



## Psychiatry & Behavioral Sciences Section – 2004

### I2 Developing and Testing a Behavioral Coding System for Hostage Negotiations

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After attending this presentation, attendees will understand potentially effective crisis communication strategies for hostage negotiators.

Multiple variables within crisis situations have been hypothesized to contribute to lethal and non-lethal outcomes. Verbal behaviors are one of the key factors in crisis situations that directly affect outcome; an analysis of that communication can help predict outcomes, guide future crisis interventions, and assist with training hostage negotiators. This poster presents data on the assessment of communication processes during crisis situation interactions, specifically hostage negotiations. Previous researchers have attempted to predict outcomes of these crisis situations by examining behaviors using descriptive and frequency analyses defined by formal or topographical features and aggregated across many different situations and negotiator-hostage taker dyads.

This methodology prevents the analysis of the specific individual behaviors that contribute to specific outcomes. An analysis of the assessment of individual behaviors at a micro-analytic, or process, level may help to more accurately predict the resolution of these crises. This poster presents data from of a behavioral coding system, the Crisis Communication Rating Scale that assesses verbal behaviors in hostage negotiations. The CCRS was designed to determine the communicative behaviors that contribute to lethal outcomes in hostage situations. Data from the evaluation of this coding system are presented for both training coders to use the CCRS and analyses of hostage negotiations using lag sequential methodology, a method of determining the serial dependency of verbal interchanges.

Data regarding the amount of time to train raters to accurately code transcripts of hostage situations and kappa values as an index of inter-rater agreement are presented for raters. Empirical analyses of several series of coded interactions were conducted using lag-sequential analysis. This data analytic strategy helps determine, for example, whether a hostage taker reduces threatening behavior following the use of empathy by the negotiator. The 21 codes of the CCRS were applied to five transcripts coded by four raters. Non-parametric statistics used to relate the process variables in the CCRS to actual outcome (e.g. violent or nonviolent resolutions) are described. The poster concludes with a discussion of the potential use of the CCRS manual for the assessment and analysis of hostage negotiation interactions, domestic violence interchanges, and suicide threat interventions.

**Hostage Negotiation, Crisis Communication, Empirical Coding**