The Costs and Benefits of Arguing: Predicting the Decision Whether to Engage or Not

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1. Introduction

Pragma-dialectical theory (van Eemeren & Grootendorst 2004) explains that a critical discussion has four stages: confrontation, opening, argumentation, and concluding. In the confrontation stage, two people discover that they have a disagreement, and in the opening stage they decide how to pursue it. This study focuses on the transition from the confrontation stage to the opening stage. Not all disagreements are explored or even expressed. When circumstances invite disagreement and then argument, sometimes we move forward and sometimes we move away. This is an investigation of the decision to engage or not. What factors predict engagement and which predict that no argument will be voluntarily forthcoming?

2. A Theory of Engaging in Arguments

Recent work (Paglieri 2009; Paglieri & Castelfranchi 2010; see Hample 2009) has analyzed the circumstances in which face-to-face arguments are most likely to escalate out of control, suggesting that people take these factors into account in deciding whether or not to argue at all. This paper takes that work as a theory of argument engagement. Our most general claim is that people are predicted to engage in an argument when the expected benefits of doing so exceed the expected costs.

The essential model being tested here is

$$\text{Beh} \sim \text{BI} = f(S, P, C, B), \tag{1}$$

where Beh represents behavior, BI is behavioral intention, S is the situation, P represents various aspects of the person, C is the expected costs of the behavior, and B is the expected benefits of the behavior. Our interest here is in a particular behavior, engaging in an interpersonal argument. While our design does not include a direct observation of arguing behavior, meta-analysis shows that behavioral intentions are highly correlated with behaviors ($r = .83$, Kim & Hunter 1993), and so BI serves us as a suitable proxy - that is, Beh is approximated by ($\sim$) BI. We theorize that behavioral intention to engage in a face-to-face argument will be a function of the characteristics of the situation that might or might not invite an argument, individual differences among people, and anticipated costs and benefits of arguing. S, P, C, and B can be

operationalized in many ways. We will test only one set of instantiations, one collective example of how the model might be applied.

Equation 1 is essentially a cost-benefit model that makes room for personal and situational influences on the assessment of costs and benefits. Cost-benefit models are common in the social sciences and have a good record of accurate predictions in many domains. They go by various names, such as Subjective Expected Utility models, Predicted Outcome Value theory, Social Exchange Theory, Utility Theory, and others (e.g., Lave & March 1975; Thibaut & Kelley 1959; Uehara 1990).

Several particular applications of this general theoretical orientation are supportive of our current project. The literature shows, for example, that some formulation of costs and benefits predicts behavioral intentions, relational engagement, conflict engagement, and conflict resolution. Fishbein and Ajzen (1975) showed that an algebraic combination of positive and negative beliefs predicts attitudes, and that similar combinations of attitudes and norms predict behavioral intentions. Marek, Wanzer and Knapp (2004) found that the costs and benefits implied in one's first impression of another person predicted whether roommate relationships would persist and be constructive. Similarly, the positivity of one's expectations about a relationship predicted one's emotional engagement in the relationship, the amount of interaction, and the intimacy of exchanges (Ramirez, Sunnafrank, & Goei 2010). Bippus, Boren, and Worsham (2008) found that people who felt they were under-benefitted in a relationship were angrier, more critical, and more avoidant during conflicts, compared to people who felt properly- or over-benefitted. Vuchinich and Teachman (1993) analyzed data indicating that the likelihood of ending riots and family arguments increases as they go on because their costs increase; in contrast wars and strikes become entrenched. Both pairs of results were predicted from the premise that the prospects of concluding a conflict can be projected from the momentary and projected costs of continuation. These findings encourage us to theorize that people's intentions to argue or not will be predictable if we know how the people project their costs and benefits if they were to argue.

