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## The Impact of Diffusibility of Blame on Subsequent Persistence in a Project

*Marya L. Leatherwood*  
*Edward L. Conlon*

College of Commerce and Business Administration  
Bureau of Economic and Business Research  
University of Illinois, Urbana-Champaign



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Persistence in a Project

Marya L. Leatherwood, Lecturer  
Department of Business Administration

Edward J. Conlon  
University of Iowa

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## ABSTRACT

Although previous research on escalation and entrapment indicates that the responses of resource allocators to setbacks may be related to characteristics of the setback, that relationship has not been well understood. Using a realistic resource allocation scenario, this study tested how one such characteristic, diffusibility of blame, affected subject responses. Withdrawal from a project occurred when blame could be diffused. Conversely, continued involvement in the project resulted when blame for the setback clearly rested on the allocator.



Over the last decade, a number of studies have demonstrated that when courses of action result in setbacks or failures, the contextual characteristics of both the decision to enter the course of action and the decision to continue (or not continue) the course of action can affect the amount of resources a decision maker will commit following the setback. In the first study of this phenomenon, Staw (1976) showed that decision makers who were responsible for the decision to enter a course of action tended to escalate their commitment of resources following a setback. Responsibility was studied because of its relationship to cognitive dissonance; that is, a responsible decision maker would experience greater dissonance as a result of the failure than one who was less responsible. Escalation was explained as a way that decision makers would rationalize their failures and resolve their dissonance.

Since Staw's first study, researchers have examined the effects of additional context factors that interact with responsibility and failure to affect decision makers' behavioral commitments to a course of action. These factors are repetition of failure (Staw and Fox, 1977; McCain, 1986), foreseeability of the failure (Staw and Ross, 1978), job insecurity (Fox and Staw, 1979), involvement and visibility (Conlon and Wolf, 1980), prospective information (Leatherwood and Conlon, 1986), closeness to a goal (Rubin and Brockner, 1975), group versus individual responsibility (Bazerman, Giuliano and Appleman, 1984), presence of a model (Brockner, Nathanson, Friend, Harbeck, Samuelson, Hauser, Bazerman and Rubin, 1984) and opportunity costs and framing (Davis and Bobko, 1986; Northcraft and Neale, 1986). These studies have primarily focussed on exogenous aspects of the social situation (e.g., responsibility, visibility, groups) or endogenous characteristics of

the decision itself (e.g., opportunity costs and framing). Prompted by results obtained by Staw and Ross (1978), this study examined how endogenous characteristics of a setback, specifically diffusibility of blame to another party, affected behavioral manifestations of commitment to a course of action.

#### Effects of Setback Types

Staw and Ross (1978) found that allocations made following a setback varied depending on the nature of the setback that had occurred. In their study, which utilized the "World Bank" case, subjects were given a choice of three regions of Kenya in which to build an economic development project. The information about each region contained a warning about a potential problem. In the foreseeable setback condition, subjects were told that a setback had occurred and that it had been caused by the potential problem mentioned in the information that had been provided about the region selected. These problems were (1) corrupt local officials, (2) ineffective economic incentives and (3) widespread illiteracy. In the non-foreseeable setback condition the setback was attributed to excessive rainfall, a possibility that subjects were not warned about.

Interestingly, Staw and Ross found that the amount allocated to the project following the setback, a behavioral manifestation of commitment, varied according to the type of setback. Generally, allocations were lower following the endogenous setbacks (i.e., Responsible subjects withdrew from the project), but there was considerable variance in allocations among the three setback conditions. Subjects allocated the least following the corruption setback and the most following the illiteracy setback. The amount allocated following the illiteracy setback was about the same as that allocated following the (non-foreseeable) rain setback.

In other studies of this type, allocators have been shown to escalate rather than withdraw resource commitments in high responsibility contexts (e.g. Staw, 1976; Staw and Fox, 1977; Fox and Staw, 1979). An important difference between the Staw and Ross design and the others was the extent to which the subjects were given explicit information about the cause of the setback. Unlike the World Bank case, the other studies produced a setback by indicating to the allocator that the performance of a previously funded corporate division continued on a declining trend. No specific rationale, such as corruption or rain, was provided for the decline. When no rationale is given, it may be difficult for allocators to formulate specific rationales on which to base their funding decisions. Research has shown that they tend to continue funding following setbacks in such situations. When rationales are provided, however, allocations may become part of the allocator's means of rationalizing the setback.

