

## Contextual Effects on Escalation Processes in Public Sector Decision Making

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The present study examined escalation bias in the context of public sector decision making. Four factors were considered: responsibility (high or low), decision alternative (reserve fund or other sponsor), decision framing (positive or negative), and mood (positive or neutral). In contrast to previous research, it was demonstrated that following a setback, some decision alternatives elicited escalation among *low*-responsibility decision makers. Other decision alternatives elicited escalation among *high*-responsibility decision makers. This interaction between personal responsibility and decision alternative was also moderated by the manner in which decision feedback was framed. That is, when feedback was negatively framed, the effects of decision alternatives were negated—resulting in allocation patterns consistent with previous escalation research. The study also addressed the potential role of the individual's affective state on escalation. The importance of decision context, framing influences, and individual differences on escalation conflicts is discussed. © 1986 Academic Press, Inc.

Research in decision making has demonstrated a number of systematic biases in human judgment that deviate from a rational model of decision-making processes (cf. Kahneman & Tversky, 1979, or Tversky & Kahneman, 1981, for reviews). Generally, this research has investigated decision-making processes in a static rather than dynamic fashion. That is, most decision-making research has focused on single-decision, discrete incidents. However, recent work by Barry Staw and others has examined decision making as a sequence of financial allocations in which feedback becomes a prominent feature of the research design (Fox & Staw, 1979; Staw, 1976; Staw & Fox, 1977). These studies have revealed a bias among decision makers who respond to choices that failed. In particular, it has been demonstrated that financial decision makers who

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commit themselves to a course of action may continue, or even escalate, that commitment in the face of substantial financial setbacks. Ostensibly, this behavior occurs when decision makers, confronted with negative consequences, feel responsible for the setback and seek to *justify* their previous decision through continued commitment or escalated commitment (Staw, 1976). This particular decision-making dilemma, and the pattern of behavior it produces, has been investigated under several rubrics: the "Knee Deep in the Big Muddy" phenomenon, entrapping conflicts, escalating conflicts, or simply escalation (cf. Brockner *et al.*, 1984; Staw, 1976).

Escalation research (in which personal responsibility is a manipulated variable) typically involves a decision-making scenario in which an experimental group is asked to make a choice between two investment options. This dichotomous decision task is then followed by feedback in the form of financial data revealing that the chosen option failed to produce a return on the invested funds. Subjects are also told that additional funds are available for augmenting the original investment. The *control group* is told that the original investment decision, which was unsuccessful, was made by another individual and this group is also given the opportunity to increase the funding for that decision. In Staw's (1976) original study, he found that the experimental group (high responsibility) committed significantly more funds than did the control group (low responsibility).

This bias toward escalating financial commitment in the face of failure has been replicated and extended in several studies (Bazerman, Giuliano, & Appelman, 1984; Conlon & Wolf, 1980; Staw & Fox, 1977; Staw & Ross, 1978). Moreover, it has also been demonstrated in domains outside of financial decision making, such as performance appraisal (Bazerman, Beekun, & Schoorman, 1982) and impression management (Caldwell & O'Reilly, 1982). Although the bias seems to operate in a variety of situations, there are some shared characteristics that define escalation conflicts. According to Brockner, Shaw, and Rubin (1979) these defining characteristics are as follows: (1) the decision maker's investments can be perceived both as a means for enhancing the probability of goal attainment and as irretrievable expenses; (2) the decision maker must believe at the outset that the probability of goal attainment is less than one or, if goal attainment is certain, then the required investment must be disproportionately high; (3) the decision maker must always have a choice about whether to escalate or withdraw; (4) the decision maker is initially motivated by economic factors, but may later become more concerned with the need to justify previous investments; and (5) up to a point, the process of escalation is self-perpetuating.

### *Definitions of Success*

The notion of goal attainment is implicit or explicit in all of the above characteristics. To date, the majority of studies that have investigated escalation have dealt exclusively with *financial* goal attainment or a financial return on investment. Some studies have tested the generalizability of the escalation bias by using decision-making contexts requiring a different standard of goal attainment. For example, Staw and Ross (1978) and Conlon and Wolf (1980) employed the World Bank Case in which "project completion," not financial return, was the standard of goal attainment. Interestingly, Staw and Ross (1978) reported results that most closely fit a reactance prediction; that is, their high-persistence (high-responsibility) subjects exhibited the propensity to reduce their commitment of resources in the face of failure. Also, Conlon and Wolf (1980) reported withdrawal among some high-responsibility subjects and demonstrated that the occurrence of escalation was a function of the problem-solving strategy used by particular decision makers.

