually easily identifiable; however, some might not yet generally be known.

#### **Limitations**

When identifying effective communicators, the results of the CAQ should be used in conjunction with all other available sources of information about staff members' communication skills, including personal experience, recommendations, performance reviews, professional experience, position within the organization, and patient satisfaction scores. The CAQ is not meant to be used as the sole basis for identifying candidates for Disclosure Leads or Communicators. The number of people selected for this role will depend on the size of the organization and the resources available for training.

## How to Administer the Communication Assessment Questionnaire

The CAQ can be uploaded into an e-survey or by administering paper-based forms. Members of the CANDOR Team can administer this instrument at their discretion when evaluating potential members of the Disclosure Team. The scores are combined for both assessments to yield one final score.

#### Part I: Role Impression Tasks

The cognitive complexity assessment is the first task, and it requires the participant to think of two people that he or she knows well on a personal level: one liked, and one disliked. The participant must then describe first the liked and then the disliked person in as much detail as possible, ignoring physical characteristics and focusing instead on the person's character, personality, behavior, etc. Participants are instructed to take no more than 5 minutes on each impression. These impressions are then scored in terms of their complexity using a standard scoring procedure. The result is a cognitive complexity score for each participant.

To assess a cognitive complexity score, simply count the number of unique descriptors used in the impressions of the liked and the disliked people. The total number of unique adjectives used, summed across the liked and the disliked impressions, will yield the cognitive complexity score for that person. Sometimes it is not obvious where to draw the boundary, or whether a description should count as one or two concepts. The rule is to err on the side of more rather than fewer concepts; if in doubt, please count the additional concept.

#### Part II: Role Scenario Tasks

The second part of the CAQ identifies messages that reflect the highest level of communication skill. Message design refers to the process that people use to perceive the relevant goals in a situation and to then convey messages that will achieve those goals.<sup>1</sup> The type of message design someone employs will show how effectively a person relays his or her intended message.

To make this assessment, ask each participant to read two hypothetical communication scenarios (a group project scenario and a disclosure scenario) and write down exactly what they would say in that situation. Then apply a standardized scoring procedure<sup>2</sup> to the messages to identify participants with the highest level of communication skill.

### Using and Sharing Results from the Communication Assessment Questionnaire

#### **Data Preparation and Logistics**

To prevent scores on one section of the assessment from influencing scores on another section of the assessment, review and score all responses for Part I separately from Part II. Then score as described below, and enter the scores into the spreadsheet for further analysis.

#### **Reporting Feedback to Participants**

Once all of the responses are scored, rank all of the participants from highest to lowest based on their scores for Parts I and II, respectively. A template for sharing responses with participants is found in Appendix 3.

<sup>&</sup>lt;sup>1</sup>Research indicates that there are at least three "message design logics" commonly used by communicators, and these correspond to progressively higher levels of communication competence. From least to most competent, these are the expressive, conventional and rhetorical message design logics.

<sup>&</sup>lt;sup>2</sup>The overall Approach to Scoring the Group Project and Harm Disclosure Situations is very similar to scoring Cognitive Complexity. Count concepts individually, and compare written responses with the examples noted in Appendix 2 to identify what type of message design logic participants will exhibit.

# Appendixes

## **Appendix 1: The Communication Assessment Questionnaire**

#### 1. Your Name:

The purpose of this questionnaire is to help us understand how you approach interpersonal communication. The questionnaire has two parts. The first part asks you to describe two people whom you know well. The second part asks you what you would say in two separate interpersonal communications.

#### Part 1: Role Impression Tasks

We want to learn how people describe others whom they know. In your own words, indicate the characteristics that a set of individuals have in common and those they do not share.

Spend a few moments looking over this list, mentally comparing and contrasting the people you have in mind for each category. Think of their habits, their beliefs, their mannerisms, their relations to others, any characteristics they have that you might use to describe them to other people.

Please choose a real person that fits each of the two different categories below. In the blank space beside each category below, please write the initials, nicknames, or some other identifying symbol for a person you know who fits into that category. Be sure to use a different person for each category.

- 2. A person your own age whom you like:
- 3. A person your own age whom you dislike:

When you've spent a few moments thinking about these people, please go to the next page.