The S, P, C, and B elements of Equation 1 can be operationalized in a great number of ways, with each set of instantiations essentially providing a separate specification and test of Equation 1. Here, our main situational variable is the type of argument topic: whether it is personal, public, or occupational. Johnson (2002; Johnson et al. 2007) has shown that whether an argument concerns a personal or public *topic* (i.e., whether the argument is about something that directly affects the nature or conduct of the arguers' personal relationship or not) predicts how people think about and react to the argument. This is a distinction between whether the topic is internal (private) or external (public) to the conduct of the interpersonal relationship. Which of us should drive the car to the polling place is a private topic but who should be the next senator is a public one. We add workplace topics to Johnson's list in the expectation that these are also common topical sites for arguments, and seem to us to have a character intermediate between personal and public matters. The key person variables here are *argumentativeness* and *verbal aggressiveness* (Infante & Rancer 1982; Infante & Wigley 1986), which are important to many arguing phenomena (Rancer & Avtgis 2006). Argument topic (S) and both argumentativeness (P) and verbal aggressiveness (P) are variables that have been very useful in understanding and predicting argument behaviors and beliefs.

Our understanding of the costs and benefits of engaging in arguments is taken from Paglieri's (2009) work. He identified nine factors that should affect people's decision whether to engage or not. We have reduced these to seven, making use of

previous concepts and scales whenever possible. The *cost* of arguing refers to the cognitive effort involved, one's emotional exposure, and one's estimates of unwelcome relational consequences. The *benefits* of arguing immediately index what an arguer might get out of the interaction if it were to go well. The likelihood of *winning* is important in projecting possible benefits to an argument. A key consideration in whether outcomes might be attainable is whether the other arguer is expected to be *reasonable*, or might be stubborn or truculent. The *civility* of a possible argument has to do with whether it would be pleasant and productive, or angry and destructive. Whether an argument is thought to be *resolvable* or not has important consequences for relational satisfaction and other valued outcomes (e.g., Johnson & Roloff 1998). People feel that it is *appropriate* to engage in some arguments but not in others, and this has implications for whether participation would be more or less costly.

Expected costs (C) and benefits (B) are measured with essentially the same scales, arranged so that if a high score represents an estimate that an argument would be costly, a low score would imply that it would be beneficial (or vice versa). At this point in our theoretical development, we suppose that these are continuous linear matters rather than, say, threshold or step-function considerations. These cost and benefit measures are discriminable on their face, and if they should prove to be highly correlated, this will be substantively informative without endangering our test of the basic model. Dividing the general ideas of cost and benefit into several specific measures makes it empirically possible for a person to project engagement as being both highly beneficial and very costly, low in both respects, or high on one and low on the other.

Equation 1 specifies only that behavioral intentions will be some function of S, P, C, and B, without indicating the exact functional form. Our theory predicts that intention to engage will be heightened when benefits are expected to be substantial and decreased when costs become predominant. We predict that the intention to argue will be highest when the argument is expected to be resolvable, civil, low in effort, successful, appropriate, and beneficial, and when the other person is anticipated to be reasonable. We expect people to prefer non-engagement in the opposite conditions. Estimates of costs and benefits are specific to a particular argument and we understand these estimates to be the proximal causes of the decision to engage. But those estimates may well vary according to the type of argument topic (S) and the arguers' predispositions for argumentativeness and verbal aggressiveness (P). Furthermore, the size of the effects of C and B on the decision to engage may also be moderated by S and P (i.e., cost estimates may be more forceful in one situation rather than another, or for one type of person rather than a different one). We expect to replicate findings indicating that people high in argumentativeness and verbal aggressiveness are more likely to engage. Since Johnson has shown that personal topic arguments are more involving that public topic ones, we expect that the causal system will reflect this difference, because public topic arguments have been found to be less costly (especially in emotional terms) than personal issue arguments. We make no hypotheses about the job topic arguments, since these have not previously been compared to personal and public arguments. While the P variables might have direct causal effects on the engagement decision, we expect that their effects will tend to be indirect, influencing and then being mediated by the cost and benefit estimates. We test our expectations by means of a structural equation model (SEM) that will reveal both the direct and indirect effects of P, C, and B on the intention to engage in arguing. The S variable's influence should be apparent when we contrast the structural equations predicting intention to engage for personal, public, and workplace topics.

3. Method

3.1 Procedures

Data were collected online. Respondents filled out the argumentativeness (Infante & Rancer 1982) and verbal aggressiveness (Infante & Wigley 1986) instruments, along with demographic items. Each participant then read stimuli describing a situation that invited an argument with a close friend, dealing with a personal, public, or workplace topic. Each participant responded to all three stimuli. The responses had to do with costs, benefits, and behavioral intentions. The study was approved by the Institutional Review Board at the first author's institution, where the data were collected.