The present study addresses the phenomenon of escalation in a public policy arena because it provides a context where goal attainment or standards of success may be expressed differently from those of profit oriented decision contexts (see below). In particular, within such public policy contexts, it will be argued that the potential for escalation bias is a function of the decision alternatives confronting the policy maker. In addition, this study demonstrates that the differences which emerge as a function of decision alternatives (in the public sector) are affected by the manner in which the decision is presented, such that *negative* framing can produce allocation patterns similar to previous private sector scenarios.

### *Decision Alternatives in Public Sector Contexts*

Most of the early studies investigating the escalation phenomenon have employed a private sector decision context—the Adams and Smith Financial Decision Case. Although private sector and public sector descriptions of escalation bias are frequently placed side by side in earlier papers (cf. Staw, 1981, p. 577), the decision-making processes and patterns of allocation within public policy may not parallel those of the private sector. Public policy decisions typically encompass a wide range of value laden social issues and a number of frequently hostile partisan forces who may be seeking their own unique solution to those issues. In short, the objectives of a public policy decision may give rise to unique standards of success—for instance, increased public welfare—which may be quite different from success measured in terms of corporate profit.

Within the escalation paradigm this uniqueness can manifest itself in

allocation behavior which is precisely opposite to patterns found in earlier studies. For example, recent research reported by Bobko, Davis, and Segar (in press), using a public policy decision scenario, found that *low-responsibility* subjects tended to escalate their commitment while *high-responsibility* subjects withdrew their support. The decision alternative that confronted these subjects was a choice between a sponsor specifically chosen to upgrade a job training program targeted by the state Governor and a *reserve fund* for other uses, namely other programs and services *not* targeted by the Governor. Feedback in the form of job placement rates had shown that the selected sponsor failed to upgrade the targeted program following the provision of additional funds. In this case, subjects were faced with the potential conflict between commitment to a potentially valuable social program and responsibility for financial expenditures. Note that withdrawal from previous levels of support could be interpreted as reflecting dissatisfaction with the coordinating sponsor and/or disenchantment with the targeted program. However, in either case, commitment to a particular sponsor was not *solely* the issue since the choice was between a sponsor and a reserve fund and not between competing sponsors of the same program.

In the above situation, low-responsibility subjects appointed after the setback need not feel responsible for the monetary costs or the poor performance of the sponsor chosen by their predecessor. Furthermore, they may wish to comply with the Governor's continuing focus upon job training. Consequently, it is reasonable to observe allocations that reaffirm or escalate commitment to the *program* endorsed by the Governor. In contrast, while high-responsibility subjects were responsible for *choosing* a sponsor to coordinate the program (in particular, the allocation of taxpayer money to that sponsor), they were *not* responsible for the choice of a program. Consequently, in order to justify the loss of taxpayer money incurred by the sponsor they selected, decision makers can escalate financial commitment to that sponsor and *risk further setbacks*, or they can *indict* the target of the Governor's focus and reduce commitment to the *program* (thus, "fogging" any attributions of failure toward the sponsor whom they chose to coordinate the program). This could be easily accomplished by placing the money in a reserve fund for other programs and services.

A similar, but not identical, decision alternative could potentially reverse the pattern of allocation described above. For instance, the decision alternative would consist of a choice between the originally chosen sponsor and an *alternate* sponsor (i.e., the unchosen sponsor). This is congruent with the decision alternative in Staw's (1976) original study. Regardless of the manner in which the funds are distributed, all monies would go toward the administration of the targeted program. Therefore,

the emphasis is not on the quality or importance of the program, but rather on how to allocate the additional funding among the eligible sponsors. In accordance with a justification prediction, high-responsibility subjects should then commit more funds to the sponsor they initially chose, relative to low-responsibility subjects who did not make the original choice of sponsor.

In summary, within a public policy context the pattern of allocations that emerge in an entrapment dilemma will depend upon the decision alternative confronting the decision maker. Two working hypotheses (to be modified by the framing factor discussed below) are therefore as follows:

a. Given the choice between a sponsor and a reserve fund, high-responsibility decision makers will *reduce* support (i.e., withdraw) to the originally chosen sponsor, whereas low-responsibility decision makers will reaffirm or escalate financial support to the sponsor designated by their predecessor.

b. Given the choice between a sponsor and an alternate sponsor, high-responsibility decision makers will escalate support to the *originally chosen sponsor*, whereas low-responsibility decision makers will reduce commitment to the sponsor designated by their predecessor.

