The Sinister Attribution Error: Paranoid Cognition and Collective Distrust in Organizations[1]

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Recent social psychological research on paranoid cognition has shown that when individuals are self-conscious or feel under evaluative scrutiny, they tend to overestimate the extent to which they are the target of others' attention. As a result, they make overly personalistic attributions about others' behavior. These personalistic attributions, in turn, foster a pattern of heightened distrust and suspicion regarding others' motives and intentions. Drawing on this research, the present work investigates antecedents and consequences of paranoid cognition in groups and organizations. Results of two studies are presented. Study 1 investigates how tenure in a group or organization affects individuals' self-consciousness and susceptibility to paranoid cognition. Study 2 replicates and extends the results of the first study using a new laboratory analog for studying paranoid cognition in small groups. Implications of the findings are discussed in terms of their contribution to theory regarding the origins and dynamics of collective distrust and suspicion.

Yossarian: "They're trying to kill me."
Clevinger: "No one's trying to kill you."
Yossarian: "Then why are they shooting at me?"
Clevinger: "They're shooting at everyone. They're trying to kill everyone."
Yossarian: "What difference does that make?"

—Joseph Heller, *Catch-22*

Social scientists have frequently drawn attention to the central role that trust plays in social and organizational life. They have noted that trust facilitates transactions between interdependent actors, enhances cooperation and coordination, and promotes more constructive social relations within groups and organizations (e.g., Arrow, 1974; Fox, 1974; Granovetter, 1985; Kanter, 1977; Sitkin & Roth, 1993). While acknowledging the importance of trust, they have also recognized that distrust and suspicion are common and recurring problems (Blake & Mouton, 1986; Fox, 1974; Kanter, 1977; Sitkin & Roth, 1993). Individuals sometimes doubt, for example, the trustworthiness of other members of a group or organization to which they belong, harbor suspicions regarding the intentions and motives underlying their actions, and/or fear that they are not cooperating fully with them.

To explain such distrust, social scientists have generated an impressive variety of theories (see, e.g., Brewer, 1981; Deutsch, 1958; Fox, 1974; Gambetta, 1987; Granovetter, 1985; Luhmann, 1979; Rotter, 1980; Sitkin & Roth, 1993; Zucker, 1986). These theories have identified a large number of psychological, social, and organizational factors that contribute to the development of distrust. In trying to bring some conceptual order to this literature, several scholars (Barber, 1983; Deutsch, 1973; Luhmann, 1979) have proposed an important distinction between "rational" and "irrational" forms of distrust. Rational distrust has been characterized as a generalized expectancy or belief regarding the lack of trustworthiness of particular individuals, groups, or institutions that is predicated upon a specific history of interaction with them. For example, the emergence of rational distrust has been linked to patterns of exchange in which individuals' expectations about other's trustworthiness have been systematically or repeatedly violated (e.g., Lindskold, 1978; Messick et al., 1983; Rotter, 1980). In contrast, irrational distrust has been characterized as an exaggerated propensity towards distrust, which can arise even in the absence of specific experiences that justify or warrant it. As Deutsch (1973) noted, irrational trust entails an "inflexible, rigid, unaltering tendency to act in a . . . suspicious manner, irrespective of the situation or the consequences of so acting" (p. 171). Thus, the distinctive feature of irrational distrust is that it is conferred presumptively (i.e., attributed *ex ante* to others).

Despite its importance, there has been very little systematic research on the psychological and social bases of such presumptive distrust, espe-

cially at the group or organizational level.[2] A primary aim of the present research, accordingly, is to investigate some of the antecedents and consequences of presumptive distrust. To do so, I explore conditions under which individuals overattribute personalistic and malevolent motives and intentions to others' actions. To develop this notion of a *sinister attribution error*, the paper integrates recent theory and research on paranoid cognitions (Colby, 1981; Fenigstein & Vanable, 1992; Kramer, in press-a, in press-b, in press-c; Zimbardo, Andersen, & Kabat, 1981) with research on group-based trust and cooperation (Brewer, 1981; Kramer, 1991; Tyler, 1993).

Paranoid Cognitions: An Overview of Theory and Research

Paranoid cognitions have been defined as "persecutory delusions and false beliefs whose propositional content clusters around ideas of being harassed, threatened, harmed, subjugated, persecuted, accused, mistreated, wronged, tormented, disparaged, vilified, and so on, by malevolent others, either specific individuals or groups" (Colby, 1981, p. 518).

Early theories conceptualized paranoid cognition primarily in terms of individual psychopathology, on the assumption that such cognitions were the result of acute intrapsychic disturbance.[3] Recent social psychological research, however, has articulated a very different conception of paranoid cognitions, and one that affords considerably more attention to their social and situational origins (Fenigstein, 1979; Fenigstein & Vanable, 1992; Kramer, in press-a, in press-b, in press-c; Zimbardo, Andersen, & Kabat, 1981). This research takes as a starting point the observation that, in milder form, paranoid cognitions are often evident even among normal individuals and thus appear to be quite common cognitions. As Fenigstein and Vanable (1992) have noted, ordinary people "in their everyday behavior often manifest characteristics — such as self-centered thought, suspiciousness, assump-

[2]Research on individual differences (e.g., Gurtman, 1992; Rotter, 1967; Wrightsman, 1981) suggests that the propensity towards irrational distrust may be correlated with general attitudes and beliefs about other people. For example, Gurtman (1992) found distrust of others appears to be greater among individuals who are high in Machiavellian orientation. Other research suggests that processes such as social categorization can contribute to the emergence of irrational or presumptive forms of distrust, especially between groups (e.g., Blake & Mouton, 1986; Brewer, 1981; Kramer, 1989; Kramer, Brewer, & Hanna, in press).
[3]See Cameron (1943) and Colby (1981) for overviews of these early theories. In some respects, the emphasis placed upon intrapsychic dynamics in these early theories is hardly surprising, given that these theories were based upon clinical observations made in institutional settings in which the "disturbed" individual had been removed from the social contexts in which their behavior had originated and for which it may have represented some sort of psychological adaptation.

tions of ill will or hostility, and even notions of conspiratorial intent — that are reminiscent of paranoia . . . on various occasions, one may think one is being talked about or feel as if everything is going against one, resulting in suspicion and mistrust of others" (pp. 130-133). To support this observation, they noted that more than 60% of the respondents to a survey endorsed one or more paranoid statements as descriptive of themselves.