The variation in allocations that occurred following Staw and Ross's three foreseeable setbacks suggests that the ability to diffuse blame for the setback to an outside party may be an important part of this rationalizing process. For example, by withholding further funding to a project beset by corruption, the allocator could claim that s/he was either legitimately punishing the local officials or pressuring the local government to purge those officials before further action could be taken. In contrast, it is unclear that such a hard line would be considered legitimate following the setback caused by illiteracy. The extent to which behavioral commitment would increase as a result of setback foreseeability would depend on the extent to which blame for the setback would be placed entirely on the allocator. In the present study, we hypothesized that setbacks which could legitimately be blamed on outside parties would lead to

different levels of commitment to the chosen course of action compared to those which could not.

This study employed two variations on a single setback, a labor strike, to investigate the diffusion hypothesis. In one case, the strike was a legitimate response to an action taken by the allocator (i.e. the non-diffusible condition), in the other it was not (i.e., the diffusible condition). We hypothesized that when the setback was not foreseeable, therefore the responsibility of the allocator for the setback was low, the placement of blame would not be a strong concern of the allocator and the diffusibility of blame for the setback would not affect behavioral manifestations of commitment. When foreseeability was high, behavioral commitment would be greater following the setback for which blame could not be diffused than following the one for which blame could be diffused. The hypothesis, therefore, predicted an interaction between foreseeability and diffusibility of the form outlined in Figure 1.

#### The Use of Multiple Dependent Measures

In previous studies, the extent of commitment to a project has been inferred from the level of monetary allocation to that project. Even though some of those studies produced results that were consistent with the hypothesized commitment effects, allocations may be ambiguous indicators. The problem is most easily seen in situations where the subject is provided with the estimated development costs of the project as was the case in the World Bank scenario (Staw and Ross, 1978; Conlon and Wolf, 1980) and in the present study. When the amount necessary to complete a project is known or can be estimated, allocations of that amount signify a clear decision to continue, and allocations of zero indicate a clear desire to withdraw.

Allocations between zero and the cost estimate are difficult to interpret since they could be attributed to an incremental approach to allocation (e.g. Lindblom, 1959), an attempt to "control costs" or, more generally a risk averse "wait and see" attitude. Similarly, allocations in excess of the projection may indicate the subject's disbelief of the estimate or some type of "adjustment" for potential cost increases.

The present study used three measures of behavioral commitment in order to clarify the allocators' motivations. The first measure (AMOUNT) was an allocation of an amount which would be spent to further develop or complete the project. Because the task used in this study was closely modeled after a real context where cost projections are routinely provided, this measure was expected to be distributed in a bimodal fashion with allocations equalling either the remaining development costs or zero. As such, it was expected to be a particularly good indicator of a desire to withdraw from the project.

A second measure (OVERAGE) allowed individuals to set aside funds which could be used in the event of further setbacks. It was explained that funds in this account, if not used, would revert to the allocators' general fund and could be used for future projects. The use of an overage amount provided an indicator of commitment based on how willing decision makers would be to exceed the projected budget in order to finish the project. It was expected to be a good indicator of a subject's desire to continue, but would not distinguish allocators who desired to withdraw from those who desired to continue without committing additional resources. Finally, an important alternative to the abandonment of projects which develop capital assets (ie. land, buildings, financial instruments, etc.) is for managers to seek to sell the assets and recover as much of the development cost as

possible (see Northcraft and Wolf, 1984). To measure this propensity, allocators were asked to indicate their desire to sell the project (PRTYSEL) on a four point scale. Unlike AMOUNT and OVERAGE, PRTYSEL can indicate the desire to withdraw, continue or escalate resource commitment with about equal sensitivity.

## METHOD

### Subjects

Sixty-seven business students volunteered to participate in what was described as a decision making study. The members of this sample ranged in age from 19 to 45 with a mean age of 26.7. Twenty-four subjects were MBA students who were employed full time. These students had between 1 to 10 years experience in their current jobs (mean = 2.9) and 1 to 19 years in their current organization (mean = 6.2). The remaining subjects were in their last 2 years of undergraduate study in business administration and had completed the introductory courses in finance, accounting and economics. Subjects were randomly assigned to experimental conditions.

### Procedure

Subjects were provided a package of materials that contained the following instructions:

This is an exercise in decision making. You will be acting in the role of a vice president for Conwood, Inc., a real estate development corporation. Several decisions need to be made regarding the funding of various real estate projects in the southeast region -- such decisions will be your responsibility in this exercise.

You have recently been provided information describing two office projects located in major metropolitan areas of the southeast. The following portfolio contains the information on each of the projects. You should examine this information



and make a decision to fund one project as a commercial development in your region.

All of the participants were given portfolios that included information in the form of a financial pro forma detailing the development costs, the expected leasing rates, the projected cash flows and the net present values for two commercial real estate development projects, one in Birmingham and the other in Jacksonville. A financial analysis was also included that indicated the net present value of each project. In addition, reports from the company's contracting specialist, market analyst and policy specialist were included in the portfolio. These portfolios were modeled after those used by two real estate management firms in the Southeastern U.S.

