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When Threats and Encouragements are Effective
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When Threats and Encouragements are Effective in Bargaining:
The Case of Credit Collectors

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Abstract

We develop the hypothesis that the effectiveness of threats and encouragements is contingent on the intended recipient's level of negative affect, as evidenced by his or her negative affective display. Therefore, bargainers can be more effective if, as they make offers, they condition any threats or encouragements on this display. We test this hypothesis using 5,561 verbal exchanges that occurred during 192 conversations between telephone-based credit collectors and debtors. In our sample, collectors were most effective in motivating debtors to discuss terms when, as they bargained, they made threats contingent on recipients' non-responsiveness and lack of negative affective display and made encouragements contingent on recipients' displays of negative affect. This result suggests that making threats and encouragements contingent on a partner's displays of negative affect may be an important but frequently overlooked component of bargaining.

When threats and encouragements are effective in bargaining: The

case of credit collectors

When are threats and encouragements effective in bargaining? Observational evidence suggests that threats and encouragements are important in shaping negotiated outcomes. For instance, credit collectors use threats to instill unpleasant feelings in delinquent payers that they will want to relieve by paying up (Sutton, 1991). Similarly, police interrogators use threats to instill unpleasant feelings in criminal suspects so that they will want to relieve by confessing (Rafaeli & Sutton, 1991). However, these and similar findings have been hard to address empirically because of the complexity created by the dynamics of interactions (Eagly & Chaiken, 1993; Leventhal, 1970; Leventhal, Singer, & Jones, 1965; Rogers, 1983). In one field study, courteous displays by convenience store clerks, hypothesized as an encouragement for customers to buy more, were negatively correlated with store sales because customers in busy stores pressured clerks to dispense with the displays to speed service (Rafaeli & Sutton, 1990).

This study examines the dynamic effectiveness of threats and encouragements in the context of the degree of negative affect and willingness to discuss deal terms the recipient is displaying during an interpersonal negotiation. Negative affect is a generalized negative mood or combination of moods that heightens goals to reduce aversive feelings by, for instance, escaping, avoiding, defending, expelling, or attacking. We hypothesize that negative affective displays are an indication of the extent to which this type of goal is salient to recipients at the moment of the display. Since threats and encouragements heighten and lower the salience of factors that

stimulate negative affect, such as imminent danger or the presence of a hostile other, their effectiveness is contingent on the negative affect the recipient may already feel, as evidenced by his or her display. For instance, a threat to a bargainer who is not responding productively to deal terms nor displaying much affect may motivate her to avoid danger by coming to a deal. However, a threat to a bargainer who is already making unpleasant statements with hostile, defensive, or evasive content may simply increase negative affect and the non-cooperative behaviors it engenders.

The next section details our theoretical foundation. We then describe an observational field study in which we examined 5,561 verbal exchanges from 192 contacts between telephone-based credit collectors and debtors. The debtors were individuals behind on credit card payments at a major U.S. bank. We coded and analyzed these exchanges to study our hypothesis. Our results suggest that bargainers' threats and encouragements to their partners significantly influence the course of the bargaining interaction contingent on the negative affect and willingness to discuss deal terms the partner is displaying at the moment.

Negative Affect and Bargaining

Imagine that you are a telephone-based bill collector and that, each day, you must telephone 150 accounts, almost all of which you have not seen before. Each time you get a delinquent payer on the phone, your company would like you to get as much money in as short a time frame as possible. However, it has also given you leeway to negotiate payment terms down to a minimum amount in a specified maximum number of days. To help you goad delinquent payers toward better terms, the company has specified encouragements and threats you may use at your discretion.

You get someone on the phone. You make several offers. No matter how much

you lower your offer and encourage the delinquent payer, she does not come around. She does not respond to your offers nor does she display much negative affect. Finally, you decide to threaten that if she lets the situation go on much longer, it will stay on her credit report for seven to ten years and ruin her chances for future credit. The delinquent payer agrees to a minimal payment in the maximum number of days allowed and unpleasantly remarks to you that this situation is all your company's fault for having given her such a big line of credit. You encourage her by pointing out that she is on the road to recovery now, and if she pays just another thirty dollars, it will move her completely out of delinquency. The payer accepts your new offer.

This scenario highlights that bargainers' threats and encouragements can be an important <u>dynamic</u> influence on their partners but that the effect of these threats may depend on the degree of negative affect the partner is displaying <u>at the moment</u>. Most studies only focus on the continuing effects of bargainers' negative or positive mood prior to a bargaining session and do not take into account how these feelings may exert dynamic influences on behavior during the interaction (e.g., Barry & Oliver, 1996; Forgas, 1998, Experiments 1 and 2; Hertel, 1999; Hertel, Neuhof, Theuer, & Kerr, in press). In one of the few studies addressing these dynamics, when bargainers who felt happy were paired with partners in a negative mood, they tended toward less cooperative behavior than they did when paired with other happy partners, and the reverse effect held for bargainers who felt more negatively Forgas (1998, Experiment 3). However, the mechanism producing these dynamics remains unclear.

We hypothesize that the valence and content of a bargaining partner's statements can be used as information about the extent to which they feel negative affect (Hatfield, Cacioppo, & Rapson, 1994, pp. 10-11). Based on factors used to

identify specific negative moods and emotions, <u>unpleasant</u> statements that are hostile, defensive, or evasive should serve as indicators of heightened negative affect (Keltner, Ellsworth, & Edwards, 1993; Smith & Ellsworth, 1985). Since threats and encouragements raise and lower the salience of factors that stimulate negative affect, their effectiveness depends on the negative affect the recipient may already feel, as evidenced by his or her display.