3.2 Respondents

A total of 509 undergraduates at a large public Mid-Atlantic university in the U.S. provided data in exchange for extra credit in undergraduate communication classes. 207 (41%) were men, and 302 (59%) were women. Their average age was 20.1 years (SD = 1.83). Freshman constituted 11% of the sample, sophomores 32%, juniors 31%, and seniors 25%. Most (53%) self-categorized themselves as Euro-Americans. Asian-Americans (11%), African-Americans (10%), and Hispanic-Americans (5%) were also common in the sample. The other respondents were scattered among other ethnicities and national origins, or declined to answer.

3.3 Argument Topics

Three argument topics were used in the study. All three were designed to invite but not require the respondent to participate in an interpersonal argument. In other words, they each constituted the first half of a confrontation stage (van Eemeren & Grootendorst 2004). All described the other potential participant as a "good friend" to control for relationship with the other person. The public topic concerned musical preferences: the friend remarks that the respondent's preferred sort of music is "awful." The personal topic dealt with the friend's new romantic partner. The respondent has not been enthusiastic about the relationship, and the friend says that the respondent has been holding back and should be more supportive. In the workplace topic, the respondent and friend work together, and the friend says that the respondent has not been doing his or her share of the work, placing more burden on the friend. In each case, the respondent might plausibly have engaged in a disagreement with the friend's standpoint or might have found some way to avoid an argument. The topics represent the S element in equation (1). The full text of the three topics is reported below:

PUBLIC TOPIC: You and a good friend are both very fond of music. Besides just listening to lots of music over the radio and on iPods, when you have a little extra money, both of you like to go to fairly expensive concerts. You really like different sorts of music, however, and always have. One day when you're just spending a little time together, your friend makes a remark about how good the sort of music s/he likes is, and says that the kind of music you like is awful.

PERSONAL TOPIC: You and a good friend have just had a third person come into your lives because your friend has been dating him/her. The problem is that you and the third person really don't get along very well. You don't like him/her because you don't trust him/her to treat your friend well, and he/she doesn't seem to like you,

either. You and the third person have made some effort to be pleasant to one another for the sake of your common friend, but your friend has begun to notice that you seem to be holding back a little. One day when you're just spending some time together, your friend makes a remark about how you don't seem very sincere about liking the third person, and that you really should make more of an effort.

WORKPLACE TOPIC: You and a good friend work together in an office. You have essentially the same job and your common boss gives the two of you similar work to do. Your boss pays attention to how you're doing on your current tasks, and when one of you has finished, your boss gives that person the next set of assignments. You think that the two of you work at about the same pace and do about the same quality of work. But your friend has apparently begun to feel that you're not quite doing as much as he/she does. One day at work when you're just spending a little time together without much to do, your friend makes a remark about how you don't seem to be doing your share and that he/she is a little resentful about having to do extra work.

3.4 Measures

The P elements in Equation 1 were argumentativeness and verbal aggressiveness. As is the case with the other measures in the study, they were assessed with five-choice Likert items. Both are twenty item scales supposed to be composed of two ten-item sets. Argumentativeness (Infante & Rancer 1982) measures the motivation to attack another person's position, and resolves into a measure of argument-avoid and another of argument-approach. Verbal aggressiveness (Infante & Wigley 1986) is an index of one's predisposition to attack another arguer's character or qualities, and has been shown to have a two-factor structure (Levine et al. 2004). One factor measures pro-social impulses and the other, which Levine et al. suggested is the more genuine measure of verbal aggressiveness, measures anti-social inclinations.

The C and B elements of Equation 1 were measured in several ways. *Cost* of arguing was measured with ten items, dealing with the time and effort expected, complexity of the anticipated argument, likelihood of emotional exposure for self and other, and the possibility of damaging the friendship. *Benefits* of arguing involved six items asking globally whether the respondent would regret the argument or find it beneficial. The other's expected *reasonability* was operationalized with six items that referred to whether the friend would be stubborn, reasonable, open-minded, and mature. *Resolvability* refers to the estimate of whether the argument could be productively concluded (Johnson & Roloff 1998). The likelihood of *winning* asked for projections about who would win the argument and who had the better supporting evidence and reasons. *Appropriateness* included seven items asking whether this was the right time, place, topic, and person for an argument. *Civility* (Hample, Warner, & Young 2009) is a set of ten items asking the respondent to say whether the argument would be cooperative, hostile, open-minded, and so forth.