### *Decision Framing*

Research by Tversky and Kahneman (1981) has demonstrated that the manner in which a decision problem is framed—e.g., whether it is worded negatively or positively—can reverse the order of preference among equivalent options. For instance, choices involving gains induce risk averse behavior while choices involving losses promote risk seeking behavior. Indeed, Bazerman (1983) has noted that the framing of information is one of the crucial factors affecting policymaker and/or negotiator judgments.

Within the present public sector situation, the context for funding decisions was also altered according to the manner in which performance data were framed. Note the positive and negative frames below:

After 2 years of operation the Employability Development program has PLACED 39.9% of all participants in either part-time or full-time jobs.

After 2 years of operation the Employability Development program has FAILED TO PLACE 60.1% of all participants in either part-time or full-time jobs.

As noted earlier, Bobko *et al.* (in press) reported allocations precisely opposite to those found in previous studies of escalation bias—that is, withdrawal by high-responsibility subjects and escalated commitment by low-responsibility subjects. It is crucial to note that Bobko *et al.* used

positively framed feedback. In contrast, it can be argued that Staw's (1976) previous research used an inherently negative frame; that is, the feedback to decision makers indicated that the chosen division was operating *further in the red*. Consequently, the current study was also designed to test the following hypotheses:

1. Within positively framed feedback conditions, decision makers will allocate funds according to the predictions of the two previous working hypotheses. That is, there is a predicted interaction between decision alternative and responsibility under positive decision framing.

2. Within negatively framed feedback conditions, decision makers will allocate funds consistent with self-justification predictions and previous escalation research (which has found no effect for decision alternative). Note that this second hypothesis is in direct contrast to the predicted interaction of decision alternatives and responsibility under *positive* framing. Consistent with Bazerman's (1983) view that negative framing does contribute to escalation behavior, it is expected that the effect will be powerful enough to override the influences of decision alternatives.

#### *Positive Affect and Risk Taking*

Another component of the entrapment characteristics described by Brockner *et al.* (1979) is risk taking under conditions of uncertainty. One individual difference factor which could influence risk assessment is the affective state of the decision maker. For example, research examining the influence of mood or affect on risk taking has also demonstrated that positive affect can increase the propensity to take a risk if the risk is relatively low, whereas positive affect under conditions of high risk tends to decrease risk taking (Isen & Patrick, 1983; Isen, Shalcker, Clark, & Karp, 1978). Given these findings, it is reasonable to assume that the affective state of the decision maker will have some influence on the perception and calculation of the risk involved in funding decisions.

Within the escalation paradigm, however, the probability of a given outcome is *not* specified. It is left to the decision maker to determine the level of risk associated with continued funding and, therefore, this process of risk assessment could affect the escalation of commitment to a course of action. Furthermore, factors that influence this process could have an indirect effect on the tendency to escalate or withdraw. There are indications, for example, that positive affect can lead to *improved* expectations regarding probable outcomes when risk is not actually specified (Isen & Shalcker, 1982; Isen *et al.*, 1978). As such, decision makers experiencing a positive mood state may perceive the commitment of resources as less risky than their counterparts who are experiencing negative (or neutral) mood states. It has been suggested that this occurs

because positive affect can serve as a retrieval cue for positive material in memory, thus influencing the subsequent assessment of risk (Isen, Means, Patrick, & Nowicki, 1982). In turn, this reduction in perceived risk should lead to inflated allocations among decision makers. Consequently, the present study attempted to manipulate the mood of decision makers. It was expected that:

3. Given a positive mood or affective state, the perceived risk associated with allocating additional funds should decrease. Therefore, the perceived efficacy of additional funding and the extent of additional funding to the originally chosen sponsor were expected to increase relative to perceptions of efficacy and allocations under neutral affective states.

## METHOD

### *Subjects and Design*

A total of 160 subjects, enrolled in an introductory psychology course, participated in the study. For their participation, each subject received extra credit toward the course grade. Subjects were randomly assigned to one of 16 treatment conditions in a  $2 \times 2 \times 2 \times 2$  factorial design in which responsibility (low–high), decision alternative (reserve fund–un-chosen sponsor), decision frame (positive–negative), and affective state (positive–neutral) were manipulated as independent variables. All subjects received feedback indicating that the first course of action failed. The dependent variable was the individual's commitment (potentially ranging from \$0 to \$20 million dollars) to the previously chosen sponsor.