The information provided in the portfolios was constructed to be similar for each of the projects across a number of dimensions including the net present value, the expected demand for office space, the projected availability of building materials and the "fit" of the project with current corporate strategy. Similar information for each project was provided in order to prevent a systematic choice of one project over the other from occurring and to increase the degree of commitment that the decision makers felt regarding their choices.

The case materials stated that the corporate policy required the vice presidents to annually allocate a proportionate amount of the development cost of the project based on the construction horizon of the selected project. Since each of the projects had a construction horizon of two years, the allocation at the initial decision time should be one-half of the total development costs for the project that was chosen for funding. At the beginning of the next fiscal year, (i.e. the second experimental session) the project would be reviewed and a decision regarding the next annual

allocation would be made at that time.

Within the contracting specialist's report, two levels of foreseeability of the setback were manipulated. For those subjects in the foreseeable condition, the contracting specialist's report stated:

The report on union activities indicates some unrest within the masons' union. A lack of resolution regarding the use of prefabricated construction techniques may create conflict when the current masons' contract expires. This contract will expire during the construction horizon for this project.

The not foreseeable condition contained no mention of labor problems.

Individuals were instructed to review the materials for each project and to select one project to be funded. After selecting a project and allocating funds to cover the development costs for the first construction period, individuals were asked to write a prospectus detailing their reasons for project selection, and were then asked to assign themselves a code name so that their materials could be returned to them at the second session. Self-assigned codes were used to retain anonymity.

At the second experimental session, held one week after the first one, individuals were told that a strike (setback) had occurred. The reasons for the strike were manipulated in order to create two levels of diffusibility. In the high diffusibility condition, subjects were told that a strike had occurred. In the low diffusibility condition, subjects were told that "they (i.e., the subject) had approved the prefabrication of masonry slabs, off-site, by non-union workers as a cost saving measure." They were further told that "although this procedure may have violated the union contract, the step had been taken as a cost saving measure in the hope that the union stewards would not realize it." The strike, in the non-exonerating condition, resulted from the allocator's gamble on cost savings.

Persistence was explicitly manipulated in order to control the possible

effects of variation in subject's perceptions of the extent to which the setback would continue. In the resolved condition, subjects were told that the labor dispute had been successfully resolved. In the persistent condition, they were told that although the employees were back to work, unrest continues and a contract had not yet been signed.

The diffusibility and persistence manipulations were fully crossed with the foreseeability manipulation conducted during the first experimental session. The result was a complete 2 (high / low foreseeability) by 2 (high / low diffusibility) by 2 (resolved / persistent) experimental design.

After receiving the setback information, subjects were asked to review the project portfolio, to make a second allocation of development costs to the project (AMOUNT) and to decide on the amount of money that they wished to allocate to an overage account that would be set aside for the project (OVERAGE). Each folder also contained a memo informing subjects that a potential buyer existed for the office building. The memo instructed subjects to indicate their priority to sell the project on a four point scale ranging from 1 = "low priority--continue project" to 4 = "high priority-- consider accepting a price covering development costs to date" (PRTYSEL).

After completing the case materials, subjects completed a questionnaire containing the 5 manipulation check items displayed in the Appendix. The first two of these items evaluated the extent to which the subjects felt that the setback was foreseeable and that they felt responsible for it. The next two items evaluated the extent to which an outside party was responsible for or should be blamed for the setback. The last item evaluated the subjects' expectations that the setback would persist.

Subjects were thanked for their participation, debriefed regarding the

true purpose of the study and given a written feedback summary of the experiment after all the data were collected.

## RESULTS

### Manipulation Checks

Analyses of variance (ANOVA's) were used to evaluate the effect of all three experimental manipulations on the five manipulation check items. - These results are summarized in Table 1. The manipulation of foreseeability produced significant effects on item 1 which evaluated personal responsibility for the setback ( $F_{1,59} = 8.10, p < .01$ ) and item 2 which evaluated the foreseeability of the setback ( $F_{1,59} = 9.17, p < .01$ ). The means of both items were greater in the highly foreseeable condition. The manipulation of setback persistence produced a significant effect on item 5 which evaluated persistence ( $F_{1,59} = 5.18, p < .05$ ). As anticipated, subjects in the persistent setback condition reported greater persistence than those in the resolved condition. The manipulation of diffusibility produced significant effects on item 1 which evaluated personal responsibility ( $F_{1,59} = 25.15, p < .001$ ), item 2 which evaluated setback foreseeability ( $F_{1,59} = 13.2, p < .001$ ), item 3 which evaluated the responsibility of an outside party for the setback ( $F_{1,59} = 5.83, p < .05$ ) and item 4 which evaluated the extent to which an outside party should be blamed for the setback ( $F_{1,59} = 18.07, p < .001$ ). In the high diffusibility condition, subjects felt less personal responsibility, perceived the setback to be less foreseeable, and attributed greater responsibility and blame to a third party compared to the low diffusibility condition. The ANOVA's did not reveal any other significant main effects or interactions on the manipulation checks.