The dependent variable is behavioral intention to engage in an argument, and this was assessed separately for each of the argument topics (S). Seventeen items were used. These expressed the respondent's willingness to argue, to exchange reasons and evidence, to confront, to concede, and so forth.

Descriptive statistics including Cronbach's alphas for all these variables are presented in Table 1. Table 2 shows the correlations between the trait measures and the other variables for each topic type. These are provided for the benefit of future meta-analysts, and readers should notice that these variables are calculated by simply averaging their component items, with reverse scoring as appropriate. Other results in

this report concern the latent variables calculated as part of our structural equation modeling.

4. Results

4.1 Measurement Model

Structural equation modeling (SEM) has two steps. First, the measurement model must be evaluated. The measurement model refers to our theorized connections between particular response items and the concepts they are supposed to measure. Although we planned that a particular set of items (e.g., for appropriateness) would represent the general concept we specified, whether those items measure it properly is an empirical question. In SEM terms, the individual items are indicators and the general concept (e.g., appropriateness) is a latent variable. Latent variables are unmeasured and are understood as the unobserved causes for the values of the indicator items. Only with a passable measurement model can the theoretical model (here, Equation 1's instantiations) be properly assessed.

We conducted confirmatory factor analyses (CFA) on our measures. Because LISREL (a standard SEM software package) does not permit missing data, our sample size for these and other SEM analyses is 473. Given the number of parameters involved in the study compared to our sample size, we conducted separate CFAs on the trait and then the cost, benefit, and intention measures. We parceled indicators for each measure (Little, Cunningham, Shahar, & Widaman 2002). This involves averaging two or more indicators to create a composite indicator. The purpose of parceling is to permit some of the random measurement error to cancel out before the indicators enter the model. Each parcel had two to five indicators, and we created three or four parcels for each latent variable. Details on the parcels are available from the authors.

The trait measures were argumentativeness and verbal aggressiveness. Hamilton and Hample (in press) have recently shown that two of the argumentativeness items (items 16 and 18 in the standard numbering) seem to form an ability factor. Items 16 and 18 loaded poorly on the proposed ability factor in this study and so these items were dropped from our analyses. This left four trait measures: argument-approach, argument-avoid, VA-prosocial, and VA-antisocial. The CFA was reasonably successful in spite of a significant overall fit test: χ^2 (48, N=473) = 129.49, $p < .001$, RMSEA = .061, χ^2/df = 2.70, NFI = .96. All of the parcels had substantial R^2s with their latent variables, ranging from .45 to .80.

The remaining variables assessed the costs, benefits, and intentions for the three argument topics. All these variables were included in a single CFA. The third parcel for *winning* had an R^2 less than .10 for all three topics, and so was dropped from the analyses. In addition, one item from *benefits* performed badly in the exploratory factor analysis used to inform the parceling, and that indicator was dropped as well for one topic. The CFA was again reasonably successful in spite of a significant fit test: χ^2 (2208, N=473) = 5934.75, $p < .001$, RMSEA = .071, χ^2/df = 2.69, NFI = .89. The R^2 between the parcels and their latent variables ranged from .21 to .87.

Tests of the measurement model showed it to be a reasonable fit to the observed data. The latent variables (e.g., argumentativeness) are well defined by their indicator variables (i.e., their response items). If there is a problem in the overall analysis, it will be attributable to the underlying theory and not to the measurement techniques.

4.2 Structural Model

The second phase in SEM is usually more theoretically interesting than the measurement step. The theory (here, our instantiation of Equation 1) specifies a set of causal relations among the latent variables. This causal system is called the structural model. It models the possibility of causal influence from exogenous variables (those not theorized as caused by any other variables in the system) to endogenous variables (those that have at least one cause in the system). The idea is to test the theorized set of relationships among the latent variables against the observed relationships. If the observed and theorized relationships are similar (i.e., they "fit" one another), the structural model is successful. A successful structural model is in turn good evidence for its generative theory.