This research has also identified some of the psychological processes that contribute to paranoid cognitions. Of particular relevance to the present research is the finding that paranoid cognitions are likely to occur in situations where individuals feel self-conscious and/or under evaluative scrutiny (Fenigstein, 1979, 1984; Fenigstein & Vanable, 1992; Kramer, in press-a, in press-b, in press-c). It has been shown that heightened self-consciousness increases individuals' tendency to make overly personalistic attributions about others' intentions and motives (Buss & Scheier, 1976; Fenigstein & Vanable, 1992; Pyszczynski & Greenberg, 1987). In other words, when individuals are self-conscious, they overconstrue others' behavior in self-referential terms. This tendency is one of the defining features of paranoid cognition. As Colby (1981) noted, "Around the central core of persecutory delusions [that preoccupy the paranoid person] there exists a number of attendant properties such as suspiciousness, hypersensitivity, hostility, fearfulness, and self-reference that lead such individuals to interpret events that have nothing to do with them as bearing on them personally" (p. 518). Thus, paranoid cognitions, via a process of misattribution and overattribution, engender an exaggerated or "irrational" distrust and suspicion of others.

Although this research suggests some provocative links between self-consciousness and paranoid cognition, a number of questions remain unresolved regarding the role such cognitions play in collective contexts, such as groups or organizations. First, since previous work has been concerned primarily with paranoid cognitions as cognitive phenomena, this research is not very informative about the impact of group and organizational processes on such cognitions. Specifically, we know very little about the social and organizational antecedents of paranoid cognition. Second, previous research has left the interpersonal and collective consequences of paranoid cognition largely unexplored.

The two studies reported below were designed to address these unresolved questions by investigating organizational antecedents and consequences of paranoid cognition. Study 1 investigates the impact of tenure on organizational members' self-consciousness and paranoid cognition. In particular, it investigates the proposition that newcomers to a group or organization — those whose tenure in the group or organization is short — will be more self-consciousness and more prone to paranoid cognition com-

pared to those with longer tenure. Study 2 provides a conceptual replication of Study 1 and extends its results by investigating social and behavioral consequences of paranoid cognition.

STUDY 1

There are several reasons why tenure, defined as how long an individual has been a member of an organization, might influence self-consciousness and susceptibility to paranoid cognitions. First, newcomers are likely to have greater insecurity regarding their standing in an organization compared to those with longer tenure. Standing refers to the "information communicated to a person about his or her status with the group . . . communicated both by interpersonal aspects of treatment — politeness and/or respect — and by the attention paid to a person as a full group member" (Tyler, 1993, p. 148). Recent research has shown that people attach considerable importance to information regarding their standing in social groups and organizations because they believe such information will "tell them something about whether they will be treated fairly and whether they are valued" by other members of the group or organization (Tyler, 1993, p. 143).

Because their place in the organizational order is still being actively negotiated, newcomers may have considerable uncertainty, insecurity, and anxiety regarding their standing: They are likely to worry about how well they will fit into the organizational culture, how well they will perform in their work roles, and how well they will be accepted on a social or interpersonal basis. As a result of such uncertainties and insecurities, organizational newcomers will tend to be self-conscious and will actively seek diagnostic information that might allay such fears and concerns.

In contrast, those with longer tenure in an organization typically possess considerably more diagnostic information regarding their standing: They have already passed whatever evaluative screenings and socialization hurdles the organization has placed in their path — screens and hurdles that newcomers still confront. Moreover, they are likely to be more knowledgeable about, and comfortable with, organizational norms and routines compared to newcomers. In short, they know where they stand in the organizational order. As a result, their uncertainty and anxiety regarding such issues is likely to be relatively low when compared to newcomers. Thus, individuals with longer tenure are likely to be less self-conscious compared to those who are new to the organization.

These arguments imply individuals will use information about how they are treated during their interactions and exchanges with other organ-

izational members "diagnostically" (e.g., as clues to their standing). Unfortunately, from an attributional standpoint, the meaning of many interactions between organizational members is often uncertain. The cause of another person's behavior is almost always subject to multiple interpretations, making the attribution process quite difficult (Kelley, 1973). For example, the fact that another person fails to say hello to an individual as they pass each other in the hallway on a Monday morning may reflect a *personalistic* cause (the person is angry at the individual for something the individual did on the previous Friday). However, there are also many *nonpersonalistic* causes that can be invoked to explain the person's behavior (e.g., he or she was preoccupied by a traffic ticket received on the way to work that morning and did not even notice the individual as they passed each other).

From a normative or logical standpoint, an individual should discount the validity of any single causal explanation for another person's behavior when multiple, competing explanations for that behavior are available (Kelley, 1973). Thus, even when individuals suspect they are the target or cause of another's behavior, they should discount this personalistic attribution until more conclusive evidence is available. However, despite the logical inappropriateness of doing so, there is substantial evidence that people often make overly personalistic attributions of others' actions even when competing explanations for those actions are readily available (Fenigstein, 1979; Fenigstein & Vanable, 1992; Greenwald, 1980; Heider, 1958; Hilton, Fein, & Miller, 1993; Kramer, in press-a, in press-b, in press-c; Vorauer & Ross, 1993). Specifically, it has been shown that self-consciousness increases the tendency to make such overly personalistic attributions. Extrapolating from this research, I hypothesize that organizational newcomers will be more likely to construe their interactions with other individuals in personalistic terms, attributing greater intentionality and meaning to others' actions, compared to those with longer tenure.

In terms of their diagnostic value, of course, all interactions are not equally informative to organizational newcomers. In particular, interactions involving more senior organizational members might be expected to be particularly salient to newcomers, and information about such encounters processed more extensively. For example, for the newly hired, untenured assistant professor, interactions with more senior, tenured colleagues should loom larger in terms of conveying diagnostic information than comparable interactions with other assistant professors. Thus, assistant professors might be especially self-conscious and vigilant when interacting with their senior colleagues compared to interactions involving other new assistant professors. Accordingly, it seems reasonable to hypothesize that the tendency to make overly personalistic attributions about others' behavior should be par-

ticularly pronounced in interactions between newcomers and those with longer tenure.

To summarize, the arguments advanced thus far suggest several hypotheses. Hypothesis 1 is that newcomers to an organization will be more self-conscious than those with longer tenure. Hypothesis 2 is that newcomers to an organization will be more likely to make personalistic attributions about others' motives and intentions compared to those with longer tenure. Hypothesis 3 is a prediction that organizational newcomers will make particularly strong personalistic attributions with respect to interactions involving individuals who have longer tenure in the organization. In addition to these hypotheses, Study 1 also explores the relationship between the sinister attribution error and organizational members' suspicions and judgments regarding others' trustworthiness. In particular, I investigate whether the tendency to make overly personalistic attributions about others' thoughts and behaviors is correlated with general perceptions of collective distrust and suspicion (Hypothesis 4).

Method

Participants

Participants in Study 1 were 204 first- and second-year students enrolled in a 2-year MBA program. First-year students ($n = 102$) were recruited at the beginning of their first quarter, while second-year students ($n = 102$) were surveyed at the beginning of their second year.