Threats consist of <u>a warning of either imminent or present danger and a call to action</u>, thereby increasing the recipient's negative affect (Block & Keller, 1995; Boster & Mongeau, 1984; Eagly & Chaiken, 1993; Giner-Sorolla & Chaiken, 1997; Hovland, Janis, & Kelley, 1954; Janis, 1967; Leventhal, 1970; Leventhal et al., 1965; McGuire, 1968; Rogers, 1983). Past evidence shows that moderate levels of negative affect increase the likelihood that the recipient will act to avert the threat by energizing their response (Boster & Mongeau, 1984; Eagly & Chaiken, 1993). Threats and encouragements may best be used to maintain a bargaining partner's level of displayed affect at this moderate level, neither too high nor too low. Bargainers who are neither displaying negative affect nor discussing deal terms are likely experiencing insufficient levels of negative affect to motivate them to come to agreement. Therefore, we hypothesize:

> <u>Hypothesis 1</u>: Threats made while bargaining will lead to a higher
> likelihood that the recipient will discuss deal terms, <u>if</u> the recipient is
> neither discussing deal terms nor displaying negative affect.

As negative affect becomes stronger it tends to also heighten non-cooperative behavior. This observation derives from the implicit goals associated with the specific moods which underly negative affect (Lerner & Keltner, 2000; Smith & Ellsworth, 1985). For instance, fear and anxiety may lead a bargaining partner to terminate bargaining

because she feels a lack of control (Raghunathan & Pham, 1999) and acts on this feeling by terminating contact or refusing to discuss a deal (i.e., fleeing, Lang, 1995; LeDoux, 1996). Anger may lead to feelings of hostility that cause one bargaining partner to want to punish the other (Goldberg, Lerner, & Tetlock, 1999; Keltner et al., 1993) by not giving her the satisfaction of a deal or attacking her verbally (Lemerise & Dodge, 1993). Disgust may cause one bargaining partner to want no further dealings with the other (Scherer, 1988). Finally, sadness deriving from a sense of loss (Raghunathan & Pham, 1999) may cause a bargaining partner to not want to give any more in the bargaining situation.

We formally define encouragements as <u>positively framing a requested course of action in terms of how it could alleviate these potential sources of negative affect</u> (Block & Keller, 1995). If a partner is displaying negative affect by making unpleasant, defensive, evasive, or hostile statements, these non-cooperative goals and not the goal of discussing deal terms are likely paramount in that partner's mind. These displays are a sign that the partner is experiencing more than moderate amounts of negative affect. Encouragements can reduce negative affect by showing how the deal could remove one of its possible causes and help the partner focus on practical steps to resolve her situation. We therefore hypothesize:

> <u>Hypothesis 2</u>: Encouragements made while bargaining will lead to a higher likelihood of the recipient discussing deal terms, <u>if</u> the recipient is displaying negative affect.

Hypotheses 1 and 2 concern the effectiveness of threats and encouragements conditioned on a bargaining partners' observed behavior, i.e., the presence or absence of negatively valenced statements with negative content and whether the partner is

discussing deal terms. This observed behavior provides an indication as to whether the bargaining partners are under or over motivated relative to the moderate level of negative affect that leads to the highest rates of compliance (Boster & Mongeau, 1984; Eagly & Chaiken, 1993).

Absent these indicators to the contrary, we believe that delinquent debtors in the bargaining context we observed were generally experiencing a sufficiently motivating level of negative affect; they had had their credit cards canceled and were receiving collection calls (further detailed in the next section). To test this assumption, we pose the following hypothesis about the effect of unconditioned threats which should raise baseline negative affect above moderate levels:

Hypothesis 3: Making unconditioned threats to a delinquent debtor while bargaining will lower the likelihood that he or she will respond with deal terms.

As indicated earlier, encouragements reduce negative affect by indicating that some of its possible causes can be alleviated. If, as we assume, debtors were generally only experiencing a sufficiently motivating level of negative affect, unconditioned encouragements should have acted to lower it below the levels that lead to the highest likelihood of compliance. Therefore, to further test our assumption about debtors' base level of negative affect, we hypothesize:

Hypothesis 4: Making unconditioned encouragements to a delinquent debtor while bargaining will lower the likelihood that he or she will respond with deal terms.

In sum, we hypothesize that people's displays of negative affect are correlated

with the relative level of negative affect they are experiencing at that moment (Hatfield et al., 1994). Threats and encouragements alter the level of negative affect the recipient experiences by raising and lowering the salience of factors that stimulate it. Therefore, the effectiveness of threats and encouragements is contingent on the level of negative affect the recipient is displaying and whether or not he or she is responding positively to deal terms. In this context, threats will be effective when administered to bargainers who fail to respond to deal terms or display negative affect because they are likely experiencing insufficiently motivating levels of negative affect. Encouragements will be effective when administered to bargainers who are openly displaying negative affect because they are likely highly motivated to pursue the non-cooperative goals associated with negative affect. However, in bargaining situations where one set of bargainers can be assumed to already experience a moderate amount of negative affect as we believe to be the case with delinquent debtors, unconditioned threats and encouragements will cause those bargainers to feel either a higher or lower level of negative affect than is ideal for motivating them to discuss deal terms.

Observations of Collectors in Contact with Debtors

To test these hypotheses, we collected data for content analyses (Krippendorf, 1980) of credit collectors' telephone bargaining sessions with debtors. The data were collected during a two week period in April 1997 by the first author at a Midwest call center for a major bank. Data collection focused on accounts in the fourth month of delinquency, the stage at which the bank starts to consider the debtor a credit risk, cancels the debtors' credit card, and begins to use an urgent tone in its dealings with the debtor. Verbal tactics collectors use from the fourth month of delinquency until the account is written-off as bad debt in the sixth month are similar although the

consequences become proportionally more severe and the tone more urgent with each succeeding month (see Sutton, 1991 for similar observations).