### *Decision Task*

The decision task employed in this study has been extensively pilot tested and used successfully in previous research (Bobko *et al.*, in press). Subjects were presented with a scenario which depicted the 10-year history of a state agency known as the Governor's Employment and Training Council (GETC). Case materials indicated that one program under the purview of the GETC, Employability Development, had been targeted for additional funding due to a decline in employment placement rates (from 75 to 44% in 8 years), taxpayer complaints regarding the success of government programs, and interest on the part of a new administration (including a newly elected Governor). Subjects were asked to play the role of GETC Executive Director and, in that role, determine which of two sponsors would be the recipient of \$10 million earmarked for upgrading the program. A brief description of each sponsor, the Manpower Planning Coalition and the Human Resources Consortium, was provided in the case materials. Subjects were requested to make a choice on the

basis of the potential impact on Employability Development—a program of classroom and on-the-job training designed to facilitate placement in unsubsidized employment. Sponsor performance was presented in terms of placement rates averaged across full-time and part-time positions. Finally, in addition to choosing a sponsor, subjects were requested to write a brief paragraph defending their decision.

Part 2 of the scenario provided each subject with feedback that the placement rate of the chosen sponsor, after 2 years of training activities, had continued to decline from 44 to 39%. Each subject was informed of the Governor's continued emphasis on Employability Development as well as the availability of additional funds totaling \$20 million to be allocated by the Executive Director. This time, however, the funds were to be divided between the originally chosen sponsor and an alternative course of action (see Decision Alternatives below). Subjects were then asked to make the second allocation on the basis of its potential contribution to Employability Development and, again, to write a brief paragraph defending their decision.

#### *Manipulation of Responsibility*

The above 2-part scenario described the high-responsibility subject condition. In order to vary responsibility, half of the subjects were told that the initial choice of sponsor had been made by a previous Executive Director. Given this prior decision and the reported placement rate, these *low-responsibility* subjects were then asked to make the second allocation decision. In short, the conditions were equivalent to the high-responsibility situation described above except for the process by which the initial sponsor was chosen.

#### *Manipulation of Decision Alternative*

The factor of "decision alternative" was controlled by presenting half of the subjects with an allocation decision between the previously chosen sponsor (i.e., chosen either by the subject or the subject's predecessor) and a *reserve fund* for other programs and services. The remaining half of the subjects were presented with an allocation decision between the previously chosen sponsor and the *other* (unchosen) *sponsor*.

#### *Decision Framing*

Framing was experimentally varied by a straightforward rewording of performance data for the Employability Development program. An example of these contrasting frames (positive and negative frames, respectively) is as follows:

With inflation accounted for it appears the cost per participant is comparable to



similar programs. After 2 years of operation the Employability Development program has placed 39.9% of all participants in both full-time and part-time jobs.

With inflation accounted for it appears the cost per participant is comparable to similar programs. After 2 years of operation the Employability Development program has failed to place 60.1% of all participants in both full-time and part-time jobs.

### *Affective State*

Previous research has induced positive affect by providing subjects with a \$0.50 gift certificate or a report of success on some previous task (Isen & Patrick, 1983). The current study used extra credit toward the course grade to vary subject's general affect. Specifically, subjects under positive affect conditions received bonus course credit (i.e., over and beyond course credit earned for participating in the study) prior to the second (\$20 million) allocation decision. These subjects were told that the additional credit was a token of the experimenter's appreciation for participating in the study. Subjects under neutral affect conditions were simply awarded the initially expected credit at the same stage of the experimental task. In fact, these subjects also received the bonus credit, but only after the experiment had ended.

### *Dependent Measures*

The focal dependent variable in this study was the amount of funds allocated to the originally chosen sponsor at the second stage of the scenario. This amount could vary between \$0 and \$20 million.

In addition, subjects completed a questionnaire containing 9-point rating scales which assessed the effect of the responsibility manipulation and the effect of the mood manipulation. "Responsibility" was assessed by the question, "How responsible did you feel for the outcome or results of the first allocation?" (1 = *not responsible*, 9 = *very responsible*). "Mood" was measured by the question, "Prior to the second allocation, how would you describe your mood?" (1 = *not positive*, 9 = *very positive*). Additional items measured subjects' perceptions regarding the "cause" of the failure (i.e., stable versus unstable), the efficacy of additional funding, subjects' confidence in their funding decision, the importance (to the subject) of a successful program, and the program's social value.