- 4. Please look back to the first sheet and place the symbol you have used to designate the person in category 1 here:
- 5. Now describe this person as completely as you can, so that a stranger might be able to determine the kind of person he or she is from your description. Do not simply put down those characteristics that distinguish him or her from others on your list, but include any characteristics that he or she shares with others as well as unique characteristics. Pay particular attention to habits, beliefs, ways of treating others, mannerisms, and similar attributes. Please do not spend more than five (5) minutes describing this person.

This person is:

- 6. Please look back to the first sheet and place the symbol you have used to designate the person in category 2 here:
- 7. Now describe this person as completely as you can, so that a stranger might be able to determine the kind of person he or she is from your description. Do not simply put down those characteristics that distinguish him or her from others on your list, but include any characteristics that he or she shares with others as well as unique characteristics. Pay particular attention to habits, beliefs, ways of treating others, mannerisms, and similar attributes. Please do not spend more than five (5) minutes describing this person.

This person is:



Thank you. That completes this part of the task. Please proceed to the next part of the survey.

#### Part 2: Role Scenarios Tasks

Please describe how you would handle several different interpersonal communications. In this questionnaire, you will find descriptions of two different situations. Read each description carefully and try to imagine yourself *actually being in the situation*. *After you read the description, in your own words, write what you would actually say to handle the situation*. **Do NOT describe the general action you would take.** 

When you have finished reading these instructions, go to the next page and begin.

8. Scenario 1: Non-Clinical Situation, Group Project

Imagine that you have been asked to head a small working group within your organization. When your group was assembled, you were pleased to see that a colleague named Ron had been assigned to your group. Ron is known to be a very bright and creative fellow who was part of another highly successful group in the Association. However, Ron has been causing some problems. Ron often arrives late to group meetings; once he showed up halfway through the meeting and was clearly unprepared.

You overheard two members of the group discussing Ron's behavior. One group member, Marsha, was wondering why Ron had not been removed from the group yet; the other team member, Bill, speculated that Ron has been having some problems at home and suggested that everyone should cut him some slack.

Next week your group is expected to complete an important project so that the results can be passed along to other members of the organization. Each team member is responsible for a different part of the project, but Ron happens to be responsible for the two most important parts. Your group is scheduled to meet tomorrow to do any last minute coordination that may be required. Based on that timetable, you gave the head of your Association your personal guarantee that the project would be done by Monday.

Ron calls you today and says he doesn't have his sections finished and probably won't be able to finish them before the meeting. He says he just needs more time.

What would you say to Ron? In the space below, write what you would say. **Do Not Describe the General Action You Would Take**—instead, **Write the Exact Words You Would Actually Say** to handle this situation. 9. Disclosure Situation, Immediately After Event

Mary is a 39-year old mother of two small children who has presented to the hospital's GI suite to undergo a procedure under moderate [procedural] sedation. Her parents, Bill and Beth, accompany her. Toward the end of the procedure, the nurse notices that Mary has become "blue" and stops the procedure. She also notices that Mary is not breathing and her EKG shows a heart rate of less than 30. The nurse calls for a "code blue" response while the team involved in the procedure begins to administer CPR. When the code team arrives, there are some delays in providing appropriate care as different physicians argue about the proper course of treatment. Eventually, they are able to re-establish a normal heart rate, blood pressure, and adequate blood oxygen level.

During the resuscitation efforts, information obtained from the devices monitoring Mary's EKG, blood pressure, and blood oxygen levels reveals a period of approximately 7 minutes during which she may not have been breathing adequately, possibly from too much sedation medication during the procedure. The nurse involved in monitoring Mary appears visibly shaken and states that she was distracted during the procedure trying to obtain different pieces of equipment for the procedure.

Bill and Beth are in the waiting room. They have heard the overhead call of "code blue" and have seen many people running to the procedure area.

You have been asked to go to the waiting room and speak with Mary's parents. You approach them.

In the space below, write what you would say. **Do Not Describe the General Action You Would Take**—instead, **Write the Exact Words You Would Actually Say** to handle this situation.

Thank you for completing these tasks!