To observe contacts between collectors and debtors, the first author sat with each collector for four hours when the likelihood of contact was highest (either early morning or evening with both time periods sampled equally often). The banks' goals for collectors is that they obtain a promise to pay (PTP) by the end of each phone call, although the bank does not track whether specific PTPs are actually honored. In our sample, 62.5% of the PTPs were checks written over the phone, a verbal check equivalent to a paper check, that is honored well over 90% of the time. Of the remaining 37.5%, 7.5% were for payments by next day mail or at the branch, and 30% by regular mail. Conversion rates for these forms of promise are lower but do not drop below 50%, leading to an overall conversation rate of over 70%. Without PTPs, the chance of payment falls to less than 10% (managerial estimate). We focused on the process for obtaining PTPs because (1) whether collectors obtained PTPs or not was their only real-time measure of a telephone call's success; and (2) they were a valid indicator of likely future payment.

Before initiating each call, collectors used a computer terminal to review information on the debtor in question, and this information was available throughout the call. Collectors tended to limit their initial review to approximately 30 seconds. When a contact was achieved, the collector asked for permission to tape record the call for research purposes. If the debtor agreed, the debtor was included in the study, and the conversation was taped. Finally, a printout of the debtor's information as displayed to collectors on their workstation was obtained immediately after the call ended, and archival information on the debtor's past history with the bank was

obtained from records.

<u>The Sample</u>

To ensure that we drew from a representative sample of collectors, we stratified them based on experience level (short: less than the median 1.5 years experience at the sites, long: greater than 1.5 years) and skill (low: less than average performance, high: greater than average performance) as assessed by managers. To counteract availability bias in managers' assessments, we asked managers to consider performance over the past six months (Dawes, 1988, pp. 92–102). We then randomly chose collectors from the four subgroups identified. Our final sample included 20 collectors of a possible 44 in the work group where we conducted our study. Three of the collectors we initially approached refused to participate. We replaced these collectors with others in the same experience and skill-level subcategory.

The pool of potential debtors each collector chose from was generated essentially at random by the bank's system, but collectors could choose to work them ordered by factors which they deemed important such as size of balance. Each collector generated between 6 and 18 contacts. Of the 237 debtors contacted, 38 refused to participate in the study and one did not speak English, leaving us with a total of 198 contacts for our analysis. Of this sample, we combined data for each of 5 debtors who were contacted twice in the same sampling session due to a request for call-back. We dropped one other contact because its extremely short length did not allow for analysis. Our final sample had 192 contacts that yielded 5,561 separate verbal exchanges, consisting of the debtor's most recent speaker turn and the collector's turn that preceded it. We analyzed these speaker turns stratified within collectors and debtors.

Two concerns regarding our data are our level of intrusion and the self-selection of debtors and collectors. Given our level of intrusion, the call might have proceeded significantly differently than if we had not been there. For 16 of the 20 collectors, we were able to compare the difference in the average account-balance weighted ratio of PTPs during our sampling session with that collector's average over the previous 12 fiscal months. The other four collectors had been in the unit we studied for too short a period to have accumulated any historical performance data. For the 16 collectors measured, the difference in the account-balance weighted ratio of PTPs was insignificant both when we only included the debtors who agreed to be in our study ($t_{15} = 0.23$, $p = 0.82$) and when we included the debtors who refused participation ($t_{15} = 0.70$, $p = 0.49$). We find these results encouraging that our presence did not exert a systematic influence over contact outcome.

We also find these results encouraging as regards debtor self-selection in our sample. Our results without the debtors who refused participation are not significantly different from the collectors' year long averages. As for collector self-selection, we believe substituting collectors with similar skill and experience profiles helped minimize any potential bias. Furthermore, as we will show below, using fixed effects to capture differences between collectors indicated few collector-level differences in our sample.

Coding the Collector-Debtor Interactions

In order to analyze the contacts, we coded (categorized) the information in each of the debtor's and collector's speaker turns for relevant tactics and responses. To do so, we first broke the collector's and debtor's utterances into statements, each containing one thought. Next, we developed the coding scheme shown in Table 1. At

the level of statements, the codes were mutually exclusive and exhaustive. Since each debtor and collector utterance was typically composed of more than one statement, utterances could contain more than one code. We used the following, multiple sources of information for each code we developed:

- Past work on coding emotional expression in other contexts (Lang, 1995; Whissell, 1982).

- Semistructured interviews with 35 collectors, 6 direct supervisors, 5 senior managers, and 4 trainers.

- Observation of 15 collectors for two to four hours each prior to the main data collection effort.

- Classroom and on-the-job training materials. These included: instructions on how to operate the computer system, legal collection practices according to federal and state statutes, and a list of standard threats and encouragements.

- Two weeks experience by the first author as a collector during which he contacted 50–100 debtors per day.

Insert Table 1 about here

The Codes

The codes in Table 1 fall into four main categories with each code having a different role for both debtors and collectors. Throughout this paper, we indicate these roles by prefixing the code with Collect for collectors and Debt for debtors. Discussing Deal Terms (DealTerms) codes indicated when either the collector or debtor was discussing how the delinquency might be resolved in terms of specific

dollar payments, dates, or both. The codes are ordered from mentioning a higher dollar amount or earlier payment date (Collect.DealTermsUp, Debt.DealTermsUp) through mentioning a commitment currently on the table (Collect.DealTermsSame, Debt.DealTermsSame) to mentioning concessions for either amount or date of payment (Collect.DealTermsDown, Debt.DealTermsDown).