Procedures

Attribution Measures. To study paranoid cognitions in an organizational context, I used a vignette methodology similar to that employed by Fenigstein (1984). Individuals were told they would be participating in a study that was concerned with how MBAs evaluate their interactions with other MBAs within the business school. They were asked to read a series of eight vignettes, each of which described a hypothetical interaction between the participant in the study and another MBA. In each vignette, study participants found themselves in the role of "target" or "victim" of a potential violation of trust committed by either a first-year or second-year MBA student.[4] For each vignette, two attributions for the perpetrator's be-

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[4]To enhance the internal validity of these vignettes, a pilot study using an independent sample was first conducted in which 360 MBA students had been asked to list "things other MBAs

havior were provided: one that suggested a personalistic (target-relevant) explanation, implying the perpetrator's behavior was intentional and directed at the target, and one that suggested a nonpersonalistic (target-irrelevant) explanation. (A sample of the vignettes and attributions is provided in the Appendix.) Order of presentation of the attributions was counterbalanced to control for possible order effects. Participants were told to (a) read each vignette carefully and (b) evaluate the likelihood of the two explanations that were provided for the perpetrator's behavior. To increase involvement with the vignettes, participants were told to "really try to imagine how you would feel in this situation and how it would affect your evaluation of this person." To summarize, the two independent variables in Study 1 were the tenure of the target or victim of the perpetrator's behavior (a first- or second-year MBA student recruited for the study) and the tenure of the perpetrator (a hypothetical first- or second-year MBA with whom participants imagined they were interacting). These two variables were factorially combined, producing a 2 × 2 (Target Tenure × Perpetrator Tenure) design.

Measures of Self-Consciousness, Distrust, and Suspicion. Several weeks prior to their participation in the vignette study, the MBA students completed a questionnaire concerned with their perceptions of the organizational culture of the business school. Included in this questionnaire were items pertaining to respondents' self-consciousness, level of suspicion about other MBAs, perceptions of their own trustworthiness, perceptions of the trustworthiness of other students, and so forth. During a detailed debriefing conducted at the end of the vignette study, none of the students expressed awareness of the fact that the questionnaire and vignette study were part of the same study.

Results

Self-Consciousness and Tenure

According to Hypothesis 1, newcomers to a group or organization will be more self-conscious in their interactions with others compared to those with longer tenure. To assess this, respondents were asked to indicate how self-conscious they felt when interacting with other students (7-point scale, 1 = *not at all* and 7 = *very*). In support of the prediction, first-year

have done to you that (1) increased your trust in them or (2) decreased your trust in them." Vignettes were then constructed based on the most prototypic situations described by MBAs as affecting their levels of trust and distrust.

students reported significantly higher levels of self-consciousness in their interactions (M = 3.58) compared to second-year students (M = 2.96), $F(1, 200)$ = 8.57, p < .004.

Attributions

The primary data for evaluating the attributional hypotheses are individuals' perceptions of the plausibility of the personalistic and nonpersonalistic attributions pertaining to the perpetrator's behavior. The first analysis was conducted using the personalistic attribution data alone. To facilitate analysis of these data, and enhance comparability of the results with previous findings, we followed the procedure used by Fenigstein (1984): Individuals' ratings of the likelihood of the personalistic attribution were collapsed across all eight vignettes, after first insuring that the direction of the means was the same for each vignette. This yielded a mean score reflecting each respondent's overall endorsement of the personalistic attributions. These data were then analyzed by means of a 2 × 2 (Target Tenure × Perpetrator Tenure) analysis of variance (ANOVA).

The results of this analysis reveal a number of effects (Table I). First, there was a main effect for tenure of target, $F(1, 200)$ = 4.38, p < .05. In support of Hypothesis 2, first-year students were significantly more likely to make personalistic attributions regarding a perpetrator's behavior (M = 3.62) compared to second-year students (M = 3.44). There was also a main effect for tenure of the perpetrator, such that personalistic attributions were more likely when the perpetrators were second-year students (M = 3.68) than when they were first-year students (M = 3.38), $F(1, 200)$ = 11.79, p < .001.

In support of the third hypothesis, a significant interaction between target and perpetrator tenure was also observed, $F(1, 200)$ = 10.41, p <

Table I. Perceived Likelihood of Personalistic Versus Nonpersonalistic Attribution for Perpetrator's Behavior

| | Target tenure[a] | | | |
| | First year Perpetrator tenure | | Second year Perpetrator tenure | |
Attribution	First	Second	First	Second
Personal	3.33	3.92	3.43	3.45
Nonpersonal	4.82	4.41	4.78	4.69

[a]These cell means are based upon a 7-point scale ranging from *not at all likely* (1) to *very likely* (7).

.002. As can be seen in Table I, first-year students were particularly likely to make personalistic attributions when the perpetrator was a second-year student (M = 3.92) compared to when the perpetrator was another first-year student (M = 3.33). In contrast, second-year students' attributions reflected little sensitivity to the tenure of the perpetrator (M = 3.45 and 3.43, respectively).

Analyzing the data pertaining to respondents' personalistic attributions alone provides a direct measure of the extent to which individuals construed the perpetrator's behavior as intentional and directed at them personally. However, another way of operationalizing paranoid cognition — and one that might be viewed as a more conservative test of the hypotheses — would be to compare the extent to which individuals' make personalistic attributions *relative to* nonpersonalistic attributions. This comparative measure constitutes a more sensitive indicator of paranoid cognition in that it provides information about individuals' willingness to *discount* (in attributional terms) the plausibility of the personalistic explanation given the availability of a competing nonpersonalistic explanation. Accordingly, I also analyzed the data by means of a 2 × 2 × 2 ANOVA with repeated measures, using respondents' perceptions of the likelihood of the personalistic versus nonpersonalistic attributions as a repeated factor.

This finer-grained analysis revealed a number of additional results. First, there was a highly significant effect for the repeated measure, $F(1, 200)$ = 250.15, p < .0001. As can be seen in Table I, nonpersonalistic attributions were viewed as more likely (M = 4.68) than personalistic explanations (M = 3.53) for the perpetrator's behavior across all of the conditions. This result replicates Fenigstein's (1984) findings, and suggests that individuals were cognizant of the possibility of alternative explanations for the perpetrator's behavior (i.e., they were not completely paranoid!). Of greater relevance to evaluating the hypotheses, there were several interactions between this repeated factor and the independent variables. First, significant interactions were observed between target tenure and the repeated measure, $F(1, 200)$ = 4.48, p < .05, and perpetrator tenure and the repeated measure, $F(1, 200)$ = 15.01, p < .01. Even more important, however, was a significant three-way interaction involving the repeated measure, perpetrator tenure, and target tenure, $F(1, 200)$ = 9.41, p < .01. As can be seen from inspection of the means in Table I, first-year MBA students were *most* likely to endorse the personalistic attribution (M of 3.92) and *least* likely to subscribe to the nonpersonalistic attribution (M of 4.41) when the perpetrator was a second-year student, compared to respondents in any of the other conditions. This pattern provides strong support for Hypothesis 3.