The contrast between the effects of foreseeability and diffusibility on the manipulation checks is important. As in previous studies (i.e., Staw and Ross, 1978; Conlon and Wolf, 1980), foreseeability affected the degree to which subjects felt responsible for the setback. It did not affect the perception of third party responsibility. In contrast, the diffusibility manipulation both reduced the perception of personal responsibility and increased the perception of third party responsibility for the setback.- The unique effect of diffusion, then, was to shift responsibility away from the subject and toward an outside party.

#### Dependent Measures

There were three dependent variables: AMOUNT, OVERAGE and PRTYSEL. In the introduction, we suggested that the distribution of AMOUNT may be bimodal with most allocations being either the normative amount, or zero. On examination of the frequency distribution of this measure, we found that 62 of the 67 subjects allocated exactly the projected budget requirement, 2 subjects allocated zero dollars and 3 subjects allocated amounts greater than the projections. This result was consistent with our concerns about the experimental demand that would be induced when projected costs were provided to subjects. Further examination showed that the five subjects allocating an amount other than the budget were not concentrated in any particular experimental condition and that the two subjects who allocated zero also placed zero in the overage account. Because the variance in allocations was small and essentially random with respect to the manipulations, we excluded the AMOUNT measure from further analyses and tested our hypothesis with the remaining 2 indicators of commitment: OVERAGE and PRTYSEL.

The correlation between OVERAGE and PRTYSEL was  $-.21$  ( $n = 67$ ).

$p < .05$ ). Both the sign and significance of this relationship was appropriate and support the notion that the two measures each evaluate commitment. It is not surprising, however, given the differences between the measures that we noted in the introduction, that the relationship is not stronger. Because of the significant correlation between the two variables and the unequal cell frequencies, a Multivariate Analysis of Variance (MANOVA) estimating unique sums of squares was conducted to test the hypothesis.

The means and standard deviations of the dependent variables are presented in Table 2. The MANOVA produced two significant multivariate effects. The strongest of these, a diffusibility by foreseeability interaction (Multivariate  $F = 5.21$ ,  $df = 2, 58$ ;  $p < .01$ ) was predicted by the hypothesis. The second, a main effect for persistence (Multivariate  $F = 4.05$ ,  $df = 2, 58$ ;  $p < .05$ ) was not specified a priori. These multivariate effects were further interpreted by examining the univariate effects on each dependent variable. The univariate effects for OVERAGE and for PRTYSEL are displayed in Tables 3 and 4 respectively.

It was hypothesized that diffusion of blame would interact with foreseeability in the form outlined in Figure 1. Consistent with the hypothesis, significant diffusibility by foreseeability interactions were obtained on both OVERAGE ( $F = 4.80$ ,  $df = 1, 59$ ;  $p < .05$ ) and PRTYSEL ( $F = 7.49$ ,  $df = 1, 59$ ;  $p < .001$ ). These interactions are diagrammed in Figures 2 and 3 respectively. The 95% confidence intervals on the means indicated that diffusibility affected OVERAGE in the foreseeable setback condition, but not in the non-foreseeable condition. In the foreseeable (i.e., high responsibility) condition, subjects allocated more to the OVERAGE account following setbacks for which blame could not be diffused. The interaction

on PRTYSEL followed a similar pattern except that diffusibility produced significant differences in both of the foreseeability conditions. When foreseeability was high, the desire to sell was significantly greater following the diffusible setback than following the setback that could not be diffused. This pattern was reversed in the non-foreseeable condition where subjects expressed a significantly greater desire to sell projects following setbacks for which blame could not be diffused. Considered together, the results for both OVERAGE and PRTYSEL indicate that when an allocator is responsible for a setback, diffusibility of blame to an outside party promotes a preference for withdrawal, whereas low diffusibility promotes continuation in the project.

A significant univariate effect for persistence was indicated on PRTYSEL. As would be expected, subjects indicated a higher priority to sell the project when the labor contract had not been signed (mean = 2.36). When the labor dispute had been successfully resolved, subjects were not as willing to abandon the project (mean = 1.99).

A significant univariate effect for diffusibility was also found on OVERAGE, meaning that subjects allocated more resources when responsibility for the setback could not be diffused to the labor union.