Encouraging and Reinforcing (EncourageReinforce) codes represented when the collector (Collect.EncourageReinforce) was encouraging the debtor by mentioning the benefits of paying (e.g., This will get you back on track.) or by expressing sympathy for the debtor's situation (e.g., I'm sorry, when did that happen?) As for debtors, their statements were coded as Debt.EncourageReinforce if they expressed relief, happiness, or thanks to the collector (e.g., "thank-you" after a concession).

Threatening and displaying negative affect (ThreatenDisplayNA) codes captured collectors' threats (Collect.ThreatenDisplayNA) and debtors' negative affective displays (Debt.ThreatenDisplayNA). For collectors, Collect.ThreatenDisplayNA indicated that they were stating the negative consequences of not paying (e.g., Without a payment this account may possibly be referred to an outside agency) or the negative state of the account. For debtors, Debt.ThreatenDisplayNA indicated that the debtor was refusing to arrange payment (e.g., No, I will not pay), expressing strong negative sentiment (e.g., expletives), blaming the collector (e.g., You're the ones who got me in this mess), or making excuses.

We assumed that Debt.ThreatenDisplayNA statements provided an indication that debtors were feeling negative affect. The defensive, evasive, and hostile content of these codes indicated that the debtor was acting on goals generally associated with specific negative moods. If the statements' content were further judged as

significantly unpleasant, it would provide additional evidence that the statements were negatively motivated. To test for this, we ran the following study. At the end of an unrelated experiment on decision making, we asked 44 subjects to rate 30 statements on two scales, one for emotional valence and the other for strength. The scale for emotional valence ranged from -3 (highly unpleasant) to +3 (highly pleasant) with 0 as a center, and the strength of emotion on scale of 1 (weak) to 7 (strong). A similar scale has been used by Whissell and her collaborators to rate single words and passages with high reliability (Brisson, Dewson, & Whissell, 1982; Whissell, 1982, 1994).

The 30 statements were randomly ordered and contained a sample of five statements from the EncourageReinforce and and ten from the ThreatenDisplayNA categories for both collectors and debtors. We tested the two types of statements to ensure that debtors really were behaving differently when they made Debt.ThreatenDisplayNA statements. We tested statements from both debtors and collectors to determine whether we could generalize our observations to both bargaining participants. Statements coded as ThreatenDisplayNA were on average rated as negatively valenced on the scale (for collectors, $M = -0.98$, $t_{43} = -16.58$, $p < 0.001$; for debtors, $M = -1.27$, $t_{43} = -17.68$, $p < 0.001$) while the statements coded EncourageReinforce were rated as neutrally or positively valenced (for collectors, $M = 0.16$, $t_{43} = 1.77$, $p < 0.08$; for debtors, $M = 1.34$, $t_{43} = 18.40$, $p < 0.001$). Furthermore, in a direct contrast comparison, statements coded as ThreatenDisplayNA were more negatively valenced than statements coded EncourageReinforce (for collectors, $M = -1.14$, $t_{43} = -10.85$, $p < 0.001$; for debtors, $M = -2.61$, $t_{43} = -26.13$, $p < 0.001$). Strength of emotion was insignificantly different across the codes for both collectors and debtors.

We conclude that Debt.ThreatenDisplayNA statements can serve as an indicator for debtors' negative affect. Debtors clearly displayed different valence by type of statement. Statements coded as Debt.ThreatenDisplayNA were both negatively valenced, and they contained defensive, evasive, and hostile content.

For collectors, probing and responding (Collect.ProbeRespond) codes indicated that they were asking factual questions not related to specific dollar amounts or dates of payment (e.g., Do you still reside on Dalzell Place?). For debtors, Debt.ProbeRespond codes indicate responding to factual questions or volunteering information that did not relate to specific dollar amounts or dates of payment (e.g., I have a new job). We included these codes largely to serve as control variables in the analyses below. Finally, the category other accommodated statements which did not fit in any other category.

After we developed the coding scheme, the first author coded all of the exchanges in a random sample of 21 contacts. Two independent coders were then given the coding scheme. Following Krippendorf's (1980) recommendation, during training, coders were briefed on the coding scheme, then applied it independently to the exchanges in the 21 contacts coded by the first author, and finally compared their coding with that of the first author. We measured coding performance by calculating κ, a measure of inter-rater reliability that accounts for chance agreement (Fleiss, 1981), for the three possible pairings of the first author and the two coders over all of the individual codes for the first 21 contacts (before coders saw the first author's answers) and 6 other randomly sampled contacts from those remaining after training. The lowest pairwise κ for a single code was 0.71 and the highest 0.95. Overall, κ between coders ranged from 0.80 to 0.92. These measures indicate very good to excellent inter-rater reliability (Fleiss, 1981) for all codes that we used in our analyses.

Analyzing the Coded Collector-Debtor Contacts

We tested our hypotheses using the coded collector and debtor statements. Our dependent variable for all tests, `Debt.DealTerms`$_j$, indicated whether the debtor was discussing deal terms on a given speaker turn, j. We coded `Debt.DealTerms`$_j$ as one every time a debtor made a DealTermsUp or a DealTermsSame statement since these codes represented improvements on or reiterations of a deal already under consideration. When debtors asked for concessions (DealTermsDown), it was very likely that the deal would not be within the range that the bank would allow the collector to accept.

