Escalation of commitment: where competing theories collide

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Abstract

The extant literature focuses primarily on individual characteristics that influence one's tendency to escalate commitment. However, there are no known studies that have investigated the extent to which existing organizational behavior decision-making theories can be applied to better understand one's tendency to escalate commitment. Because human decision-making involves the interaction of many variables, the inclusion of established decision-making theories regarding affect, framing, and image should promote additional insight concerning the tendency to escalate.

Introduction

Escalation of commitment is a behavioral phenomenon. It is defined as the tendency to continue to allocate resources to a course of action above and beyond what would be warranted by the objective facts of the situation [14]. In a project context, a decision-maker would have escalating commitment if he/she continually chose to allocate resources to the project despite credible evidence that operational objectives are not being met. Escalation of commitment does not imply an increased rate of resource allocation, but rather a continued commitment to a course of action [3] [8].

Brockner [3]specifies that escalation situations have three characteristics. (1) There must be the opportunity for repeated decision making in the face of negative feedback about prior resource allocations. For feedback to be negative, there must be some credible standards against which to compare raw feedback data, and the feedback must predictably indicate that future performance will not meet the outcome standards in the future [2]. (2) There must be uncertainty surrounding the likelihood of goal attainment. (3) There must be a choice about whether to continue.

1. Affect theory

Isen [6] posits that affect is key in predicting behavior. Affect is defined as feelings/moods that have a pervasive influence on both thought and behavior. Affect can be positive, negative, or neutral. A positive affect is most common and most desirable, and decision-makers have a tendency to try to maintain this feeling. However, a decision-maker may have one of two responses to a negative affect: The decision-maker may either become more pessimistic, or he/she may make attempts to return to a positive affect by changing the conditions that induce the negative feelings.

Wright and Bower [15] reported that affect significantly changes a decision-maker's subjective probability judgements. Dunegan [4] found additional support for the affect-to-cognition interaction. These results offered support for Isen's contention that affect does interact with cognition. As summarized in Figure 1, affect has been linked to both thought and behavior. (Lord and Kernan [9] reported that behavior and thought were inter-related using the scripts/schema decision-making theory.)

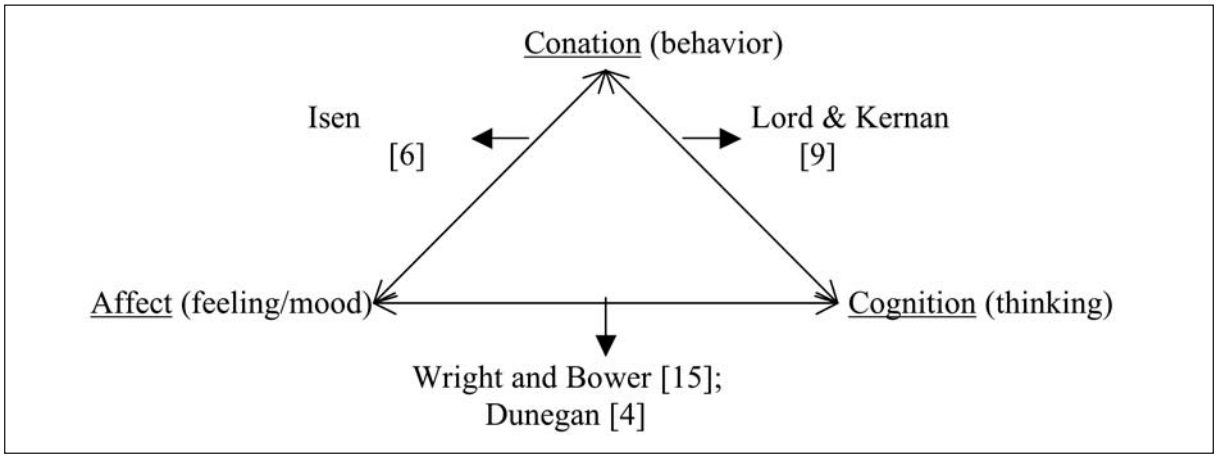

Figure 1 : Links Between Affect, Conation, and Cognition

1.1 - Affect and the Study of Escalation

Escalation situations exist when there is a continued series of increasingly negative feedback. Affect theory stipulates that in the face of negative feedback, the decision-maker's affective state would influence his/her reaction to the negative feedback. If the decision-maker has a positive affective state, then he/she will try to maintain that feeling [6]. To this end, negative project feedback may be ignored or heavily discounted. The decision-maker may continue to escalate commitment simply by choosing to avoid the cognitive processing of the objective facts. He/she would not consider de-escalation because doing so would require facing potential criticisms, which would (in effect) create a negative affect for the decision-maker.