Table II. Descriptive Statistics and Correlates of Paranoid Cognitions

Variable	M	SD	1	2	3	4	5
1. Paranoia	−1.14	1.09	—	−.23[c]	−.19[b]	−.13	.56[c]
2. Trust in others	5.25	1.16	−.23[c]	—	.23[c]	.29[c]	−.13
3. Own trustworthiness	6.35	0.69	−.19[b]	.23[c]	—	.54[c]	.006
4. Others' trust in you	5.92	0.87	−.13	.29[c]	.54[c]	—	−.010
5. Suspicion	3.62	0.80	.56[c]	−.13	.005	−.010	—

[a] $p < .05$.
[b] $p < .01$.
[c] $p < .001$.

Judgments Regarding Distrust and Suspicion

Confidence in the internal validity of the argument would be enhanced if evidence were available that these attributional tendencies were correlated, in turn, with respondents' general level of distrust and suspicion regarding other members of their group. To address this issue, I examined the relationship between respondents' attributional tendencies and their perceptions of collective trust and distrust in other MBAs. I first constructed an individual measure of level of paranoid cognition for each respondent in the study by creating a difference score, calculated by subtracting their nonpersonalistic attribution score from their personalistic attribution score. The relationship between this measure and their other perceptions were then assessed. Several results are particularly noteworthy. (See Table II for descriptive statistics and correlations among these variables.) First, individuals' level of paranoid cognition was highly correlated with their general level of suspicion regarding other MBAs. Thus, individuals who tended to make personalistic attributions about the behavior of other MBAs also tended to be more suspicious of their motives and intentions. Similarly, paranoid cognition was negatively correlated with individuals' trust in other MBAs, indicating that individuals who tend to make personalistic attributions also possessed lower levels of trust in other MBAs.[5]

[5]While not central to the present study, it is interesting to note that, overall, the absolute levels of trust in other MBAs is fairly high, and levels of suspicion relatively low, consistent with research on ingroup bias (Brewer, 1979). The data also show that MBAs tend to view themselves in relatively positive terms: for example, regarding themselves as significantly more trustworthy ($M = 6.35$) than other MBAs ($M = 5.92$), $p < .05$. They also assume that others see them as more trustworthy ($M = 5.92$) than they see others ($M = 5.25$), $p < .05$. These patterns are consistent with a general self-enhancement bias documented in previous research (Brown, 1986).

Qualitative Data. To complement these quantitative data, qualitative data were collected from respondents in the form of personal essays they had written earlier about their perceptions of the MBA culture. These qualitative data were used to gather richer information regarding the phenomenology of paranoid cognitions, in the hope that such information would provide further insight into their antecedents and consequences. Consistent with the theoretical arguments, first-year students frequently expressed feeling self-conscious in their interactions with other students, and also expressed varying degrees of uncertainty and anxiety about their standing in the group. For example, one first-year student noted, "I find myself 'looking over my shoulder' all the time around here, wondering whether I am doing ok . . . I worry a lot about fitting in." Another student wrote, "I spend way too much time thinking about what other people are thinking of me." Another noted, "It's hard to relax and be yourself. Even walking down to [the student lounge], I feel that everyone is staring at me, sizing me up. It is an uncomfortable feeling." In contrast, the statements by second-year students seldom mentioned concerns related to self-consciousness or group standing. One interesting pattern that emerged from inspection of the qualitative data were indications that first-year students spent significant amounts of their time thinking about and reliving their interactions with other MBAs. This tendency to ruminate about past events assumed two forms. The first was a kind of "private" rumination, in which individuals described how they would mull things over when they were alone. As one student expressed it, "I sometimes find myself lying in bed at night thinking about something that happened during the day, like if I said something stupid in class." The second form of rumination was more social, consisting of a collective rumination about events with other newcomers. For example, as one student commented, "We seem to use up a big chunk of time in our study groups going over things that happen to us and how to interpret them. It's not a good use of our time, but it's kind of therapeutic . . . it also helps you feel like your [sic] not alone in the way you feel." Viewed in aggregate, such statements are consistent with the portrait of the organizational newcomer as a highly self-conscious actor, and one who is quite concerned about their status and standing in the group. Moreover, they show that newcomers are willing to allocate considerable cognitive and social resources in response to those concerns.

Discussion

The results of Study 1 suggest how individuals' tenure in a group or organization can influence the attributions they make about the motives

and intentions of other people with whom they interact. They also suggest the relationship between such attributions and their judgments about the trustworthiness (or lack of it) of a collective. In support of the theoretical arguments advanced earlier, newcomers to an organization were more likely to draw personalistic inferences from their interactions with others compared to those with longer tenure. In interpreting their significance, it is important to note that these results do not appear to reflect a simple ingroup bias or outgroup derogation (cf. Brewer, 1979; Cooper & Fazio, 1986; Hewstone, 1992; Kramer, 1989; Pettigrew, 1979). In particular, the significant interaction observed between tenure of the victim and tenure of the perpetrator suggests that the ingroup versus outgroup status of the perpetrator alone is not driving these results (recall from Table I that second-year students showed little differential responsivity to the perpetrator's group status).

The results of Study 1 seem particularly compelling when account is taken of the fact that the first- and second-year MBA classes from which these samples were drawn were highly comparable — indeed virtually identical — with respect to relational demographic variables such as age, gender, educational background, and professional experience. The homogeneity of the respondents along these lines is important because it suggests that Study 1 provides a fairly conservative test of the sinister attribution hypothesis. In particular, based upon a substantial body of empirical evidence (e.g., Brewer, 1991; Kanter, 1977; Kramer, 1989; Stephan & Stephan, 1985; Tsui, Egan, & O'Reilly, 1992), one would expect to see even stronger evidence of such attributional tendencies with respect to interactions involving individuals who differ more substantially with respect to such variables (e.g., mixed-gender or cross-racial interactions). In other words, all else equal, the more distinct or different the interactants, the greater the propensity towards paranoid cognition one might expect to observe. Along similar lines, based upon recent research on procedural justice (e.g., Bies & Moag, 1987; Tyler, 1993), it seems reasonable to argue that even stronger attributional consequences would attend more consequential violations of trust. Thus, I argue the fact these attributional biases emerged with respect to the relatively benign violations of trust exemplified in these vignettes suggests they may be fairly robust.