<u>Hypotheses</u>

The next step of the analysis was to specify the hypotheses in terms of the coding scheme. Table 2 summarizes each hypothesis in words and the details of how it was specified using our codes. We coded each hypothesis as an interaction between collectors' offers, their threats and encouragements, and debtors' displays of negative affect. Since collectors took the lead in bargaining (Gibson, Fichman, & Plaut, 1996), we cast them as the bargainer making threats and encouragements and debtors as the recipients.

For example, Hypothesis 1 stated: "Threats made while bargaining will lead to a higher likelihood that the recipient will discuss deal terms, <u>if</u> the recipient is neither discussing deal terms nor displaying negative affect". To translate this hypothesis into our codes, we first encoded the collector's threats as `Collect.ThreatenDisplayNA`$_{j-1}$ with the subscript, $j-1$, indicating that the utterance occurred the speaker turn just before the current one, j. We grouped statements indicating the collector was making

an offer ($\mathtt{Collect.DealTermsUp}_{j-1}$, $\mathtt{Collect.DealTermsSame}_{j-1}$, and $\mathtt{Collect.DealTermsDown}_{j-1}$) into one variable, $\mathtt{Collect.DealTerms}_{j-1}$. We then added two derived codes, $\mathtt{Debt.NotThreatenDisplayNA}_{j-2}$ and $\mathtt{Debt.NotDealTerms}_{j-2}$ to indicate that the debtor had neither displayed negative affect nor discussed deal terms on his or her previous speaker turn. Finally, we multiplied all of the terms together to indicate that they occurred in combination. Similarly, for Hypothesis 2, the collectors' encouragements were encoded as $\mathtt{Collect.EncourageReinforce}_{j-1}$ and multiplied by $\mathtt{Collect.DealTerms}_{j-1}$ and $\mathtt{Debt.ThreatenDisplayNA}_{j-2}$ to indicate that they occurred in combination. Hypotheses 3 and 4 contained predictions for the main effect of collectors' threats and encouragements based on the assumption that debtors were experiencing a moderate level of negative affect. Therefore for Hypothesis 3, we just multiplied $\mathtt{Collect.DealTerms}_{j-1}$ and $\mathtt{Collect.ThreatenDisplayNA}_{j-1}$ together to indicate that they occurred in combination. Similarly for Hypothesis 4, we multiplied $\mathtt{Collect.DealTerms}_{j-1}$ and $\mathtt{Collect.EncourageReinforce}_{j-1}$ together to indicate that they occurred in combination.

Insert Table 2 about here

Control variables

We used control variables to account for factors outside of our hypothesized effects that might affect the likelihood of observing the dependent variable, $\mathtt{Debt.DealTerms}_{j}$, in our model. First, we considered events in the conversation that might permanently alter its course. Believing that the likelihood of the debtor

discussing an acceptable offer would increase after the first time she mentioned one in the conversation we included a control variable, `Debt.FirstDealTerms`. It was entered as a dummy variable with a value of zero before the debtor first discussed the terms of an acceptable offer and one after. We also included another dummy control variable, `FirstSecondHalf`, to account for the possibility that the likelihood of discussing deal terms was higher in the first or second half of the conversation.

We further considered that statements made by the debtor in recent past speaker turns could serve as valid predictors of the course of the conversation independently of any action the collector was taking (i.e., endogenous effects, Diggle, Liang, & Zeger, 1994; Greene, 1993; McCullagh & Nelder, 1990). If the debtor discussed deal terms ($\text{Debt.DealTerms}_{j-2}$), or even just asked for a concession ($\text{Debt.DealTermsDown}_{j-2}$) on her last speaker turn, she might be more likely to do so again on the current speaker turn. Additionally, responding to factual questions ($\text{Debt.ProbeRespond}_{j-2}$) or making reinforcing statements ($\text{Debt.EncourageReinforce}_{j-2}$) might also indicate a higher likelihood that she would discuss deal terms on the current speaker turn. By similar reasoning, displaying negative affect ($\text{Debt.ThreatenDisplayNA}_{j-2}$) might indicate a lower likelihood that the debtor would discuss deal terms because she was acting on non-cooperative goals. Controlling for these possible endogenous effects made it possible to determine the incremental impact of collector statements over and above what the debtor might have done on her own.

Next, we considered that when collectors made offers it should raise the likelihood of the debtor discussing an acceptable offer. We thought this should happen whether the collector was asking for harder terms ($\text{Collect.DealTermsUp}_{j-1}$), reiterating the same terms ($\text{Collect.DealTermsSame}_{j-1}$), or making concessions

(`Collect.DealTermsDown`$_{j-1}$).

Our final set of control variables attempted to account for individual differences among debtors and collectors, an important potential source of variation in any observational study (Diggle et al., 1994; Greene, 1993; McCullagh & Nelder, 1990; Trussell & Richards, 1985). For debtors, we had two concerns. First, debtors' probability of talking about an acceptable offer might have been partially based on their ability to pay. We did not have direct access to debtors' overall financial situation. However, we were able to measure their total balance due, `Debt.DollarsDelinquent`. Total balance due indicated the extent of the debtor's indebtedness to the bank and averaged approximately $4500 (*s.d.* = 4007) over our sample. Higher balances meant that higher amounts were needed to resolve delinquencies making it harder for people with little money to pay.

Our second concern about debtors was that there would be a difference between people who were new debtors and those who had become habituated (e.g., Rock, 1973). To control for this difference, we included the average number of months delinquent, `Debt.MeanMonthsDelinquent`, the debtor had been in each of the last twelve months (*M* = 1.9, *s.d.* = 0.86) with a higher average number of months suggesting a lower likelihood of the debtor discussing the terms of an acceptable offer.