If the decision-maker has negative affective state, then negative feedback may cause him/her to become more negative about the project [6]. In this case, the decision-maker may exhibit greater escalation tendencies. For example, when the decision-maker knows that he/she will be held accountable for the high sunk costs, the person may feel that he/she has little to lose, but potentially everything to gain, by escalating commitment to the project. This increase in escalation has been described in the literature as the "sunk cost" effect.

Sunk costs are defined as all the costs related to resources that are wasted on a project that meets with a premature demise. Garland, Sandefur and Rogers [5] first reported the sunk cost effect to be a factor in escalation. The sunk cost effect occurs when the decision-maker must choose between two negative alternatives. For example, a manager of a failing project may opt to discontinue the project and absorb all sunk costs; alternatively, he/she could choose to do whatever is necessary in attempt to rescue the project. While the first alternative would result in a sure loss, the second option would provide the opportunity for success, but would result in even greater loss if the attempts to rescue the project were unsuccessful.

The alternative reaction by a decision-maker in a negative affective state would be to try to regain positive affect [6]. This may lead either to de-escalation or to continued commitment. In an attempt to remove the negative feedback that induced the negative affect, de-escalation may occur. However, continued commitment may result because of the sunk cost effect.

If a decision-maker has a neutral affect, it can be argued that decisions would be most unbiased by his/her state of mind. In fact, under positive or negative affect, a decision-maker's "choices" may not be consciously derived at all; instead, the decision's may be a subconscious reaction to his/her affective state. Neutral affect may be the only state in which current escalation research findings may prove to be most valid: A decision-maker's response to negative feedback may be more influenced by innate responses based of his/her affective state, than by a purely rational assessment of the feedback. Future research could be conducted to determine if affect plays such a major role in one's tendency to escalate commitment (see Figure 2).

Affective State	Response to Affective State	Expected Impact on Escalation	Previous Studies
Positive	try to maintain positive (dominant force)	continue escalation	none
Negative	become more negative	continue escalation (due to sunk cost effect)	none
Negative	attempt to change negative to positive	de-escalation OR continue escalation (due to sunk cost effect)	none
Neutral	Unknown	cannot be estimated from the literature	none

Figure 2: Affect and Escalation Tendencies

1.2 - Integration of Affect and Escalation into a Combined Study

The inclusion of affect could be easily incorporated into escalation research. Replication of escalation studies could be performed with the addition of a treatment to the subjects. The treatment could place subjects into positive, negative, or neutral affective states. After conducting appropriate manipulation check, any number of previous escalation studies could be replicated. For example, the sunk costs experiment developed by Keil et al. [8] could be administered to the three treatment groups. The results would provide empirical testing for the expected responses (which could be refined as hypotheses) posited in Figure 2.

2. Framing theory

Kahneman & Tversky [7] developed "prospect theory" in an attempt to explain decision-making under risk. Their seminal article represented a landmark departure from the more traditionally accepted rational utility theory of decision-making. Framing (as prospect theory is otherwise known) relates to the impact of a decision-maker's perception of a decision's outcome (e.g., if it will be positive or negative) on the decision itself. The way that information is presented and the degree to which that perception varies from the decision-maker's current state (or reference point) can influence the decision-maker's ultimate decision. This influence is referred to as framing bias.

Unlike utility theory (where decision-makers rationally seek to maximize utility), framing theory considers three effects: reflection, certainty, and isolation. The reflection effect predicts that if all of the decision-maker's options are positive, then he/she will be risk averse in order to guarantee a sure gain. If the options are negative, then the decision-maker will exhibit risk-seeking behavior: Instead of accepting a sure loss, the decision-maker will be willing to take on more risk if a subsequent gain is probable. The certainty effect is defined the bias that occurs as a result of over-weighting higher probability decision outcomes. The isolation effect describes how a decision-maker will disregard the similarities between alternatives and focus only on distinguishing characteristics.

The reflection, certainty, and isolation effects are influential in the decision-making process. First, the decision-maker organizes the options (or prospects) and determines how these options are perceived. The perception of these options is also known as the decision-maker's frame. Then, the decision-maker evaluates the options, and chooses the one with the highest "perceived" (or framed) value. Framing is itself the bias introduced into the decision process as a result of the interaction of the three effects [7] [11].

Dunegan [4] provides an extensive review of the framing literature. He concludes that there is strong evidence that "...framing equivalent information in different ways can systematically effect the actions decision-makers take." As an example, presenting the glass as "half-full" would evoke a positive frame and thereby promote risk averse behavior. The exact same information presented as "half-empty" would likely evoke a negative frame and leads to risk seeking behavior.