## RESULTS

### *Manipulation Checks*

The responsibility item designed to compare high- versus low-responsibility subjects indicated significant differences ( $p < .01$ ) in the expected direction (means of 6.2 versus 3.3 for high- and low-responsibility groups,

respectively). This difference is required to invoke the usual justification explanation of escalation bias. No significant differences between positive mood and neutral mood subjects were revealed on the mood item (means of 4.6 versus 4.5 for positive and neutral mood groups, respectively). This suggests that the mood manipulation was inadequate or that the item used was not sensitive to low-level changes in affect that might have been achieved (see discussion below).

### *Homogeneity of Variance*

The within-cell variances ranged from 14.01 to 44.18. The  $F_{\max}$  test for homogeneity of variance (cf. Kirk, 1982, p. 78) indicated no significant differences in variances across experimental conditions  $F_{\max}(16,9) = 3.15$ , n.s.

### *Check on Initial Sponsor Choice*

Preliminary analyses were conducted to determine if the sponsor that was *initially* funded (Manpower Planning Coalition or Human Resources Consortium) affected subsequent allocations. This check was needed to ensure that the specific choice of sponsor was not confounded with manipulated variables designed to impact on allocation behavior. An analysis of the data from the 80 subjects who *chose* the original sponsor (high-responsibility condition) revealed no allocation differences across choice of sponsor. An analysis of the 80 low-responsibility subjects revealed a main effect for initial sponsor. However, inspection of the means revealed identical allocation patterns across all independent variables in the study. Given the lack of *any* differences in high-responsibility subjects and homogeneity of allocation patterns in low-responsibility subjects, all data were collapsed across sponsors in the analyses that follow.

### *Overall Analysis*

Table 1 presents the results of a  $2 \times 2 \times 2 \times 2$  analysis of variance of funds allocated, where personal responsibility (high versus low), decision alternative (reserve fund versus other sponsor), decision frame (positive versus negative), and affective state (positive mood versus neutral mood) were independent variables.

Consistent with previous escalation research, there was a significant main effect for responsibility, such that high-responsibility subjects allocated an average of \$10.3 million to the sponsor they had recommended, whereas low-responsibility subjects allocated an average of \$8.2 million to the sponsor designated by the previous Executive Director of the GETC. The significant interactions and tests of the theoretical hypotheses are discussed below.

TABLE 1  
ANALYSIS OF VARIANCE OF EFFECTS OF RESPONSIBILITY, DECISION ALTERNATIVE,  
FRAMING, AND MOOD UPON ALLOCATION TO THE PREVIOUSLY CHOSEN SPONSOR

Source	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Responsibility (R)	1	174.31	6.25	<.01
Option (O)	1	15.63	0.60	n.s.
Frame (F)	1	49.51	1.89	n.s.
Mood (M)	1	12.10	0.46	n.s.
R × F	1	211.60	8.08	<.005
R × O	1	31.50	1.20	n.s.
R × M	1	1.81	0.07	n.s.
F × O	1	17.56	0.67	n.s.
F × M	1	.51	0.02	n.s.
O × M	1	32.40	1.24	n.s.
R × F × O	1	102.40	3.91	<.05
R × F × M	1	50.63	1.93	n.s.
R × O × M	1	41.01	1.57	n.s.
F × O × M	1	7.66	0.29	n.s.
R × F × O × M	1	34.23	1.31	n.s.
Residual	144	26.20	—	—

#### *Interaction of Responsibility and Decision Alternative*

With a significant three-way interaction among the factors of responsibility, decision alternative, and decision frame it was necessary to conduct a simple effects analysis to confirm the predicted interaction between responsibility and decision alternative under positive decision framing. No significant main effects or interactions for mood emerged. Therefore, the results reported below are collapsed across affective state.

As Fig. 1A illustrates, there was a significant interaction,  $F(1,79) = 5.34$ ,  $p < .02$ , between responsibility and decision alternative under the positive framing condition. An inspection of the cell means indicates *escalated* commitment in the high-responsibility/other sponsor cell (mean of \$11.62 million) and *withdrawal* under high-responsibility/reserve fund conditions (mean of \$7.85 million). In contrast, low-responsibility/reserve fund subjects exhibited escalation (mean of \$10.55 million), while low-responsibility/other sponsor subjects showed a slight propensity to withdraw (mean of \$9.35 million).