As for collectors, we believed that they might have different abilities in pushing debtors to talk about acceptable deal terms. Furthermore, collectors each produced several contacts, and some account had to be taken of the collector effect on debtor responses. We addressed both these issues by estimating fixed effects with 19 dummy variables for the 20 collectors (Diggle et al., 1994). Finally, gender might play a role in collector-debtor interactions (Sutton, 1991). To account for this possibility, we

included variables for debtor gender (`Debt.Gender`, Males = 69, Females = 123) and

collector gender (`Collect.Gender`, Males = 5, Females = 15).

Statistical Method

Since at the speaker-turn level we had repeated measures of the same person

and binary dependent variables, we used autoregressive logit analysis to construct our

model (Allison & Liker, 1982; Bonney, 1987; Vries, Fidler, Kuipers, & Hunink, 1998;

Diggle et al., 1994; Zeger & Qaqish, 1988). The logit transformation provides a way to

write a model that is linear in the past values of the binary dependent variable, y (in

our case, whether the debtor was discussing deal terms in that utterance), and the

covariates x_i (in our case, all of the terms encoding the hypotheses and control

variables). It is typically written as follows (McCullagh & Nelder, 1990):

$$\text{Logit}[P(y_j = 1)|X, Y)] = \alpha + \sum_{i=1}^{k} \sum_{l=1}^{n} \beta_{j-l,i} \, x_{j-l,i} + \sum_{l=1}^{n} \gamma_{j-l,i} \, y_{j-l} \qquad (1)$$

where X is a matrix in which each row represents a set of i covariates at speaker turn

j minus the row number, and Y is a matrix in which each row similarly represents the

dependent variable.

Autoregressive logit models may be estimated using quasi-likelihood (McCullagh

& Nelder, 1990; Venables & Ripley, 1998; Zeger & Qaqish, 1988). This procedure

minimizes a performance measure, The Akaike Information Criterion (AIC) which is

calculated as (Venables & Ripley, 1998):

$$\text{AIC} = -2 \, \text{maximized log likelihood} + 2 \, \# \, \text{parameters} \qquad (2)$$

When the number of observations is large, AIC is distributed χ^2. Different models

which differ only in the number of parameters may be compared based on whether the

difference in AIC is significant. Additionally, with a large number of observations as in our sample, parameter estimates are normally distributed allowing for traditional two-tailed t-tests on parameters.

Results

Table 3 displays the coefficients for the control variables and our four hypotheses in the model we estimated. Overall, the model provides a significantly better fit in predicting the likelihood of a `Debt.DealTerms`$_j$ ($\chi^2(40) = 1341.3$, $p < 0.001$), than a simple model containing only the intercept.

Insert Table 3 about here

Control Variables.

In the simplest interpretation, our hypotheses and control variables assumed that we only needed to consider statements from two speaker turns back to predict whether the debtor would discuss deal terms. We tested this assumption by adding statements from four, six, and eight speaker turns back. Neither the four ($\chi^2(13) = 21.60$, $p > 0.06$) nor the six ($\chi^2(27) = 38.67$, $p > 0.07$) speaker turns analyses fit better than the two speaker turns analysis. Therefore, our analyses extended back to just two speaker turns required by our initial statement of the hypotheses.

As a group, the coefficients for fixed effects by collector did not improve the fit ($\chi^2(18) = 11.19$, $p > 0.10$). Similarly, as a group, previous debtor statements did not significantly improve the fit ($\chi^2(5) = 3.89$, $p > 0.10$). Finally, as a group, all of the other control variables significantly contributed to the fit ($\chi^2(6) = 40.53$, $p < 0.01$).

Examining the significant coefficients for the control variables, when the collector increased terms on the previous speaker turn ($\texttt{Collect.DealTermsUp}_{j-1}$), debtors were more likely to respond by discussing deal terms ($t = 6.42$, $p < 0.01$) and similarly when collectors reiterated the same terms ($\texttt{Collect.DealTermsSame}$, $t = 26.12$, $p < 0.01$). Debtors were less likely to discuss deal terms in the second than the first half of the conversation ($t = -4.61$, $p < 0.01$). The more delinquent the debtor was, the less likely he or she was to discuss deal terms ($\texttt{Debt.DollarsDelinquent}$, $t = -2.68$, $p < 0.05$). Furthermore, debtors were more likely to discuss deal terms if they had already done so at least once during the conversation ($\texttt{Debt.FirstDealTerms}$, $t = 4.27$, $p < 0.01$). Overall, the results for the control variables suggest that reiterating or increasing offer terms pushed debtors to discuss acceptable offers, that the course of conversations tended to be decided in the first half of the conversation, and that debtors' financial state (as represented by dollars delinquent and months in delinquency) influenced their tendency to discuss deal terms.

Hypotheses.

Consistent with Hypothesis 1, when the collector used threats after the debtor had neither discussed deal terms nor expressed negative affect, the debtor was more likely to respond by discussing deal terms ($t = 1.95$, $p < 0.05$). Consistent with Hypothesis 2, using encouragements while bargaining after the debtor had displayed negative affect raised the likelihood that the debtor would respond by discussing deal terms ($t = 2.99$, $p < 0.01$). Using threats and encouragements conditioned on the debtor's negative affective display raised the likelihood of the debtor discussing deal terms.