## **Appendix 2: Scoring Rubric and Examples**

#### **Overview of Part I - Role Impressions Tasks:**

Part I of the survey asks participants to think of two people whom they know well, one liked and one disliked. The participant must then describe each of these people, in as much detail as possible, given 5 minutes per person. The resulting impressions are analyzed to produce a cognitive complexity score. These impressions are believed to reveal a sample of the personal concepts the respondent uses to represent to social world.

#### Scoring:

Count the total number of unique descriptors used in the impressions of the liked and disliked others. *The total number of concepts, summed across the two impressions, is the final cognitive complexity score for that individual.* 

Physical descriptions (tall/short) are not counted, nor are descriptions of the other person's age or social role (mom, nurse, etc.). When in doubt about whether a description should count as one or two concepts, err on the side of counting more rather than fewer. When a descriptive word is preceded by a modifier (e.g., "a rude pessimist," "a caring friend"), it should be counted as one concept not two.

Similar, but not identical, descriptions should be counted separately. Descriptions of the participant's attitudes toward the person are not counted (e.g., I like working with him), but descriptions of the other person are (e.g., "He is easy to work with").

Do not worry about absolute precision. The goal should be to arrive at a reasonably accurate count of the total number of unique descriptive dimensions used in a pair of impressions. The best communicators will generally have many, many more concepts (greater than 45) in their impressions than their less skilled colleagues (who will often have 25 or fewer).

#### **Examples:**

The following two examples show varying levels of detail in participant responses:

#### Less Descriptive Impressions: (Total Concepts: 24)

#### Impression of Liked Other: (Concepts: 16)

KC is a very intelligent /and well spoken person. / She communicates her thoughts clearly,/ consisely, /and with a smile. / I find her approachable/ and attentive to me when I seek her./ She is also a very direct person, /and when she is unable to help or is not in agreement with something that I said, she does not hesitate to voice her concerns in a gentle/ but definitive manner. /I seek her out for advice often because I have found her to be honest /and selfless in her opinions./ She is concerned with the greater good even at her own expense. / KC will admit her own personal shortcoming /or when she is unqualified to comment. / She spends an enormous amount of time researching information before forming a conclusion. / I admire her character tremendously aspire to be more like KC in many ways.

#### Impression of Disliked Other: (Concepts: 8)

Sometimes, I find XX focused on self-preservation / and self-promotion as opposed to thinking of how that behavior and words will affect others around her. / She frequently requests help, /but is usually unable to respond to the needs of others in a timely /and sincere manner. / I often hear her complaining about others in their absence, which makes me feel uncomfortable. / While we are conversing, I usually can't finish a sentence without being interrupted /or negated for my thoughts. /I find myself avoiding this person.

#### **Detailed Descriptive Impressions: (Total Concepts: 33)**

#### Impression of Liked Other: (Concepts: 22)

This person is a very calm,/ caring, /and compassionate person. / He is very professional /and considerate when dealing with difficult topics of conversation that have emotional ramifications. / For instance, he is often approached

by friends, /family, /and colleagues who need advice on challenging situations. / In this type of situation he sits calmly,/ listens intently, /and allows the person to fully explain all details. / He does not judge /or tell people what to do in those situations /but guides them through their own decisionmaking process. / In his professional career, he is a technical expert /and a manager, so he has devleoped excellent leadership skills/ and is highly regarded by peers, / customers,/ and leaders./ I completely trust this person's ability to deal with any type of critical situation. / I admire his ability to remain calm / and provide an environment for people to feel safe to discuss anything that is concerning them.

#### Impression of Disliked Other: (Concepts: 11)

This person is a challenging individual/ in the sense that he is unable to keep his mind open regarding cultural, / philosophical/, or religious differences. / I regularly converse with him, as he is my next door neighbor. His perspecitive on his intolerances of others is that he is always right /and that other opinions are not correct /or valued. /He is often loud /and animated when he is passionate about a particular topic /and will often talk over others /and interupt them. /In my approach with him, I always calmly listen and let him finish speaking his mind before I ask questions or comment. I find my quiet approach descalates him and slows him down enough to reconsider other view points. I find giving him examples real life helps him think more deeply about the situation at hand.

#### **Overview of Part II - Role Scenario Tasks:**

When scoring either role scenario, you will review each participant response to determine if the participant fits in one of the following categories:

- Expressive or emotional.
- Conventional or commonly communicated.
- Rhetorical or effective. [The most effective communicators are in this category.]