Planned comparisons (cf. Keppel, chap. 11, 1982) were also conducted in order to examine the differences among the four cell means in Fig. 1A. These comparisons revealed a significant difference,  $t(38) = 1.69$ ,  $p < .05$ , one tailed, between low-responsibility/reserve fund allocations and high-responsibility/reserve fund allocations. This replicates the escalated commitment among *low-responsibility* subjects reported by Bobko *et al.* (in press). No significant differences emerged between low-responsi-

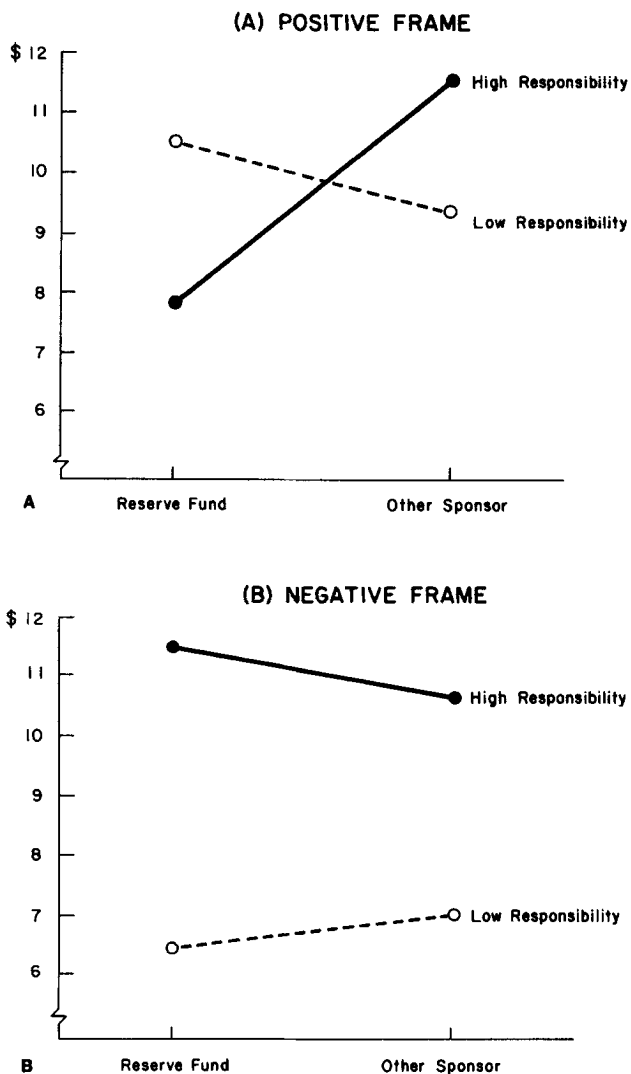


FIG. 1. Amount allocated to the previously chosen sponsor (in millions of dollars) as a function of responsibility, decision alternative, and framing. A, positive frame; B, negative frame.

bility/other sponsor and high-responsibility/other sponsor allocations. The comparison between high-responsibility/reserve fund and high-responsibility/other sponsor allocations was significant,  $t(38) = 2.36$ ,  $p < .05$ , one tailed, whereas the comparison between low-responsibility/reserve fund and low-responsibility/other sponsor was not statistically significant.

### *Effects of Negative Framing*

Figure 1B illustrates subjects' mean allocations given negatively framed feedback. Simple effects analyses indicated a significant main effect,  $F(1,79) = 13.36, p < .01$ , for responsibility. Under high-responsibility conditions, subjects allocated an average of \$11.30 (reserve fund) and \$10.55 (other sponsor) million. Under low responsibility, mean allocations dropped to \$6.20 (reserve fund) and \$6.88 (other sponsor) million.

## DISCUSSION

### *Escalation and Withdrawal under Positive Framing*

The confirmation of the hypothesized interaction between responsibility and decision alternative under *positive* framing (cf. Fig. 1A) raises some important questions. First, what are the processes which give rise to an escalation of funds by low-responsibility/reserve fund subjects? Second, what accounts for the withdrawal of commitment to a previous course of action by high-responsibility/reserve fund subjects?

To begin, one can take issue with the term "escalation" as applied to the low responsibility/reserve fund group. That is, allocations by *both* low responsibility groups fall close to the initial \$10 million investment—\$10.55 and \$9.35 million for reserve fund and other sponsor alternatives, respectively. Consequently, it may be more accurate to state that each group merely "reaffirmed" their commitment to the Governor's targeted program. This reaffirmation is not surprising, inasmuch as the Governor in the scenario communicates his emphasis on, and belief in, the importance of Employability Development. Therefore, these decision makers are complying with that emphasis by matching previous *baseline* allocations.