Hypotheses 3 and 4 focused on bargainers' unconditioned use of threats and encouragements with recipients whom we assumed were already experiencing moderate levels of negative affect. Examining Hypotheses 3 and 4, when collectors used threats ($t = -2.10$, $p < 0.05$) or encouragements ($t = -3.52$, $p < 0.01$) unconditionally while bargaining, it lowered the likelihood of the debtor responding by discussing deal terms. Using threats and encouragements that were not conditioned on the debtor's negative affective displays did not raise the likelihood of the debtor discussing deal terms in this bargaining environment.

Discussion

The key differentiating feature in the effectiveness of collectors' threats and encouragements in getting debtors to discuss acceptable offers was whether they used them contingent on debtors' displays of negative affect. When collectors' threats and encouragements were not conditioned on debtors' negative affective displays, they lowered the likelihood that debtors would respond by discussing acceptable deal terms, perhaps due to heightened goals to defend, evade, or display hostility. When threats were used contingent on debtors' prior lack of responsiveness and display of negative affect, they raised the likelihood that debtors would discuss acceptable deal terms.

General Discussion

Our results support the hypothesis that making threats and encouragements contingent on that partner's responsiveness and negative affective display can increase the likelihood that the partner will discuss terms. Partners' negative affective display is an indicator of the extent to which they are motivated by goals to defend,

evade, or display hostility. If a bargaining partner is overly influenced by this type of goal, he or she may focus exclusively on non-cooperative behavior. However, if a partner is not sufficiently motivated by perceived threat, he or she may fail to respond.

One way to determine the extent to which a person is motivated by negative affect is to monitor his or her statements. A partner's statements can alert bargainers whether they should accentuate or moderate aspects of the situation that could cause the partner to feel more negative affect. When collectors limited their threats to times when the debtor had not been displaying negative affect or responding to deal terms, they increased the likelihood that he or she would discuss deal terms. By a similar token, when collectors made encouraging or sympathetic statements to debtors displaying negative affect, it also increased the likelihood that these debtors would discuss deal terms.

Limitations and Future Work

This work has three significant limitations. First, our dependent variable for measuring the progress of the bargaining session represented discussion of offer terms. Discussing offer terms was a necessary precursor to striking a deal in our sample. Further, it is often all bargainers have to go on in assessing the success of their tactics in real time, an important aspect of our theoretical focus.

Of course, from the bank's perspective, there is real interest in the effect collectors' tactics have on actual consummation of the deal. This problem is interesting and difficult, requiring longitudinal collection of data that typically cannot be related back to real-time factors because of confounds from interventions over time by multiple institutional agents (Gür-Ali & Wallace, 1995). Carefully controlled field experiments may be possible, but this strategy has rarely been pursued due to high

costs incurred by the participating institution that outweigh the perceived benefit (Showers & Chakrin, 1981). One promising possibility for addressing these limitations is experimentation in artificial economies. In this case, the number and variety of contacts between bargainers could be controlled as well as the strategies employed.

Second, the richness of our affect measures was limited. Although we found effects for threats and encouragements made contingent on the display of negative affect, we believe that these might have been richer had we been better able to measure non-verbal cues such as voice tone and facial expression (Burgoon, Kelley, Newton, & Keeley-Dyerson, 1989; Kappas, Hess, & Scherer, 1988). In this regard, we also note that we did not query participants directly concerning their subjective experience of negative affect nor did we undertake to measure physical correlates of negative affect. Such measures have been used quite successfully in naturalistic lab settings to study emotional factors in long-term relationships (Gonzaga, Keltner, Londahl, & Smith, 2001; Gottman, 1998; Roberts & Levenson, 2001). We view the extension of such techniques to the more punctual type of bargaining setting we studied a useful direction for future research.

Finally, the observational approach presented here lacked experimental control, forcing us to use control variables to account for non-random selection. However, a problem with the laboratory, where we can use non-random assignment, is that it may allow the researcher to assume away factors important to the functioning environment. As noted earlier, theorists have had a hard time predicting the impacts of affective display in the field. This study fulfilled an important role by developing theory and a means to test that theory in a relatively less well-controlled field environment.

<u>Conclusion</u>

Theories of interpersonal affective display have not performed well when predicting behavior in fast-paced functioning environments. This work has offered a hypothesis as to why bargainers' use of threats and encouragements may have different impacts contingent on the recipients' negative affective display. The contingent effect of collectors' threats and encouragements on debtors' willingness to discuss deal terms provides evidence supporting this hypothesis.

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Author Note

Table 1: Collector and Debtor Coding Categories

Code	Collector Definition	Debtor Definition
Deal Terms		
DealTermsUp	Asking a higher dollar amount or earlier payment date than is currently on the table (e.g., "We need $50." in response to the debtor's offer of $40).	Offering a higher dollar amount than is currently on the table (e.g., Let's do it for the balance in full).
DealTermsSame	Accepting or restating the offer on the table (e.g., Okay, you'll pay $35 on the 15th?)	Accepting or restating the offer on the table (e.g., you want $50 by Tuesday?).
DealTermsDown	Offering a specific concession in either dollar amount or due date (e.g., I can give you to the 24th to make the payment).	Asking for a specific concession in either dollar amount or due date (e.g., Can you lower it to $35).
Encouraging or Reinforcing		
EncourageReinforce	Positively frame the situation to debtors by outlining the benefits of paying or by expressing sympathy for their situation (e.g., I'm sorry, when did that happen?).	Express relief, happiness, or thanks to the collector (e.g., thanks for your help).
Threatening and Displaying Negative Affect		
ThreatenDisplayNA	Negatively frame the debtor's situation by stating the negative consequences of not paying (e.g., your account may be referred to an outside agency). Negatively frame the debtor's situation by stating the negative state of the debtor's account (.e.g., you are four months past due).	Refusing to arrange payment (e.g., No! I will not pay). Expressing strong negative sentiment toward the collector or blaming the collector (e.g., you <expletive>, you're the ones who put me in this situation.). Offering an excuse for not paying (e.g., I've been ill.)
Probing and Responding		
ProbeRespond	Asking factual questions (e.g., Do you still live on Ridgeville?)	Answering questions or volunteering factual information (e.g., Yes, I still live on Ridgeville.).
Other		
Other	All items that do not fit into the above categories.	All items that do not fit into the above categories.