Framed more broadly, the results of Study 1 suggest some of the cognitive liabilities associated with newness in groups or organizations. Specifically, they tell us something about the difficulties newcomers confront when trying to get information that will help them make sense of where they stand in the social order of a group or organization. In this respect, these results are consonant with recent conceptual frameworks that characterize organizational newcomers as highly motivated, proactive informa-

tion seekers (see, e.g., Ashford, 1986, 1989; Ashford & Cummings, 1985; Morrison, 1993). However, they also indicate how psychological concomitants of newcomer status, such as self-consciousness and rumination, might impede optimal use of that information, at least in so far as they contribute to misconstrual of relatively benign social interactions.

Although Study 1 was designed to demonstrate the effects of one factor — tenure — on paranoid cognition, it is important to note that the theoretical arguments used to motivate these hypotheses are quite general, implying similar patterns might be observed with respect to other organizational factors that affect individuals' self-consciousness. For example, extrapolating from previous research (Kanter, 1977; Kramer, in press-a-, in press-b, in press-c; Taylor, 1981; Tsui et al., 1992), a case can be made for the hypothesis that individuals with token status in organizations might display higher levels of paranoid cognition compared to nontokens. Similarly, drawing on research on accountability (Tetlock, 1992), one might expect that organizational actors who are under intense evaluative scrutiny might display similar patterns.

Although the results of Study 1 are consistent with the argument that heightened self-consciousness contributes to paranoid cognition, the observed relationships were only correlational. Thus, questions regarding the direction of causality can be raised. In particular, it is possible to argue that paranoid cognitions foster a vigilant style of perception, leading to heightened self-consciousness, rather than the other way around. If the results of Study 1 were replicated in a setting in which self-consciousness were situationally induced, then confidence in the theorized causal relationship between self-consciousness and paranoid cognition would be enhanced considerably. Accordingly, a second study was undertaken.

A second potential limitation of Study 1 is that the vignette methodology — in which individuals are merely asked to imagine how they would respond to a violation of trust — may not mirror very well how people would actually behave in such situations (although see Cavanaugh & Fritzsche, 1983, for evidence regarding the usefulness and validity of vignette methods). Study 2 addresses this issue by directly assessing the relationship between paranoid cognition and behavior in a laboratory setting.

Finally, Study 2 attempts to shed further light on the antecedents of paranoid cognition. Analysis of the qualitative results from the first study suggested that, in addition to self-consciousness, a second psychological process — rumination — appeared to play an important role in the development and maintenance of paranoid cognitions. Thus, a third aim of the next study was to investigate more systematically the effects of rumination on paranoid cognition.

STUDY 2

To evaluate causal hypotheses regarding the effects of self-consciousness and rumination on paranoid cognition, the control provided by a laboratory methodology was viewed as highly desirable. Accordingly, Study 2 introduces a new analog for studying paranoid cognition in a laboratory setting. The primary aim of a laboratory analog is to enable a researcher to abstract or "capture" the essential elements of a complex, real-world phenomenon and reconstruct them in a "scaled down setting, such that an isomorphism is preserved between the original and the analog situation" (Brewer, 1985, p. 163). Perhaps the prototypic example of an analog is the prisoner's dilemma game, which has been widely used to study cooperative behavior.

The analog developed for Study 2 reflects an integration of two well-known laboratory tasks in social psychology: The first is a multiactor resource management task that has been used in previous research to study collective trust and cooperation (e.g. Brann & Foddy, 1988; Kramer & Brewer, 1984; Messick et al., 1983; Parker et al., 1983); the second analog, based upon the autokinetic effect, has been used to study social judgment and interaction processes (e.g., Jacobs & Campbell, 1961; Sherif, 1935; Zucker, 1977). For reasons that will become more evident as the analog is described, combining features of these two tasks yields a novel task that captures many of the psychological and organizational facets of paranoid cognition.

Effects of Rumination on Paranoid Cognition

Recent research on the cognitive consequences of rumination (Lyubomirsky & Nolen-Hoeksema, 1993; Pyszczynski & Greenberg, 1987; Wilson & Kraft, 1993) indicates several reasons why rumination might contribute to paranoid perceptions and attributions. First, it has been shown that rumination following negative events tends to increase negative thinking about those events and contributes to a pessimistic attributional style. Second, rumination appears to increase individuals' confidence in their interpretations of events. Extrapolating from these findings, Study 2 investigates several hypotheses regarding the effects of rumination on paranoid cognition. First, it is hypothesized that rumination about others' motives and intentions in situations where concerns about trust already loom large will increase individuals susceptibility to the sinister attribution error. In particular, it is predicted that the more individuals' ruminate about the intentions and motives underlying the behavior of other actors with whom

they are interdependent, the greater the tendency to make sinister attributions regarding that behavior (Hypothesis 5). Relatedly, it is predicted that rumination will influence individuals' judgments and expectations about others' trustworthiness. In particular, it is hypothesized that rumination will lead to increased perceptions of collective untrustworthiness (Hypothesis 6). Finally, it is hypothesized that rumination about other's motives and intentions will increase ruminator's confidence in their judgments (Hypothesis 7).

Methods

Independent Variables and Study Design

To investigate these hypotheses, Study 2 employed a 2 × 2 (Self-Consciousness × Rumination) factorial design. Two levels of induced self-consciousness (low vs. high) were factorially combined with two levels of rumination (low vs. high).

Study Participants

Participants were 56 MBA students who were randomly assigned to conditions (n = 14 per condition).

Procedures

Upon arrival at the study site, participants were seated at a long table containing a Macintosh II computer with color monitor. Six joysticks were connected by individual cables to a cable box connected to the computer. Each student was seated next to a joystick. The joysticks were separated by large partitions, so that visual access to other participants was eliminated. In addition, as soon as they were seated, participants wore large headphones for the duration of the session. These precautions minimized the possibility of both verbal and nonverbal communication between participants during the decision-making task.

Overview of the Task

Individuals were told they would be participating in a decision-making task with five other individuals. The task involved the use of shared resources. Their attention was then directed towards a single point of light

displayed on an otherwise black computer screen. Participants were told that the point of light (dot) was controlled by their joysticks, such that moving the joystick in any direction moved the dot in that direction. If the joysticks were not moved, the dot would remain more or less stationary, except for small, random fluctuations produced by the computer.

Participants were informed they would have an opportunity to earn money during the study, based upon how many resources they accumulated. The location of the dot would determine how many resources each person accumulated. They were told that, as long as the dot was stationary, all individuals would accumulate the same amount of money (one cent per second). Thus there was the possibility that each person could earn up to 60 cents per minute, as long as no one attempted to move the dot from its center position. However, each person was assigned a specific segment of the monitor's screen space equal to 60 degrees of arc (1/6 of 360°) that radiated from the dot located at the center of the screen to the borders of the screen (e.g., the person with Joystick 1 was assigned the upper right segment, the person with Joystick 2 the middle right, etc.). Whenever the dot was off center and in one person's assigned segment, that person would earn 1.5 cents per second, while the other five individuals would receive only 0.5 cents per second. Thus, if that individual managed to keep the dot in his or her segment for a full minute, he or she would earn 90 cents, while the other individuals would receive only 30 cents. Participants were told the computer would keep a tally of the accumulating points, and that this information would be confidential (they would be individually and privately paid at the end of the task).