#### DISCUSSION

The results of this study indicate that the behavioral manifestations of commitment to a course of action following a setback depend not only on the extent to which the allocator feels responsible for the setback, but also on the extent to which an outside party may be held responsible. Although the foreseeability manipulation was sufficient to induce feelings of responsibility in the allocators, it was not sufficient to explain how

allocators behaviorally cope with responsibility for failure. When blame for the strike could be diffused to members of the contracting union, withdrawal from the project was a viable option for responsible allocators. When the blame for the strike clearly rested on the allocator, the tendency was to continue involvement in the project.

### Alternative Explanations

The design of this study ruled out several alternative explanations for the results. Because persistence of the setback was explicitly manipulated rather than controlled, the nature of the setback was not confounded with expectations about its continuation. Although we found that the manipulation of persistence had a significant effect on PRTYSEL, persistence did not interact with either the diffusibility or foreseeability manipulations. It is reasonable to conclude that the effects of the latter manipulations occurred independently of subjects' perceptions of risk or expectations that the setback would continue.

Secondly, the interaction of foreseeability and diffusibility could not be attributed to the joint effect of those factors on the perceived responsibility of the allocator for the setback. As in the World Bank scenario, the foreseeability manipulation affected levels of perceived personal responsibility for the setback, but did not affect the perceived extent to which a third party could be blamed. The diffusibility manipulation lowered the perceived level of personal responsibility and also increased the perceived level of third party blame. Diffusability and foreseeability did not interact to affect perceptions of responsibility. The joint main effects of diffusion and foreseeability on personal responsibility could be used to explain the results on the commitment



variables if main effects were hypothesized and obtained, but the obtained interaction cannot be explained by a simple responsibility effect. The results suggest that the ability to diffuse blame to a third party, in this case the union, has an effect on commitment that is independent and different from that of personal responsibility and is not contingent on a lowering of perceived personal responsibility.

Finally, the results obtained in this study were generally consistent across two different indicators of commitment. Specifically, we observed that in the foreseeable, diffusible condition, allocations to the overage account were low and the desire to sell was high. In contrast, when setbacks were foreseeable and blame could not be diffused, the allocation to overage was high and the desire to sell was low. If these results had been obtained on a single dependent variable, or if the pattern of results had differed between the two variables, the result may have been attributed to factors unique to allocations or sales. The convergence of the results across the variables enhances the interpretation of these results as a commitment phenomenon.

## Implications

Several aspects of this study have implications for future research on the escalation of commitment. The major implication concerns the manner in which researchers construe decision making following setbacks. Staw (1976) originally proposed that escalation occurred as an attempt to rationalize past behavior in the face of failure, a process generally referred to as self justification. Later, Staw (1981) expanded this explanation to include the possibility of justification to others, and a desire to appear publicly

consistent. The present results suggest that the behavioral manifestations of justification (e.g., escalation, continuation or withdrawal) may depend on the way in which the setback can be explained by the allocator. For example, when a third party may be blamed for the setback, withdrawal can be used to symbolize for self or others that a third party was involved in the setback, and can be rationally justified by the allocator as a possible means to control the future behavior of the third party. In the absence of a third party, withdrawal may signify resignation or an admission of blame, but continuation may help define the setback as a learning experience or as a short term cost in a long term strategy of success. Characteristics of the setback, such as diffusibility of blame, may have an important effect on the rationalization process, and more research on this issue is needed.

A second implication concerns the design of future studies of escalation and commitment in resource allocation contexts. One feature which explicitly differentiates the present methodology from those of previous studies was the provision of complete financial information. There are at least two advantages of providing such information in studies of escalation and commitment. First, such information provides a stronger test of "rationalizing" effects. To the extent that rationalization is described as antithesis to "economically rational" decision behavior (Staw, 1981; Bazerman, 1986), studies of rationalization processes should provide subjects with opportunities for rational choice. Studies that do not clearly define the economically rational pathway for subjects may be criticized for creating a demand for rationalization or for failing to distinguish between the rational and rationalizing options available to subjects. In the present study, the economically rational signal (i.e., net present value) favored continuation. The apparent desire of allocators to

withdraw in the foreseeable, diffusible condition is a more impressive demonstration of rationalizing when viewed in the context of that signal than it would be if the economically rational path was not specified. The second advantage of normatively relevant information concerns its effect on internal validity. When rational paths are not specified, subjects may infer them. To the extent that such inferences are affected by the experimental manipulations meant to produce rationalization (e.g. foreseeability), internal validity may be threatened. For example, if persistence of the setback had not been explicitly manipulated and assessed in this study, it is possible that foreseeability or diffusibility may have affected the allocators' expectations about persistence and rationally affected allocations to OVERAGE. The chance of such effects occurring is reduced by anticipating and providing a rational course of action against which actual behavior may be compared.