#### **Expressive (or Emotional) Responses**

Expressive messages are not conceptive messages. They may include relatively unfiltered expressions of the speaker's frustrations or other emotions. They tend to focus on the past. They fail to use communication as a means to gain cooperation or understanding of the root issues, and instead use it to express their own wants, desires, and emotions and to punish the other person for his or her conduct.

In a disclosure conversation, expressive messages can lack the very communication that is required in this interaction. Because of the difficulty and emotional intensity of the situation, the message avoids the main point or minimizes the severity of the problem/difficult situation. These messages tend to be very brief, incomplete, and can even be untruthful.

These messages also tend to begin and end very abruptly. Expressive messages often begin with no introduction, no preparation for upcoming bad news, no seeking out of a private place, etc., and often end with no offer to answer questions, no offer for support to the patient or family, and no plan for followup or future communication.

#### **Conventional (or Commonly Communicated) Responses**

Conventional messages focus on the immediate situation and request accountability. Conventional message content and the actions they describe are often brief and incomplete.

In the instance of a disclosure conversation, conventional messages address many of the basic goals in the situation (e.g., explain what happened, describe Mary's current status, offer simple apologies, and make simple offers of help or non-elaborated statements about future communication). Conventional messages deal with the intensity and complexity of the situation by avoiding a direct description of the bad outcome and its consequences and instead focusing on medical jargon, descriptions of clinical status, and procedural details.

Most of the content in conventional messages consists of a description of what happened and what the current status is. These messages might also briefly describe standard procedures that have already taken place or may take place in the near future. Future events are simply described.

#### **Rhetorical (or Effective) Responses**

Rhetorical messages exhibit flexibility in meeting task or situational demands and responding to crises and challenges. Rhetorical messages are similar to conventional messages in that they may contain complaints and requests for accountability. However, their main point is to convey the essential bad news in an empathetic, honest, and serious manner.

In a disclosure situation, most aspects of these messages involve managing the emotional response of the patient and/ or family by recognizing feelings, expressing sympathy, and offering assurances of ongoing communication. These messages are often oriented to the future, attempt to prepare the family to receive bad news, specifically recognize and name the family members' emotional or psychological states, and tend to express uncertainty about both the cause of the error and its outcome.

One other hallmark is that they often include explicit reassurances about future communication and also describe future events in terms of detailed, step-by-step plans. A message is scored as rhetorical when its main focus is on clearly conveying the bad news about what happened to a patient and then managing the emotional response to that bad news.

#### Scoring:

The descriptions for expressive, conventional, and rhetorical messages are meant to serve as guidelines for evaluating participant responses. Based on the descriptions, each participant response should be grouped into one category. The next section includes examples of responses in each of the above categories for both scenarios.

#### **Examples:**

#### Non-Clinical Situation, Group Project

The following lists and examples show traits of each type of response.

#### Expressive Responses can include...

- Punishment: A result of a voluntary act.
- Complaint: Attribute negative quality or behavior to Ron.
- Request account: Ask Ron to explain behavior or circumstance.
- State wants: Tell Ron what is important or desired.

#### **Example:**

"Ron, at the last meeting, did you agree to have these two sections completed by tomorrow? Is there a reason why these cannot be completed by tomorrow? It was very important for this project that these sections be completed, and I am really upset that they are not done. This is late to be giving me notice at this time and gives us too little time to get this completed. I would have preferred you contact me earlier when you realized this could not be finished on time for tomorrow's meeting. I will need to inform the head of the Association of this."

#### Conventional Responses can include...

- Request specification: Ask for further information about Ron's work or needs.
- Simple offer: Ask about needs or offer help.
- Assign responsibility: Tell Ron what his responsibilities are.
- Conditional threat: Threat made depending on Ron's future performance.
- Immediate correction: Tell Ron to change his behavior (or indicate that a talk about his behavior will occur immediately).

#### **Example:**

"I have given my personal guarantee that this project will be completed by Monday, so we need your sections before the meeting to finish coordinating the project. What might be causing the delay? What can I do to help? Are there any resources I can provide that would help you complete your sections before the meeting?"