The task was described as difficult because of several features: first, participants were told that, for any given second, the computer was programmed to respond only to one person's joystick inputs; thus, if one person had control of the dot, the others were "locked out" for that instant by the computer; second, they were told the computer was programmed to introduce a slight delay between joystick movements and movements of the dot. Third, they were told the computer had been programmed according to a "stochastic, fluctuation algorithm," so that the dot would sometimes move slowly and randomly even when no one was intentionally moving a joystick. These instructions were intended to increase individual's vigilance and involvement with the task, while at the same time increasing attributional ambiguity regarding perceived movements of the dot (i.e., as in Study 1, both sinister and benign attributions were available to explain what participants were seeing).

To summarize, the task structure, payoff schedule, and operational features of the computer system were designed to create a collective trust dilemma in which a group of interdependent decision makers must choose

between self-restraint (not moving the dot, a decision that maximizes collective long-term payoffs) and self-interest (i.e., increasing one's own gain at others' expense). Note that, in this kind of trust dilemma, individuals may move the joystick for reasons other than pure greed (e.g., even if they are not motivated by a desire to increase their own payoffs, individuals may decide to move their joysticks in a defensive or retaliatory fashion to thwart someone else's perceived attempt to do so).

While participants were led to believe that movement of the dot was controlled by their joysticks, in actuality the joysticks had no effect on the dot's location on the screen. The dot was stationary. However, the dot subjectively appears to drift off center in a random pattern in response to uncontrolled eye movements. Thus, while perceived movement of the dot is vivid and compelling, it is purely subjective. Importantly, any differences in the perceived magnitude of movement *across the four conditions of the study* can be attributed entirely to the manipulations of the independent variables described below. (Note: The study was conducted at night in a completely darkened room to help reduce visual orientation to surrounding objects which otherwise might be used as reference points. Pilot testing showed this led to increased perceived movement of the dot.)

Participants were told the task would last approximately 700 seconds (12 minutes) and would be divided into two periods of roughly equal duration. They were told the breaks were to provide them with an opportunity to rest and relax their eyes. In actuality, the breaks were used to introduce the rumination manipulation.

Rumination Manipulation. Halfway through the task, the researcher asked the participants to stop and take a break. To fill the time, they were asked to write a brief assessment. Participants in the *high-rumination condition* were asked to "try and imagine what the motives, intentions and strategies of the other five people with whom you are interacting are and then write them down." Those assigned to the *low rumination condition* were told the researchers were interested in learning more about the experience level of MBAs with personal computers. Accordingly, they were asked to write about their general level of previous experience using PCs. This condition was designed to parallel the distraction/control conditions used in previous rumination research (cf. Lyubomirsky & Nolen-Hoeksema, 1993).

Manipulation of Self-Consciousness. To manipulate self-consciousness, I employed procedures similar to those used in previous research (Carver & Scheiver, 1981; Fenigstein, 1979). Participants were told one purpose of the experiment was to see how MBAs, as prospective managers, coped with complex interdependent decision-making environments, since performance in such situations is often predictive of managerial ability. The use of such

abstract tasks, it was suggested, are particularly valuable because they minimize the effects of prior experience based upon specific problem contexts. In the *high self-consciousness condition,* participants were then told their reactions would be videotaped using a "nightcam" lens so that the experimenter could monitor how well they were coping with the task even in the darkened room. A video camcorder was conspicuously mounted in a corner of the room facing toward the group, with its red light blinking, indicating the camera was on. Those in the *low self-consciousness condition* were simply told that they would be debriefed at the end of the session. In this condition, the mounted camera was in the room, but the lens cap was on and the camera lens was pointed toward the floor.

To obtain the dependent measures, a questionnaire was administered immediately upon completion of the task. Individuals were then fully debriefed, paid, and thanked for their participation. (Note: all participants were paid the same amount.)

Results

Manipulation Checks

Several questions were included on the posttask questionnaire to provide checks on the effectiveness of the study manipulations. First, to assess the effectiveness of the self-consciousness manipulation, individuals were asked to indicate how self-conscious they felt during the task (1 = *not at all;* 7 = *very*). Individuals in the high self-consciousness condition reported significantly higher levels of self-consciousness ($M = 5.03$) compared to those in the low self-consciousness condition ($M = 3.89$), $F(1, 52) = 11.91, p < .002$.[6] The effectiveness of the rumination manipulation was assessed by asking individuals to estimate how much time they had spent thinking about the motives, intentions, and strategies underlying other's behavior (7-point scale, 1 = *very little time,* 7 = *a great deal of time*). Individuals assigned to the high rumination condition estimated that they had spent more time thinking about these issues ($M = 4.53$) compared to those assigned to the low rumination condition ($M = 3.10$), $F(1, 52) = 8.49, p < .006$. Thus, both manipulations appear to have been successful.

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[6]Interestingly, participants in the high self-consciousness condition uniformly expressed confidence during debriefing that the camera had had no effect on their perceptions or behavior.

Attributional and Judgmental Data

Several measures were used to assess how self-consciousness and rumination affected individuals' attributions regarding others' motives, intentions, and behavior during the task. First, upon completion of the task, individuals were asked to indicate how suspicious they were that others in their group, on average, were trying to take resources from the common pool. An analysis of variance revealed several effects. First, there was a main effect for self-consciousness, $F(1, 52) = 11.47$, $p < .01$, and a main effect for rumination, $F(1, 52) = 6.79$, $p < .01$. As is evident in Table III, individuals in the high self-consciousness condition were more suspicious of others' intentions and motives $(M = 5.21)$ compared to those in the low self-consciousness condition $(M = 4.28)$. Similarly, those in the high-rumination condition were more suspicious $(M = 5.10)$ compared to those in the low-rumination condition $(M = 4.39)$. The interaction was not significant, $F = 2.44$, $p > .10$.

Table III. Effects of Self-Consciousness and Rumination on Collective Attributions and Judgments[a]

| | Self-consciousness | | | |
| | Low | | High | |
Dependent variables	Low rumination	High rumination	Low rumination	High rumination
Suspicions regarding others' motives and intentions	3.71	4.85	5.07	5.35
Estimated total time the dot was off center position	384.64	519.64	506.78	537.14
Estimated occurrences of cheating	34.85	63.85	53.42	57.64
Trustworthiness of group	4.57	2.78	3.00	2.71
Attraction towards group	4.92	2.71	3.14	3.21
Willingness to interact again	4.64	2.64	3.07	3.00
Confidence in future interaction	4.85	2.85	3.07	3.07
Confidence in judgment	4.21	5.28	4.71	4.92

[a]Seven-point scales ranging from *not at alll likely* (1) to *very likely* (7).