The study also suggests a practical implication. The results of studies utilizing the World Bank case (Staw and Ross, 1978; Conlon and Wolf, 1980) showed that responsibility and its effect on the need to justify a prior behavior could promote withdrawal from a course of action as well as escalation. The present study showed that third party involvement partially explains the type of rationalizing strategy that allocators will use. It is noteworthy that such strategies may appear quite rational to the parties involved. Conlon and Wolf (1983) documented a corporate example that parallels the results of this study. In that case, a decision was made to discontinue a new product that, if kept, was projected to have an above average profit margin for the firm. The product was discontinued because of the persistent failure of the firm to meet development deadlines which, because of contractual obligations to a client firm, were embarrassing to top

management. At the time the decision was made to discontinue the product, development was virtually complete and most of the "start up costs" had been paid. The ceremony of discontinuation was a top management meeting during which the most affected managers presented a profit and loss statement for the product to date. The managers blamed the negative cash flow on poor decisions by engineers who had been hired specifically to work on the new product and who would be dismissed if the product was dropped. The presentation ignored the known interest of potential future clients in the product. To an uninformed observer, the process would have appeared economically rational. Privately, the involved managers admitted their intent to detach themselves from a product which evoked bad memories and some embarrassment. Hence, the advice to managers on how to avoid escalation (cf., Rubin, 1980; Brockner and Rubin, 1985) may apply equally well to contexts of unproductive escalation and unproductive withdrawal.

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Table 1  
Cell means for manipulation checks

<u>CONDITION</u>	<u>RESPOTH</u>	<u>RSPSTBK</u>	<u>BLAME</u>	<u>STBKFOR</u>	<u>STBKPER</u>
DIFFUSABLE					
NOT PERSISTENT					
NOT FORESEEABLE	3.87	1.62	3.75	2.37	2.75
FORESEEABLE	3.78	3.33	3.55	3.88	3.00
PERSISTENT					
NOT FORESEEABLE	4.37	2.25	4.50	2.87	3.37
FORESEEABLE	4.20	2.70	4.20	3.60	3.90
NOT DIFFUSABLE					
NOT PERSISTENT					
NOT FORESEEABLE	3.00	3.85	2.28	3.43	3.28
FORESEEABLE	3.00	4.33	2.56	4.22	2.11
PERSISTENT					
NOT FORESEEABLE	4.00	3.44	2.89	4.33	3.22
FORESEEABLE	3.57	4.14	2.57	4.57	3.10

Table 2  
Cell means and standard deviations on AMOUNT and PRTYSEL

<u>Condition</u>	<u>Frequency</u>	<u>OVERAGE</u>	<u>PRTYSEL</u>
DIFFUSABLE			
NOT PERSISTENT			
NOT FORESEEABLE	8	1.10 (.65)	1.75 (.71)
FORESEEABLE	9	.57 (.51)	2.33 (.71)
PERSISTENT			
NOT FORESEEABLE	8	1.06 (.82)	2.13 (.35)
FORESEEABLE	10	.77 (.48)	2.50 (.53)
NOT DIFFUSABLE			
NOT PERSISTENT			
NOT FORESEEABLE	7	1.09 (.19)	2.00 (.63)
FORESEEABLE	9	1.11 (.48)	1.89 (.06)
PERSISTENT			
NOT FORESEEABLE	9	1.05 (.58)	2.67 (.50)
FORESEEABLE	7	1.57 (1.06)	2.14 (.69)



Table 3  
Analysis of Variance on OVERAGE

<u>Source</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
CONSTANT	71732499	1	71732499	
DIFFUSABILITY(A)	1810352	1	1810352	4.57*
PERSISTENCE(B)	361133	1	361133	0.91
FORESEE(C)	86180	1	86180	0.21
A X B	66818	1	66818	0.17
A X C	1900937	1	1900937	4.80*
B X C	573878	1	573878	1.44
A X B X C	64241	1	64241	0.16
WITHIN	23381890	59	396303	

\*  $p < .05$

\*\*  $p < .01$

Table 4  
Analysis of Variance on PRTYSEL

<u>Source</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
CONSTANT	312.67	1	312.67	
DIFFUSABILITY(A)	0.00	1	0.00	0.00
PERSISTENCE(B)	2.21	1	2.21	6.31*
FORESEE(C)	0.11	1	0.11	0.31
A X B	0.15	1	0.15	0.42
A X C	2.62	1	2.62	7.49**
B X C	0.40	1	0.40	1.14
A X B X C	0.04	1	0.04	0.12
WITHIN	20.62	59	0.35	