#### Rhetorical Responses can include...

Veiled supervision: Give help or work together with Ron.
Rational appeal: Persuade Ron that demands are appropriate.
Alter-casting: Mention Ron's positive task-related qualities.
Reward: Mention desirable outcomes of task completion.
Planning: Outline detailed plan for completing the work.
Delayed Correction: Schedule future discussion of Ron's problems.

#### **Example:**

"Ron, can we discuss the project that is due to our Association on Monday? I need to gather some information so that we can set a plan forward to ensure we meet the deadline. Is this a good time to have the conversation or can we schedule something for later today? Ron, you are a very respected and critical part of the success of our project, and I greatly appreciate the work you have done so far to move things forward. I have noticed, however, that there have been meetings where you have not arrived on time or have been unprepared to participate. Can you tell me a little about what is going on and how I can help you? As you know, the team needs to be prepared for the meeting tomorrow and your sections are a part of that preparation that we are all counting on. What have been the challenges you've encountered so far and how can I assist you in getting this to where we need to be by tomorrow?"

#### **Disclosure Situation, Immediately After Event**

The following lists and examples show traits of each type of response. In a clinical scenario, the following examples will highlight expressive responses traits. These may differ from the non-clinical scenario with Ron; however, many of the same elements are present.

#### Expressive Responses can include...

- Condescending statements and assumptions that the patient and family will not understand the situation.
- Information is glossed over; minimal information is provided about what happened.
- Brief, curt, and non-descriptive information about next steps.

#### **Example:**

"Good morning, my name is XX. I am the manager of this unit. There were some complications during the procedure, which is why you may have witnessed all the rushing around. Your daughter had an issue with the anesthesia, but our staff responded very quickly, we were able to resolve the issue, and the physician will be out to talk to you in a little bit about the procedure."

#### Conventional Responses can include...

- Describe Mary's current condition and the events that led up to her current state in a descriptive and sequential manner.
- Offer to ask questions and/or invite questions from the patient and/or family.
- Some examples might include a mention of an apology; however, many conventional examples simply recount what happened.

#### **Example:**

"Mary's family? Hi, my name is \_\_\_\_\_, and I am from the procedure room. I want to update you on Mary's condition. During her procedure, her heart rate, blood pressure, and oxygen level were monitored. During a part of the procedure, we became aware that her heart rate, blood pressure, and oxygen level were lower than we normally maintain them. We stopped the procedure and called extra staff to assist in stabilizing Mary—the code blue that you heard. We called the code blue to have the quickest and best response to her situation. We now believe that this blue episode may have been the result of too much sedation medication being given, which can cause patients to not breathe adequately during a procedure. Her heart did not stop; however, Mary was not breathing adequately for about 7 minutes. I am not sure what brought this about, but I am sure that Mary is doing better at this moment. The procedure was not able to be finished. We can consider another attempt at another time. We will be looking into all of our documentation from this care to determine exactly what happened so we can hopefully prevent something like this from occurring in the future. Do you have any questions? I will be able to let you see her in just a few moments."

#### **Rhetorical Responses can include:**

- Offer privacy/suggest moving to private/suggest sitting down.
- Frame the situation with a statement such as "Regrettably, I have some bad news to share with you."
- Share known facts and express uncertainty about cause.
- Express uncertainty about prognosis/timeline for prognosis.
- Acknowledge difficulty of family hearing and assimilating the bad news.
- Acknowledge/name family's concern for patient.
- Affirm ongoing availability for questions/concerns/support.
- Offer sincere expressions of sympathy.

#### **Example:**

"Are you Mary's parents? My name is XX. I am one of the doctors who work here at the hospital. Would you please follow me to a private area so I can update you about your daughter's procedure? First off, right now Mary is stable; her heart rate, blood pressure, and oxygen level are all in normal ranges, but something did happen during her procedure. I am sorry that I have to share this news with you. I am sure this is very overwhelming and you have many questions. I am going to tell you as much as I know right now, but I assure you this is only the first of many updates and I or someone else from the hospital will give you more information as we get it. At some point during the procedure, her oxygen levels decreased, and her heart rate slowed down enough that staff had to perform CPR on your daughter. That was the code blue you heard over the loudspeaker. It looks like she was at these low levels of oxygen for around 7 minutes but, again, as of right now her vital signs returned to normal. We need to carefully look at each step to see what happened exactly, so I do not want to give you false information until this happens. I will make sure that as we find out what happened you are both made aware. We also don't know right now if she has suffered any injury from what happened, but we will check her out thoroughly to determine if that is the case. As soon as we are able we will let you go be with her. Do you have any questions for me right now?"