Given this notion of reaffirmation, the contrasting escalated commitment (\$11.62 million) and withdrawal (\$7.85 million) among high-responsibility subjects under positive framing is critical to the interaction observed in Fig. 1A. When a policy maker is confronted with a decision alternative between the previously chosen sponsor and the *other* (un-chosen) *sponsor*, one would readily expect an increase in commitment to the original sponsor. A self-justification framework would suggest that the policy maker must justify and/or escalate commitment to the initially chosen sponsor rather than withdraw in favor of another sponsor. The adequacy of an Employability Development *program* is not a concern, because the alternative course of action involves funding another sponsor of the *same* program.

In contrast, when the decision alternative is represented by a reserve fund for other programs and services, there is an opportunity to deliberate on the effectiveness of the Employability Development *program* as well

as the performance of a coordinating sponsor (viz., the sponsor chosen by the policy maker). Consequently, the decision maker has an additional option embedded in the self-justification framework. Specifically, that person can (1) perceptually and cognitively distort the negative feedback, (2) risk further setbacks by committing additional resources in an attempt to turn the situation around, *or* (3) fog the attribution of failure, by indicting the program (and, perhaps indirectly, the sponsor).

The results discussed thus far bring to mind issues that are relevant to escalation, particularly in public sector contexts. First, it is not infrequent for government policies and programs to be thrust upon public administrators in "top-down" fashion (e.g., federal programs which are administered at the local level by law). Consequently, reactance against the program is not an unexpected occurrence when administrators continually experience diminishing returns after executing funding decisions.

Second, as Caldwell and O'Reilly (1982) note, feelings of responsibility can result from factors other than volitional choice. Assigned responsibility can still lead to commitment if the individual adopts and strongly identifies with the role of decision maker. In the current study, although high- and low-responsibility groups differed significantly on the responsibility manipulation check, the range for low-responsibility subjects on this measure varied from 1.0 (*not responsible*) to 9.0 (*very responsible*). This high within-cell variance coupled with the allocations made by low-responsibility subjects demonstrates that some individuals, *assigned* responsibilities for policies and programs they did not choose, were still subject to commitment processes. We are currently extending the present research in an effort to identify individual difference factors that may account for this high within-cell variance.

Third, within public policy decisions, it is difficult to ascertain whether escalation or withdrawal is necessarily dysfunctional. Northcraft and Wolf (1984) indicated that some projects defy any assessment of the best possible return on future allocations of resources. In some situations, it may be quite "reasonable" to reaffirm or escalate commitment to a previous course of action, whereas *failure* to match (or exceed) baseline levels of funding can be quite dysfunctional over the long term. Indeed, government officials have been embroiled in controversy over this very point in regard to the Social Security System and a variety of programs spawned by the war on poverty begun during the Johnson administration.

### *Negative Frames*

Under negative framing, allocation patterns for both high and low responsibility were consistent with previous escalation research, irrespective of the decision alternative. For example, Staw (1976) employed an "other sponsor" decision alternative, while Staw and Fox (1977) used a

“reserve fund” decision alternative. It was suggested earlier that negative framing was inherent in the Adams and Smith scenario because (1) those case materials depicted an organization operating at a loss and (2) feedback to subjects reflected an *increase in losses*. Similarly, negative decision frames in the GETC scenario pointed to an increase in job placement *failures*. In this situation, the congruency with earlier escalation studies implies that negative framing overrides subjects’ cognitions concerning program versus sponsor failure and accentuates the self-justification process in general.

In support of this argument, note the intriguing effects of positive and negative frames on high-responsibility/reserve fund subjects. That is, high-responsibility/reserve fund subjects allocated \$11.30 million under negative framing and only \$7.85 million under positive framing. Analysis of relevant postexperimental questionnaire items revealed that, for these two cells, subjects under negative framing tended to assess the “cause” of the poor placement rate as more variable (i.e., less stable) over time,  $t(38) = 1.97, p < .05$ . This could be interpreted as a justification response. With regard to the program’s perceived social value, differences between positive and negative framing were marginally significant,  $t(38) = 1.44, p < .08$ , such that high-responsibility/reserve fund subjects under negative framing perceived the program as *more* socially valuable than those subjects under positive framing. No differences between these groups on “importance of success” (to the subject) were found.<sup>1</sup>

Thus, any post hoc explanation of the disparate allocations is quite speculative. Nonetheless, it seems plausible that negative framing induced policy makers to focus more upon the poor placement rate (i.e., failure) of the selected sponsor rather than the general ineffectiveness of the Governor’s targeted program. It would seem that the contextual factor of negative framing overrides subjects’ cognitions about program value or other alternative definitions of success. This effect of negative framing is magnified even further among low-responsibility subjects—who withdrew to extremely low levels of \$6.20 and \$6.87 million.