\*  $p < .05$

\*\*  $p < .01$

Figure 1  
An illustration of the hypothesized interaction

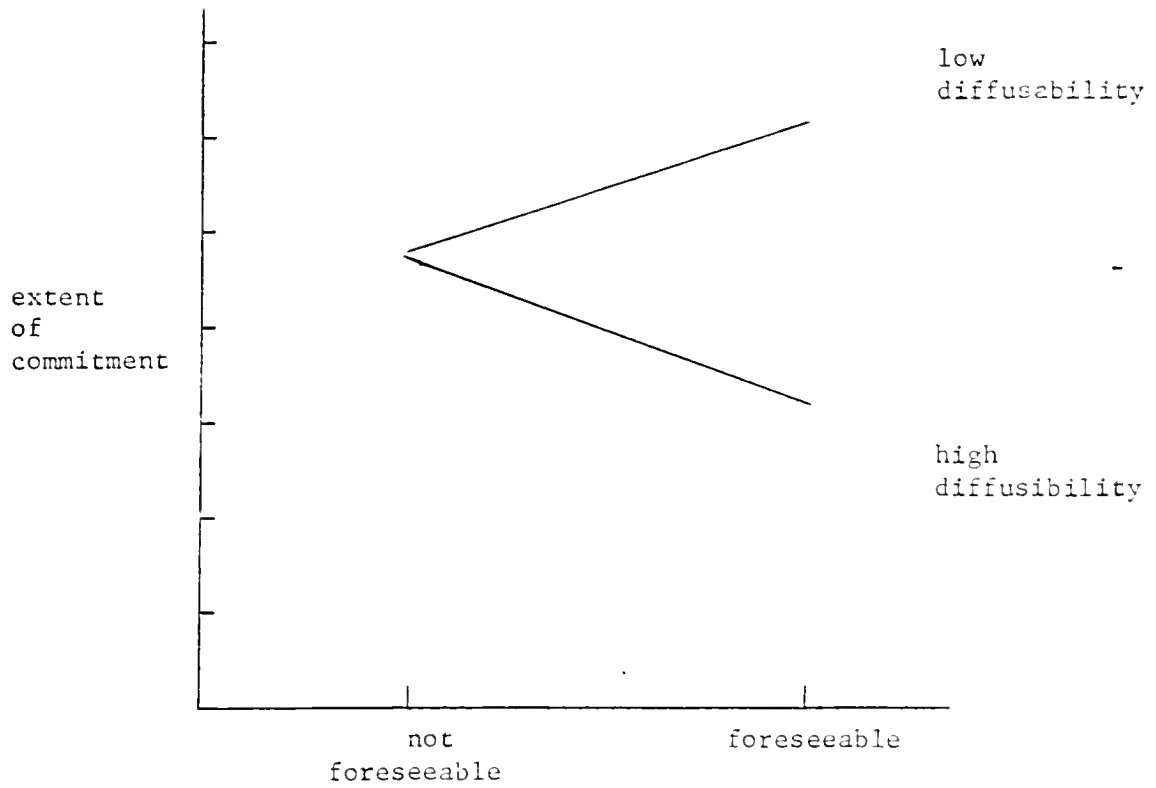


Figure 2  
Diagram of the obtained interaction on OVERAGE.