Our initial structural model defined the P variables (the subscales for argumentativeness and verbal aggressiveness) as causes of the cost and benefit estimates, and the cost and benefit variables then were modeled as causing the behavioral intentions. Fit statistics for this model were χ^2 (3291, N=473) = 9541.24, $p <$ .001, χ^2/df = 2.90, RMSEA = .076, NFI = .84. However, the most notable result was a null one. None of the P variables had significant effects on any of the cost-benefit variables. Without exception, the paths from the P variables to these estimates were nonsignificant. Prior to discarding the P variables entirely, we explored the possibility that they might instead have direct effects on the behavioral intention measures. One of them did, although only for the public issue topic. Therefore we retained the P measures in the model, but placed them in the same causal phase as the cost-benefit variables. An interesting implication of the lack of influence of P variables on the C and B elements is that the estimates of cost and benefits in argumentative contexts seem to be fairly person-independent matters, at least insofar as argumentativeness and verbal aggressiveness are concerned.

After trimming the model by eliminating the nonsignificant paths between the exogenous and endogenous latent variables, we obtained a reasonably good fit for the new model: χ^2 (3090, N=473) = 7485.53, $p <$ .001, χ^2/df = 2.42, RMSEA = .064, NFI = .88, CFI = .92. The main results are best conveyed by the structural equations. All the coefficients detailed below are statistically significant. The coefficients are unstandardized. Error terms are omitted. All the variables are measured on the same 1 – 5 metric.

BIPub = .12*ArgApp + .18*Civil - .10*Reason + .53*Win - .18*Inapprop   (2)

BIPers = .54*Win - .14*Inapprop + .07*Benefit   (3)

BIWork = -.17*Unresolv + .15*Cost + .70*Win - .08*Inapprop   (4)

The R^2 for each equation was substantial. The behavioral intention to argue on a public topic was predicted with an R^2 of .66. For personal topics, the figure was .61. For workplace topics, the R^2 was .73.

Table 3 reports the correlations among the endogenous variables as well as those within each topic's set of cost-benefit exogenous variables. The BI intercorrelations indicate that intention to engage in argumentation had some consistency from topic to topic (about 10% - 20%), with the public and personal topic intentions least strongly related. The correlations among the exogenous variables reveal that for the most part, these latent variables had quite consistent covariation across topic types. Particularly strong relations appeared between these pairs: unresolvability/civility, civility/cost, unresolvability/reasonability of other, civility/reasonability, and reasonability/cost. Given the direction of scoring, all of the correlations seem to be reasonable. Several other pairs also had noticeable relationships. As a consequence of these correlations, the

exogenous variables that lack a direct path to intention had indirect effects that passed through other exogenous variables. The strength and consistency of several of these relationships suggest that it may be possible to simplify future models by condensing some of the cost and benefit conceptions.

As Equations 2, 3, and 4 imply, the intention to engage in arguing has different causes depending on the topic type. The public topic argument was the only one to show any effects for a P variable, engagement being more likely for those having high argument-approach scores. Public topic arguing was also more likely when the argument is projected to be civil, the respondent feels confident of winning, when arguing would be appropriate, and when the other party is expected to be unreasonable. This last finding was unexpected. We had supposed that engagement would be more attractive when the potential arguing partner is projected to be reasonable. These are not the same considerations as for the other two topic types. For the personal topic (Equation 3), the strongest consideration was whether one would win the argument, somewhat supplemented by a sense of potential benefit, and inappropriateness was again a deterrent. In the workplace (Equation 4), intention was highest when one expected to win, even at some cost, and when the argument was projected as being resolvable and appropriate. The positive coefficient for cost was also unexpected. We projected that higher costs would make engagement less likely.

The only predictors that appeared in all three equations are winning and appropriateness, and of the two, regression coefficients show that winning was far more important; in fact, it is the most important predictor in all three equations. These two variables had the same sign in each equation. The other person's expected reasonability was relevant for the public topic, but not for the other two types. Benefit was mainly a consideration for the personal topic, and cost only in the workplace. So although intention to engage was well predicted for all three topic types, the intention-relevant considerations were quite different. In this study, the S variable for Equation 1 was far more important than the P variables: The P variables had little predictive effect, but distinguishing among the topic types produced different structural equations. Two effects (cost in Equation 4 and reasonability in Equation 2) were unexpected. Below we will revisit our initial understandings of cost and other's reasonability.