2.1 - Framing and the Study of Escalation

Although framing has been shown to bias decision-making, its effects have not been investigated in escalation research. Escalation studies are usually operationalized, in part, by providing negative feedback to the subjects (i.e., decision-makers) in controlled experiments. The feedback is typically negatively framed, in order to insure that the subjects perceived the feedback as unequivocally negative. Given that framing is widely acknowledged to exist [4], then the results of many escalation studies may be suspect. After all, negative framing (in the experimental treatments) should lead to risk seeking behavior (as witnessed by an increase in escalation of commitment). Would the escalation tendency be as great if the negative information were presented to the subjects in a positive frame? This question cannot be answered with the limited knowledge currently available (see Figure 3). Neither the framing or escalation research in existence today can provide the answer alone.

	Expected Decision-Maker Behavior	**Framing in Existing Escalation Studies**	**Effect of Framing on Escalation Tendencies**
Positive framing	risk averse	none	unknown
Negative framing	risk-seeking	negative framing	risk-seeking

Figure 3 : Escalation and Framing: A Comparison

2.2 - Integration of Framing and Escalation into a Combined Study

A positive framing bias could be relatively easily incorporated into an escalation study. Replication of escalation studies could be performed with the change of the escalation treatment from a negative to a positive frame. For example, the sunk costs experiment developed by Keil et al. [8] could be replicated with two treatment groups. In one treatment group, the feedback information could be presented in a positive frame; in the other group, the information could be presented using a negative bias. The results would provide empirical evidence that could be used to further the knowledge of the relationship of framing and escalation situations.

3. Image Theory

Image theory postulates that decisions are made based on the likelihood of goal attainment, as "imagined" by the decision-maker. Images are informational representations that can represent goals, actions, and feedback. When the expected image (future goals) and the experienced image (current feedback) are compatible, the decision to proceed with a course of action is automatic. However, if incompatibility exists, then a conscious analysis of the situation will be evoked. The decision on whether to continue to proceed along the established course of action rests with the decision-maker's cognizant assessment of the compatibility of the expected versus experienced images. Image theory appears intuitive and realistic; however, the literature has focused more on the conceptualization of the theory rather than empirical tests of it [1] [10].

3.1 - Image Theory and the Study of Escalation

Silver and Mitchell [13] described, but did not test, how image theory may explain the actions of a decision-maker in an escalation situation. If the decision-maker receives positive feedback, then the decision will be to maintain the status quo. Thus, escalation should occur unless (a) the goal has changed, or (b) the feedback suggests that the status quo plan will not work in the future. If the decision-maker receives negative feedback, the commitment will be escalated in order to maintain the status quo, provided at (a) the negative feedback is discounted, (b) the goal changes to accommodate the negative information, or (c) the decision-maker retains hope in the eventual success of the status quo.

The effect image theory has in an escalation situation may be the result of framing the "received" feedback. Framing inherently assumes that positive perceptions are not examined further; rather, a positive framing will result in the decision to continue to escalate. Image theory does not make this carte blanche assumption. In image theory, failure for feedback to pass the compatibility standard (which is itself a highly individualized subjective process) warrants a more critical assessment of a potential decision [13]. Thus, image theory does not support that positive feedback, in itself, will guarantee a commitment to continue escalation. Does framing influence image theory? Or does image theory override framing biases?

3.2 - Integration of Image Theory and Escalation into a Combined Study

As with framing and affect, the testing of image theory could be accommodated through modification of previous escalation studies. Subjects should be divided into two groups: those presented with negatively framed and those with positively framed escalation decision treatments. The scenario role-plays would have to include operationalization of the expected image (identical for both experimental groups). Of course, appropriate manipulation checks would have to be conducted to insure the expected image is similar across individuals. The experienced image would consist of the positively or negatively framed feedback. By replicating a sunk cost experiment (e.g., Kiel et al. [8] with such changes, a researcher may be able to make an assessment of the viability of framing and image theories vis-à-vis escalation of commitment. Furthermore, the interaction of framing, image theory, and escalation tendencies could be explored.

Summary

In the escalation of commitment literature, the potential effects of affect, framing, and image theories have not been examined. The study of each of these theories upon the tendency to escalate commitment would provide valuable information with dual implications. First, the escalation research would be enhanced through exploration of decision-making behavior from different perspectives. Secondly, additional insights into the function of the affect, framing, and image theories could be garnered. For example, framing suggests that positive feedback should lead to de-escalation, whereas affect and image theory predict an increase in escalation. Which theory holds true? Furthermore, what implications for the other decision-making theories could result from an escalation study?

Figure 4 compares affect, image, and framing theories in regard to the predicted escalation behavior(s). Where the differences in predicted escalation behavior are noted, the potential for important future tests of theory exists.

If Feedback is Perceived as...	**Framing Theory Would Predict:**	**Affect Theory Would Predict:**	**Image Theory Would Predict:**
Positive	de-escalation	increased escalation	increased escalation
Negative	increased escalation	increased escalation or de-escalation	increased escalation or de-escalation

Figure 4: Summary of Decision-Making Theories Presented and Escalation of Commitment

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