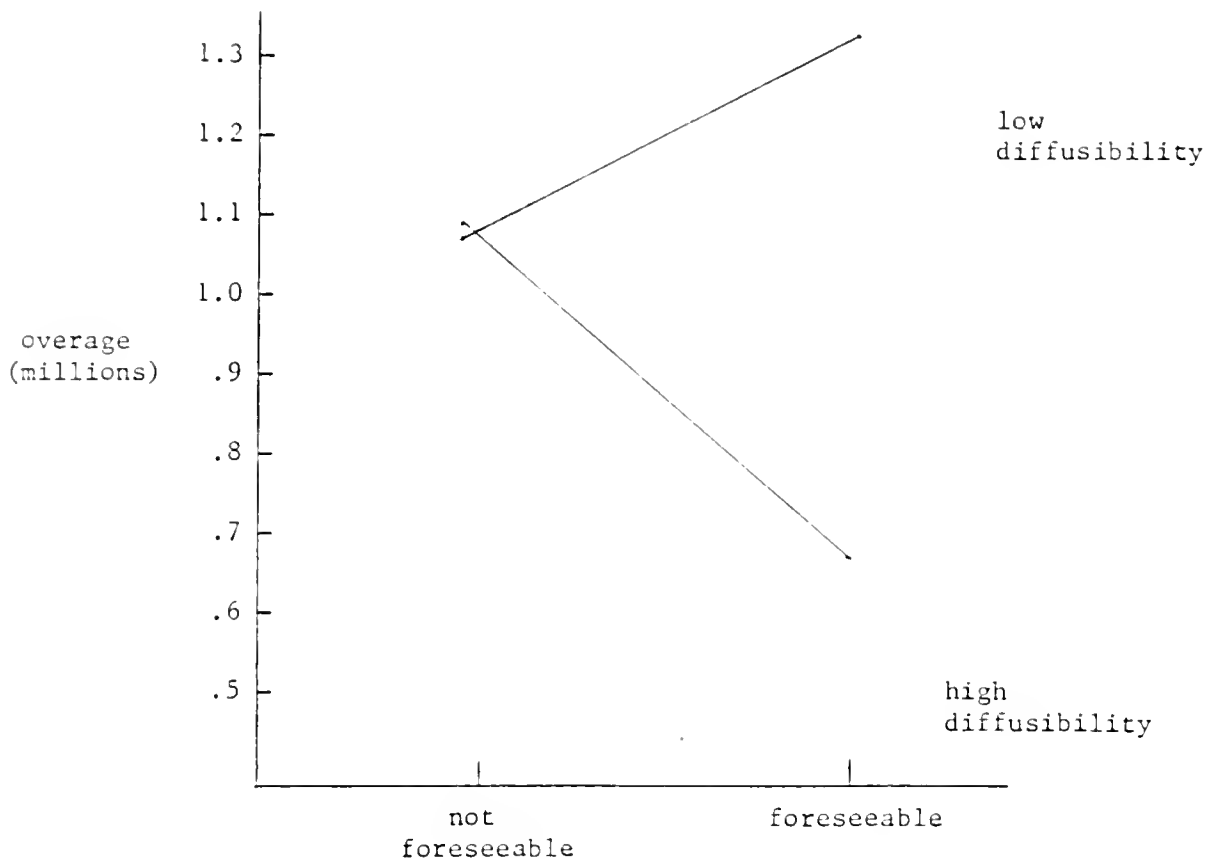
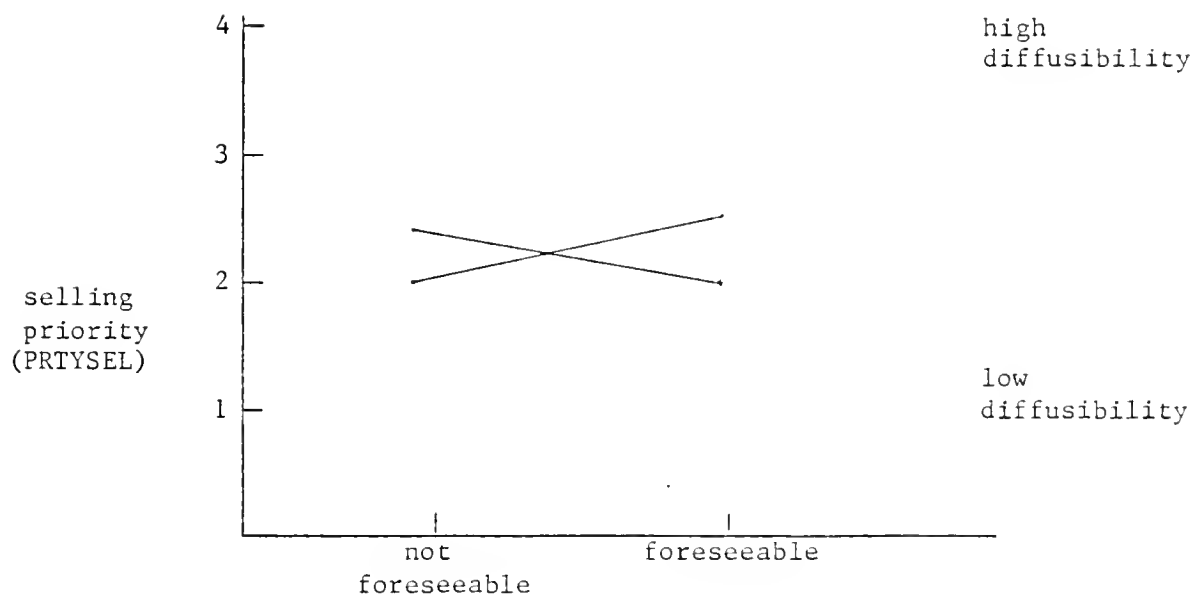


Figure 3  
Diagram of the obtained interaction on PRTYSEL.



## APPENDIX

### Manipulation check items.

The following items were included in the post-experimental questionnaire as manipulation checks. The anchors for the six-point scales are indicated in parentheses following each item.

1. How much responsibility do you feel for the setback to the project?  
(None = 1, A Great Deal = 6)
2. The setback to the originally chosen project was foreseeable.  
(Strongly Disagree =1, Strongly Agree = 6)
3. How much responsibility do you feel another party had for the setback to the project? (None = 1, A Great Deal = 6)
4. How much blame for the setback should be given to a third party?  
(None = 1, A Great Deal = 6)
5. The setback to the initially chosen project will probably persist.  
(Strongly Disagree =1, Strongly Agree = 6)







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