5. Discussion

People do not have to argue whenever arguing is invited. One can be challenged, or provoked, or confounded, and any of these makes arguing possible but not necessary. In pragma-dialectical terms (van Eemeren & Grootendorst 2004), we can find ourselves partway into a possible confrontation stage, needing to make the next move. In response to the protagonist we might change the topic, fall silent, concede, or otherwise avoid engagement. Or we might express disagreement. Should that occur, the original protagonist might then move away from the matter, or might initiate the opening stage of discussion. In the opening stage arguers make joint decisions about how to proceed. However, somewhere in the confrontation stage or in the transition to the opening stage, people must decide whether or not to engage in arguing. This has been a social scientific investigation of when the decision to engage is made and when it is rejected.

The most general statement of our theory is in Equation 1, which posits that the engagement decision will be influenced by one's general predispositions, situational features, projected costs, and projected benefits. Given the innumerable possible ways of implementing this general view, we adapted Paglieri's (2009) theory for empirical

use. We operationalized personal variables as argumentativeness and verbal aggressiveness; situational variables as topic (public, personal, or workplace); and costs and benefits as resolvability, civility, other's reasonability, costs, prospects of winning, appropriateness, and possible benefits. Several variables – most notably the traits – fell out of the model. Others had only indirect effects rather than the direct ones we expected. Two had effects that we did not anticipate. A fair judgment is that we have not confirmed our model, but have begun to develop it.

Our final structural equation model was a reasonably good match to our data. The most stringent assessment of fit is the χ^2 test, but it tends to report significant departures between a model and a data set when sample sizes are large and so is often discounted. Here we know that while our measurement model was reasonable it was also imperfect, with the consequence that its departures were carried forward into the fit test for our structural model. In our view, the most important results were the R^2 results for Equations 2, 3, and 4. They indicate that our structural model is able to account for about two-thirds of the variance in engagement intentions.

The most influential predictor in Equations 2, 3, and 4 was winning. The expectation one would win the argument had a very strong and positive relationship to one's willingness to engage. We suppose that the prospect of winning carries two sorts of rewards. One is the likelihood of achieving whatever instrumental aims are involved in the argument – getting agreement on music, on the dating partner, or on workload. The other is a positive feeling – perhaps of pride, superiority, dominance, or the thrill of victory. A glance at Table 3 shows that winning has some connection to benefits, although other pairs of exogenous variables are more closely associated. So both sorts of motive – personal and instrumental – may well be in play here.

The other exogenous variable that appeared in all three structural equations was inappropriateness. While not as influential as winning, it has a consistent effect on the intention to engage. Appropriateness scales involved the propriety of arguing on that topic, with that person, and at that time. We conceived inappropriateness as a cost of arguing, but it obviously has some connection to the situation as well.

In fact, all of our cost and benefit measures reflect the circumstances of the potential argument. This is because an actual argument is always situated and always takes place in concrete reality. In that sense, everything in our model except the traits can be understood or re-understood as situational. One might win against one opponent but not against another; more benefits might accrue in one argument compared to another; one antagonist might be reasonable and another truculent; and so forth. It is interesting that the P variables essentially disappeared from our models (excepting the relevance of argument-approach to the public topic). Other scattered evidence has suggested that the influence of personality tends to evaporate once an argument is joined (Hample 2005), and the present results imply that our participants responded in that way instinctively. Cost and benefit estimates appear to be situationally calibrated without much influence from the personal traits we have studied here.

Two of our results were unexpected. For the public topic engagement was more likely the *less* reasonable the other person was thought to be. In the workplace, the *higher* the costs the more likely the respondent was to decide to argue. We thought that other's reasonability would promote engagement and that high costs would discourage it. Our best explanations of these unexpected findings have to do with the argument topic types.

Public topics can be about social issues, ideas, or minor interests (Johnson 2002). Here, the public topic was about musical taste. For some people some of the time, arguments might be taken up for the sake of entertainment (Hample 2005).