## Appendix 3: Results Template

Name:	ID#:	Date:
Part I: Role Impressions Tas	ks	
A. Impression of Liked Other:		
[Insert original participant re	esponse here]	
Total Number of Concepts:		
B. Impression of Disliked Othe	er:	
[Insert original participant re	esponse here]	
Total Number of Concepts:		
Part I: Total Number of Cond	cepts (A+B):	
Percentile rank (Calculate if	scoring a group of partici	pant responses):
Part II: Role Scenarios Tasks	5	
A. Response to Non-Clinical G	roup Project Situation: [Ins	ert original participant response here]
Category:		
B. Response to Disclosure Situ	ation, Immediately After Ev	vent: [Insert original participant response here]

Category: \_\_\_\_\_

## **Appendix 4: References**

- 1. O'Keefe BJ, Lambert BL, Lambert CA. Conflict and communication in a research and development unit. In: Sypher BD, ed. *Case studies in organizational communication 2: Perspectives on contemporary work life.* New York: Guilford; 1997:31-52.
- O'Keefe BJ. The logic of message design: Individual differences in reasoning about communication. *Communication Monographs*. 1988;55:80-103.
- 3. O'Keefe BJ, Lambert BL. Managing the flow of ideas: A local management approach to message design. In: Burleson B, ed. *Communication Yearbook* 18. Newbury Park, CA: Sage; 1995:54-82.
- 4. O'Keefe BJ, McCornack SA. Message design logic and message goal structure: Effects on perceptions of message quality in regulative communication situations. *Human Communication Research*. 1987;14:68-92.
- 5. Burleson BR. Cognitive complexity. In: McCroskey JC, Daly JA, eds. *Personality and interpersonal communication*. Newbury Park, CA.: Sage; 1987:305–49.
- 6. Burleson BR, Caplan SE. Cognitive complexity. In: McCroskey JC, Daly JA, Martin MM, Beatty MJ, eds. *Communication and personality: Trait perspectives*. Cresskill, NJ: Hampton; 1998:230–86.
- 7. Crockett WH. Cognitive complexity and impression formation. In: Maher BA, ed. *Progress in Experimental Personality Research*. New York: Academic Press; 1965:47-90.
- 8. O'Keefe DJ, Shepherd GJ, Streeter T. Role category questionnaire measures of cognitive complexity: Reliability and comparability of alternative forms. *Central States Speech Journal*. 1982;33:333-8.
- 9. Burleson BR. Emotional support skills. In: Greene JO, Burleson BR, eds. *Handbook of communication and social interaction skills*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2003:551–94.
- 10. Burleson BR. Conceptivism: A general theory of communication skill. In: Whaley BB, Samter W, eds. *Explaining communication: Contemporary theories and exemplars.* Mahwah, NJ: Erlbaum; 2007:105–28.
- 11. Medvene L, Grosch K, Swink N. Interpersonal complexity: A component of person-centered care. *The Gerontologist*. 2006;46(2):220-6.
- 12. Lambert BL, Gillespie JL. Patient perceptions of pharmacy students' hypertension compliance gaining messages: Effects of message design logic and content themes. *Health Communication*. 1994;6(4):311-25.
- 13. Crockett WH, Press AN, Delia J, Kenny CT. Structural analysis of the organization of written impressions. 1974; https://www.scribd.com/doc/272853271/Structural-Analysis-of-the-Organization-of-Written-Impressions.
- 14. Anonymous. Crockett Role Questionnaire. 2015; https://www.scribd.com/doc/272853082/Crockett-Role-Questionnaire.
- 15. Burleson BR, Waltman MS. Cognitive complexity: Using the role category questionnaire measure. In: Tardy CH, ed. *A handbook for the study of human communication: Methods and instruments for observing, measuring, and assessing communication processes.* Norwood, NJ: Ablex; 1988:1-35.