The effects of framing reported here have implications for organizational behavior in both public and private sector contexts. Framing can be employed as a form of impression management to persuade or manipulate the general public and employees, as well as decision makers. Research is needed to closely examine the subtle and not so subtle influences of “linguistic” impression management. For instance, Neale (1983) reported that positive frames (“What do I have to gain?”) rather than negative frames (“What do I have to lose?”) resulted in significantly

<sup>1</sup> For high-responsibility/reserve fund subjects, the intercorrelations of the questionnaire items for perceived cause (C), social value (V), and importance of the subject (I) where  $r_{cv} = .17, r_{ci} = .17$ , and  $r_{vi} = -.67$ .

greater concessionary behavior among subjects engaged in wage and benefit negotiation tasks. This example from the negotiation literature, and the pervasiveness of framing in verbal or written communication (e.g., interviews, memos, reports, letters), suggests possibilities for future research. To illustrate, President Carter termed the ill-fated mission to rescue American hostages in Iran as an "incomplete success." Does this type of euphemistic framing assuage the anger of political rivals and the general public? Are consumers, as Thaler (1980) would suggest, naive to the relationship between a cash "discount" and a credit card "surcharge?" Research is needed to determine the conditions and the extent to which decision makers employ or fall prey to framing. Are effective decision makers cognizant of *both* frames or fixated, perhaps, on the "glass that is half-empty" (or half-full)? What individual difference factors account for the susceptibility to "framed" communication? These questions suggest that future research will have to address some important ethical issues as well as theoretical ones.

#### *Decision Making and Affective State*

The manipulation of mood resulted in no main effects or interactions with other manipulated variables. This may have stemmed from one or more factors. First, the mood manipulation may not have been strong enough. Second, the negative performance feedback in conjunction with the subject's role as Executive Director may have induced negative mood states which conflicted with or overrode the experimental manipulation of mood. Although the correlation between the mood condition (positive versus neutral) and perceived funding efficacy was not significant, it should be noted that the *self-reported* mood state of subjects was significantly correlated with perceived funding efficacy,  $r(158) = .30, p < .01$ . This lends support to the notion that positive affective states may foster enhanced expectations about decision outcomes, although these perceptions were not manifested in greater risk taking behavior (in this case, dollar allocations). Frankly, we are puzzled by these findings and future research is needed to examine the processes through which affective state and risk assessment are translated into risk taking behavior.

#### SUMMARY

In general, the research reported here has important implications for the study of escalation bias. First, the organizational context in which an entrapping conflict occurs is critical since disparate contexts give rise to a variety of organizational goals, objectives, and standards of success (or failure). It has been argued that goal attainment can be expressed in a variety of ways, particularly in the public sector. The manner in which organizational goals and standards of failure are formulated may make particular components of the decision problem more salient—for ex-



ample, when funding decisions are inextricably tied to policy decisions (our alternate sponsor versus reserve fund option).

Differences in context can also alter the subjective criteria that distinguish between a "setback" and a "failure" or a "failure" and a "disaster"—all of which have different connotations. For example, the implied connotations are probably dependent upon levels of previous organizational performance. Managers responsible for "losses" in floundering companies may react quite differently than managers whose "losses" occur in organizations with long histories of annual profits. In some instances, a "less than phenomenal success" may be perceived as a failure or setback. It would be interesting to revise the Adams and Smith case materials such that feedback reflects failure to meet previously high levels of profit, in contrast to the low performance levels currently depicted.

Furthermore, Peters and Waterman (1982) have postulated that one attribute of successful American companies is a "substantial tolerance for failure." Thus, in some contexts the willingness to accept mistakes and setbacks is a part of a positive corporate culture. Ostensibly, this tolerance is facilitated by extensive dialogue among decision makers in an environment where communication is open and straightforward. It follows that organizations in which exchange is limited can promote non-optimal decisions. Peters and Waterman (1982) note, "The big failures, the ones that really leave scars, are usually the ones in which a project was allowed to go on for years without serious guidance" (p. 224).

In sum, context matters. It has been shown that the nature of the definition of success, the role of framing, and decision alternatives can have a profound influence on the propensity to escalate (or withdraw). In addition, the model may be extended to include individual differences such as affective state or personal susceptibility to framing. Researchers should consider these factors in developing theory to explicate when escalation occurs, when it does not, and provide hints as to the underlying processes in allocation decisions.

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