To assess individuals' perceptions of the extent to which others in their group had actually engaged in untrustworthy behavior, individuals were asked to estimate how much time they thought the dot was off center because of another group member's attempts to increase his or her earnings. Individuals in the high self-consciousness condition estimated that the dot was off center for a significantly longer period of time (M = 521.96 seconds) compared to those in the low self-consciousness condition (M = 452.14 seconds), $F(1, 52) = 10.93, p < .01$. A similar pattern was observed for rumination (M = 528.39 and 445.71 seconds for the high- and low-rumination conditions, respectively), $F(1, 52) = 15.33, p <. 01$. However, interpretation of these main effects is qualified by an interaction between self-consciousness and rumination, $F(1, 52) = 6.14, p < .05$. As can be seen in Table III, individuals' estimates of "cheating" behavior were substantially lower in the low self-consciousness/low rumination condition compared to the other three conditions.

Individuals were also asked to estimate the number of specific instances of cheating they thought they had detected, defined as having perceived movement of the dot into one or more group members' segments during the task. There was a main effect for rumination, $F(1, 52) = 18.20$, $p < .01$, such that individuals in the high rumination condition thought they had detected more instances of cheating (M = 60.74 episodes) compared to those in the low rumination condition (M = 44.13 episodes). Although the main effect for self-consciousness was not significant (F = 2.52, $p = .12$), there was an interaction between rumination and self-consciousness, $F(1, 52) = 10.13, p < .01$. As can be seen in Table III, the lowest levels of perceived cheating occurred in the low self-consciousness/low rumination condition.

To assess how self-consciousness and rumination affected attributions regarding collective trustworthiness, participants were asked to indicate how trustworthy (1 = *not at all;* 7 = *very*) they felt their group as a whole had been during the task. A 2 × 2 ANOVA revealed main effects for both self-consciousness, $F(1, 52) = 7.37, p < .01$, and rumination, $F(1, 52) = 11.72, p < .01$, as well as a significant interaction between self-consciousness and rumination, $F(1, 52) = 6.14, p < .05$. As can be seen in Table III, as self-consciousness increased, individuals' perceptions of other's trustworthiness decreased (M = 2.85 and 3.67 for the high and low self-consciousness conditions, respectively). Similarly, rumination contributed to a decline in perceived trustworthiness (M = 2.74 and 3.78 for the high- and low-ruminations conditions, respectively). However, these effects were least pronounced in the low self-consciousness/low rumination condition.

Social Relational Measures

To assess some of the social consequences of self-consciousness and rumination, several additional measures were included in the study. First, individuals were asked to indicate how attracted they were to the group overall. There was a marginally significant main effect for self-consciousness, $F(1, 52) = 3.35$, $p = .07$, a significant main effect for rumination, $F(1, 52) = 9.30$, $p < .01$, and a significant interaction between self-consciousness and rumination, $F(1, 52) = 10.58$, $p < .01$.

Second, individuals were asked to indicate how interested they would be in interacting with these same people again on another task. There was a marginally significant main effect for self-consciousness, $F(1, 52) = 3.07$, $p = .07$, a significant main effect for rumination, $F(1, 52) = 8.94$, $p < .01$, and a significant interaction between self-consciousness and rumination, $F(1, 52) = 7.75$, $p < .01$.

Finally, to assess the extent to which their experience had affected their perceptions of the group's future trustworthiness, they were asked to indicate how confident they were that, given another opportunity, their groups would behave in a more trustworthy fashion "next time around." There was a significant main effect for self-consciousness, $F(1, 52) = 5.97$, $p = .05$, a significant main effect for rumination, $F(1, 52) = 9.67$, $p < .01$, and a significant interaction between self-consciousness and rumination, $F(1, 52) = 9.67$, $p < .01$. As is readily apparent from inspection of the means in Table III, the pattern of results for each of these variables parallel closely their previous perceptions and judgments: that is, in each case, rumination and self-consciousness impaired collective trust and confidence, with the least evidence of this pattern emerging in the low self-consciousness/low-rumination condition.

Attributional and Perceptual Confidence

To assess the effects of self-consciousness and rumination on individuals' confidence in their social perceptions and judgments, participants were asked to indicate on a 7-point scale how confident they were (1 = not at all, 7 = very) that their judgments were accurate. Analyses of variance revealed that, consistent with Hypothesis 7, rumination increased individuals' confidence in their judgments about others' motives and intentions, such that those in the high-rumination condition reported significantly more confidence ($M = 5.10$) compared to those in the low-rumination condition ($M = 4.46$), $F(1, 52) = 8.13$, $p < .05$.

Discussion

The results of Study 2 replicate and extend the basic findings from Study 1. Because they are based upon a different methodology and utilize an alternative operationalization of paranoid cognition, these results enhance confidence in the internal validity of the general argument that heightened self-consciousness and rumination contribute to paranoid cognition. In implicating rumination in this process, the results of Study 2 add weight to an accumulating body of evidence regarding the effects of rumination on social judgment, while also extending those results in an important direction. Previous research on rumination has focused primarily on the effects of self-focused rumination on individuals' perceptions of their *own* psychological states (e.g., depression and affect). In contrast, little attention has been afforded to the question of how rumination about *others'* psychological states affect social perception and judgment. In this respect, the present study documents the deleterious effects of *other-focused* rumination on social judgment and behavior in situations of high interdependence. Given the central role that such interdependence plays in social and organizational life, it is important to understand how rumination affects perceptions of collective behavior.

The results also show that ruminating about others' motives and intentions, rather ironically, can increase individuals' confidence in the veridicality of their judgments and attributions. It might seem surprising that mere rumination would increase individuals' confidence in this fashion. After all, on *prima facie* grounds, one might argue just the opposite (i.e., the more individuals ruminate about events, the more likely they would be to generate a large number of alternative interpretations, leading to decreased confidence in their initial interpretation). However, as Wilson and Kraft (1993) have aptly noted, "Because it is often difficult to get at the exact roots of [many] feelings, repeated introspections may not result in better access to the actual causes. Instead, people may *repeatedly focus on reasons that are plausible* and easy to verbalize" (p. 410). Such results suggest the operation of an interesting "effort heuristic" (i.e., "Since I've thought so much about this, it must be true"). In this respect, these findings have implications for understanding not only the origins of paranoid cognitions but also how such cognitions are sustained, and why they might be relatively resistant to disconfirmation or extinction.