Table 2: Summary of hypotheses about how bargainers can influence their partners to discuss acceptable deal terms. The column, *Model terms encoding the hypothesis*, restates the conditions of each prediction in terms specific to our field environment. In this column, `Collect` stands for collectors and `Debt` for debtors followed by the code for the particular type of statement (see Table 1). The subscript j indicates the current speaker turn where the debtor is speaking; $j-1$ is the last speaker turn when the collector spoke; and $j-2$ is two speaker turns ago when the debtor last spoke, etc.

	Hypothesis	Model terms encoding the hypothesis
H1	Threats made while bargaining will lead to a higher likelihood that the recipient will discuss deal terms, *if* the recipient is neither discussing deal terms nor displaying negative affect.	`Collect.ThreatenDisplayNA`$_{j-1}$ × `Collect.DealTerms`$_{j-1}$ × `Debt.NotThreatenDisplayNA`$_{j-2}$ × `Debt.NotDealTerms`$_{j-2}$
H2	Encouragements made while bargaining will lead to a higher likelihood of the recipient discussing deal terms, *if* the recipient is displaying negative affect.	`Collect.EncourageReinforce`$_{j-1}$ × `Collect.DealTerms`$_{j-1}$ × `Debt.ThreatenDisplayNA`$_{j-2}$
H3	Making unconditioned threats to a delinquent debtor while bargaining will lower the likelihood that he or she will respond with deal terms.	`Collect.ThreatenDisplayNA`$_{j-1}$ × `Collect.DealTerms`$_{j-1}$
H4	Making unconditioned encouragements to a delinquent debtor while bargaining will lower the likelihood that he or she will respond with deal terms.	`Collect.EncourageReinforce`$_{j-1}$ × `Collect.DealTerms`$_{j-1}$

Table 3: Factors affecting `Debt.Resolve`$_j$. Terms with one star (*) are significant at the the 0.05 level and terms with two stars (**) are significant at the 0.01 level.

Variable	Coefficient	t-statistic	
Intercept and Fixed Effects			
Intercept	−3.69813	−14.1234	**
Collector(2)	0.19325	1.0631	
Collector(3)	−0.09728	−1.1339	
Collector(4)	0.09273	1.3875	
Collector(5)	−0.08000	−1.1255	
Collector(6)	−0.05228	−1.0626	
Collector(7)	0.02123	0.7104	
Collector(8)	−0.00028	−0.0052	
Collector(9)	0.00356	0.0914	
Collector(10)	0.00533	0.1943	
Collector(11)	0.01984	0.9229	
Collector(12)	−0.00096	−0.0276	
Collector(13)	−0.00615	−0.2847	
Collector(14)	0.01825	1.1320	
Collector(15)	−0.04617	−1.7620	
Collector(16)	−0.00929	−0.5072	
Collector(17)	−0.00209	−0.1078	
Collector(18)	−0.00355	−0.2182	
Collector(19)	0.00199	0.1118	
Collector(20)	0.00342	0.2419	
Previous Debtor Statements			
Debt.Resolve$_{j-2}$	0.09140	0.4664	
Debt.ResolveDown$_{j-2}$	−0.05704	−0.1212	
Debt.ProbeRespond$_{j-2}$	0.22803	1.4027	
Debt.EncourageReinforce$_{j-2}$	−0.33825	−0.7920	
Debt.ThreatenDisplayNA$_{j-2}$	−0.04069	−0.1988	
Collector Resolving Statements			
Collect.ResolveUp$_{j-1}$	1.46516	6.4236	**
Collect.ResolveSame$_{j-1}$	3.77852	26.1245	**
Collect.ResolveDown$_{j-1}$	−0.28219	−0.8539	
Other Control Variables			
Debt.FirstResolve	0.65569	4.2670	**
FirstSecondHalf	−0.58012	−4.6055	**
Debt.DollarsDelinquent	−0.57295	−2.6801	*
Debt.MeanMonthsDelinquent	0.09299	1.2564	
Collect.Gender	0.01788	0.2252	
Debt.Gender	0.00	0.00	
Collect.Gender × Debt.Gender	0.07758	0.9685	

Table 3: *continued*

Variable	Coefficient	t-statistic	
Hypothesis 1			
$\text{Collect.ThreatenDisplayNA}_{j-1} \times$ $\text{Collect.Resolve}_{j-1} \times$ $\text{Debt.NotThreatenDisplayNA}_{j-2} \times \text{Debt.NotResolve}_{j-2}$	0.89	1.95	*
Hypothesis 2			
$\text{Collect.EncourageReinforce}_{j-1} \times$ $\text{Collect.Resolve}_{j-1} \times \text{Debt.ThreatenDisplayNA}_{j-2}$	2.02	2.99	**
Hypothesis 3			
$\text{Collect.ThreatenDisplayNA}_{j-1} \times \text{Collect.Resolve}_{j-1}$	−0.75299	−2.0992	*
Hypothesis 4			
$\text{Collect.EncourageReinforce}_{j-1} \times$ $\text{Collect.Resolve}_{j-1}$	−1.25953	−3.5179	**