Perhaps on a topic such as musical preference, it might be more fun to argue with a stubborn opponent who would keep the interaction going.

Another possibility – one that is of more methodological concern – concerns how people interpret the word "argue." Commonly arguments are seen as nasty episodes, unproductive and threatening (Benoit 1982; Gilbert 1997). Benoit showed that when people expect an exchange of reasons and disagreements to be pleasant and constructive, they call the episode a "discussion." The place of other's reasonability in Equation 2 is consistent with the idea that one can only engage in an "argument" with an unreasonable opponent; otherwise one will be discussing. If this is so, we will need to be very careful in working with these ideas in other languages (a Romanian data collection is under way, and one in Italy is planned).

High costs encouraged arguing on our workplace topic (Equation 4). The particular topic we chose – the accusation of laxity and the consequent over-burdening of one's friend – may have been seen as having notable costs to begin with. Light complaints (implying minor costs) might be disregarded at work or might call out some sort of conciliation, just to smooth things over. If this reasoning is correct, perhaps high costs are a prerequisite to workplace arguing. However, the same line of thought might make a similar prediction for personal topics, and we did not see a positive loading for cost in Equation 3. Another possible explanation of this result is that the very fact of being ready to suffer high costs in arguing is an effective way of rebutting the accusation of laxity, by demonstrating with one's own behavior that the person does not fear efforts but rather embraces them when they are in the common interest. Conversely, the actor may feel that avoidance might lead, in this particular case, to confirming the opponent's accusation ("You see? You avoid committing to argue when it is too effortful, the same way you skirt your workload and let me struggle on your behalf!"). Since the accusation of laxity is specific to our workplace scenario, this line of reasoning may explain why a positive association between high costs and intention to argue is not observed in the other situations. Moreover, if this explanation is correct, it implies that such an association will emerge whenever an accusation of laxity is launched, regardless of whether this happens in a public, personal, or workplace context.

This investigation did not offer much support for the importance of the P element in Equation 1, but the S variable was quite important. Situations can be distinguished on many grounds. Here we chose to feature Johnson's (2002) distinction between personal and public topics, and added workplace topics to her list. We found the distinction among topic types to be important. The intention to engage had only modest consistency from one topic to another (varying from 10% to 20%), and our structural equations were noticeably different from one topic to another. Although winning was a predominant predictor and appropriateness a lesser one for all three topics, the effects of civility, other's reasonableness, the argument's perceived resolvability, benefit, and cost depended entirely on which topic was in play. We only instantiated each topic type with a single example in this study, so we are a long way from offering firm conclusions. But we are encouraged that topic type will prove to be an important consideration in understanding why people engage in arguing and why they don't.

Finally, using scenarios to manipulate situational variables proved to be effective, but it also inevitably introduced other variables that were not contemplated by the model and yet may have had an impact on the respondents' estimates. If we look carefully at the scenarios used in this study, some potentially relevant factors appear: for instance, the personal and workplace scenarios involve an accusation against the

respondent, who is supposed to have done something wrong, whereas nothing of the sort is present in the public scenario; similarly, in the public and personal scenarios the matter of the dispute is fairly subjective (tastes in the first case, feelings in the second), while the workplace scenario is about settling an objective matter (whether or not the respondent did a fair share of work); moreover, the attitude of the respondent towards the friend is characterized differently across all scenarios, as an attempt to help in the personal case (respondent tried to get along with his/her friend's partner, even though the friend was not satisfied by the effort), while in the workplace scenario the respondent was just doing a fair share of work (although the friend does not think so), and in the public scenario the topic of discussion was musical tastes, with no pro- or anti-social attitude towards the friend. The fact that these and other similar factors may have influenced the participants' responses is no reason to abandon scenario-based manipulations of situational variables. It simply suggests that further research is needed to provide more robust and fine-grained assessment of the model, including studies that use other methods to operationalize situational factors.

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Table 1
Descriptive Statistics for Multi-Item Measures

	Cronbach's Alpha	N	Mean	SD
Argument-avoid	.85	509	2.70	.63
Argument-approach	.84	509	3.37	.57
VA – prosocial	.78	509	3.29	.53
VA – antisocial	.82	509	2.69	.60
Behavioral Intention				
Public	.87	509	3.56	.52
Personal	.84	490	3.22	.49
Workplace	.90	490	3.48	.57
(Un)Resolvability				
Public	.75	508	2.82	.64
Personal	.80	488	2.71	.64
Workplace	.80	489	2.58	.62
Civility				
Public	.84	508	3.58	.58
Personal	.80	489	3.35	.54
Workplace	.80	489	3.38	.55
Reasonability				
Public	.68	509	3.23	.62
Personal	.74	490	3.13	.62
Workplace	.71	489	3.24	.57
Costs				
Public	.80	508	2.72	.61
Personal	.80	489	3.23	.57
Workplace	.79	489	2.99	.55
Winning				
Public	.69	490	3.19	.51
Personal	.66	480	3.16	.48
Workplace	.76	478	3.29	.55
(In)Appropriateness				
Public	.87	508	2.63	.70
Personal	.84	490	2.69	.66
Workplace	.85	489	2.85	.70
Benefits				
Public	.83	507	2.94	.66
Personal	.80	487	3.24	.63
Workplace	.80	489	3.25	.61

Note. Means and standard deviations are on a 1 to 5 scale.

Table 2
Correlations Between Exogenous and EndogenousVariables

—	VA Prosocial	VA Antisocial	Arg-Avoid	Arg-Approach
VA Prosocial				
VA Antisocial	-.38			
Arg-Avoid	.32	-.00		
Arg-Approach	-.04	.26	-.51	
BI Public	-.05	.10	-.31	.44
Uresolv Public	-.15	.24	.00	.02
Civility Public	.33	-.33	-.02	.10
Reasnbl Public	.23	-.19	.07	.01
Cost Public	-.12	.23	-.02	.11
Win Public	.09	.06	-.13	.27
Inapprop	.00	-.02	.30	-.24
Benefit Public	.07	.03	-.22	.24
BI Personal	-.06	.06	-.14	.19
Ureslv Personal	-.15	.17	.11	-.10
Civil Personal	.23	-.29	.02	.05
Reasnbl Persnl	.28	-.14	.07	.08
Cost Personal	.01	.13	.05	.03
Win Personal	.12	.09	.06	.20
Inapprop Persnl	-.00	.11	.17	-.12
Benefit Personl	.13	-.01	-.12	.18
BI Work	.05	-.01	-.23	.33
Uresolvbl	-.12	.17	.06	-.06
Civility Work	.20	-.27	.02	.06
Reasonbl Work	.19	-.09	.05	.02
Cost Work	-.05	.15	.02	.06
Win Work	.10	-.02	-.09	.18
Inapprop Work	-.04	.04	.16	-.16
Benefit Work	.10	.02	-.15	.17

Note. Correlations with absolute values of .09 or higher are significant at $p < .05$.

Table 3

Correlations Among Endogenous and Exogenous Latent Variables

Endogenous Variables, All Topics

	BIPub	BIPers
BIPers	.31	
BIWork	.44	.42

Exogenous Cost-Benefit Variables, Public Topic

	Unreslv	Civility	Reasnbl	Cost	Win	Inappr
Civility	-.59					
Reasnbl	-.66	.70				
Cost	.47	-.67	-.63			
Win	-.05	.28	-.05	-.11		
Inappr	.25	-.34	-.08	.25	-.38	
Benefit	-.13	.02	.13	.06	.23	-.18

Exogenous Cost-Benefit Variables, Personal Topic

	Unreslv	Civility	Reasnbl	Cost	Win	Inappr
Civility	-.64					
Reasnbl	-.52	.66				
Cost	.37	-.39	-.75			
Win	-.01	.26	.01	.21		
Inappr	.35	-.42	-.20	.04	-.37	
Benefit	-.34	.40	.36	-.10	.52	-.45

Exogenous Cost-Benefit Variables, Workplace Topic

	Unreslv	Civility	Reasnbl	Cost	Win	Inappr
Civility	-.76					
Reasnbl	-.53	.74				
Cost	.45	-.55	-.65			
Win	-.25	.27	.08	.09		
Inappr	.29	-.28	-.20	.14	-.21	
Benefit	-.27	.35	.38	-.20	.39	-.18