In assessing the generality of the observed relationship between rumination and paranoid cognition, it is important to emphasize that I am not arguing here that rumination necessarily contributes to paranoid cognitions in all situations. For example, in the context of positive social relationships within organizations (e.g., relationships in which collective trust

in others' intentions and motives is high, rumination might actually accentuate perceptions of collective trustworthiness). As previous research has shown, rumination leads to attitude change in the direction of individuals' preexisting attitudes and beliefs (e.g., Wilson & Kraft, 1993, found that rumination about a positively regarded loved one resulted in an increase in positive evaluations of the relationship with that person). This raises the interesting possibility that in some contexts, one might observe a *benign* attribution error in which individuals confer too much trust on others (see Kramer, Brewer, & Hanna, in press).

GENERAL DISCUSSION

The contributions of this research can be discussed on several levels, including its contribution to theory, methodological contributions, and managerial implications.

Theoretical Contributions

Trust Theory

As noted earlier in this paper, there exists a substantial literature on trust and distrust. In much of this literature, trust and distrust have been conceptualized primarily in terms of *either* micro or macro level processes (although see Sitkin & Roth, 1993, for a notable exception). For example, psychological research on trust has examined in great detail the role that cognitive processes such as attributions, expectations, and individual differences play in the development of trust and distrust (Deutsch, 1958; Rotter, 1967; Wrightsman, 1991). It has also afforded considerable attention to identifying specific patterns of behavioral interaction that increase or decrease trust (Lindskold, 1978; Rotter, 1980). However, these psychological theories have remained generally "acontextual," at least in so far as they ignore the impact of organizational structures and processes. In contrast, sociological research has paid considerably more attention to the organizational structures and processes that influence trust and distrust (see, e.g., Granovetter, 1985; Shapiro, 1987; Zucker, 1986). However, the psychological processes that mediate individuals' response to such structures and processes have remained largely unspecified.

In response to this state of affairs, a number of scholars (notably Barber, 1983; Lewis & Weigert, 1985; Sitkin & Roth, 1993) have suggested the need for more integrative theory regarding trust and distrust. In par-

ticular, they have proposed that what is needed is theory and research that articulates more clearly the linkages between the micro-level, psychological underpinnings of distrust and the various social and organizational contexts within which problems of distrust arise. The present research contributes to our understanding of at least some of these crucial links between trust-related cognitions and structures. In particular, it suggests how individuals' location in a social system can influence basic cognitive processes such as attributions and expectations — attributions and expectations that, in turn, affect perceptions of collective distrust and suspicion. Of course, organizational theorists have long recognized that the effects of location within a hierarchical social system are far from trivial (e.g., Barley, 1991; Fox, 1974). For example, as Barley (1991) cogently noted, location determines whether individuals are "insiders" or "outsiders" in important social networks. Moreover, from a social information processing perspective, location affects not only the availability and salience of information (*what* gets seen), but also how that information is evaluated and weighted.

Broader Implications

While much of the analysis up to this point has focused on the individual and interpersonal consequences of the sinister attribution error, there may be some broader collective consequences as well. In his influential analysis of organizations, Scott (1987) identified a number of organizational pathologies that can undermine organizational effectiveness and disrupt cooperative relationships within organizations (see also Kets de Vries & Miller, 1984). Extrapolating from the results of the present study, it seems reasonable to argue that organizations in which collective paranoia is high might be particularly vulnerable to such pathologies. In particular, one might argue that collective paranoia adversely affects individuals' attachment to an organization, as well as their commitment to its collective goals. For example, it may be hard for individuals to initiate cooperative acts, when they lack confidence in others' willingness to do the same (Messick et al., 1983). Similarly, collective paranoia may heighten the potential for intraorganizational conflict. As Pfeffer (1981) observed, when organizational members lack confidence in the trustworthiness of other organizational members on whom they depend, "there is less energy expended on the production of the collective product and more time and attention given to the political activity of dividing up the resources produced by the organization" (p. 367). In the absence of collective trust, individuals may decide they might as well "get while the getting is good."

Methodological Contributions

This research also makes several methodological contributions. First, the vignette methodology introduced in Study 1 provides a useful approach for studying cognitive and social processes that affect trust-related judgments within specific organizations. A particular advantage of the vignette methodology is that it enables a researcher to construct organization-specific scenarios. In this way, the researcher can bring a given organizational context directly to bear upon the study of trust and distrust. In principle, this should enhance the ecological validity of theories that emerge from such studies.

In contrast, the laboratory analog introduced in Study 2 provides a way to study more general psychological and social processes related to trust and distrust. As noted earlier, analog studies are well suited for investigations of basic psychological and social processes because they allow a researcher to eliminate the influence of confounding variables and minimize the extraneous sources of variation that often complicate field research. Combined, these methods constitute complementary approaches, allowing the researcher to move back and forth between lab and field, enabling researchers to retain rigor while not losing sight of relevance (Brewer, 1985).

Managerial Implications

Although the primary aim of the present research was to contribute to theory regarding the origins and dynamics of distrust in organizations, the conceptual analysis presented in this paper has a number of practical managerial implications. First, the results raise the possibility that organizational members may sometimes engage in insufficient reality testing. In particular, in situations where distrust and suspicion are conferred presumptively, individuals may not subject their fears and suspicions to adequate tests. Indeed, there is evidence that paranoid actors often unintendedly structure their social and organizational interactions in ways that confirm their worst fears and suspicions (see, in particular, Kramer, in press-a and Pruitt, 1987). To counter such dynamics, organizations need to provide organizational members with the necessary information to allay their fears and suspicions, including information that provides reassurance about not only their standing in the organization, but also the fairness and trustworthiness of procedures and outcomes that affect them (cf. Bies & Moag, 1986; Tyler, 1993).

These results also suggest the possibility that some of the structural and procedural approaches that groups and organizations routinely use to solve problems of trust may, under some circumstances at least, exacerbate collective distrust and suspicion. For example, to remedy problems surrounding trust, organizations often rely on relatively formalized, legalistic procedures (see Sitkin & Bies, 1993, for an overview). These procedures are intended to enhance trust by providing reassurance that fair treatment and due process are available to all individuals within the organization. By making salient the need for such special procedures, however, organizations implicitly convey a message — especially to those in positions of lower power and greater dependence — that spontaneous behavior and the normal routines governing social interaction cannot be relied upon or trusted fully to achieve these aims. Thus, from an attributional standpoint, such solutions may unintendedly enhance collective distrust and suspicion, rather than alleviate it.

Caveats

Before concluding, it is useful to raise a few caveats. First, the terms "paranoid cognition" and "irrational" distrust may seem excessively perjorative labels that, in effect, blame the victim. For example, characterizing the cognitive processes of individuals who happen to occupy relatively disadvantaged positions within organizations (such as newcomers) as paranoid might seem to minimize the legitimacy of their concerns or plight. This is far from the intent of the present analysis. Rather, the spirit of the analysis is to suggest some of the deleterious cognitive and social consequences of certain positions or locations in social hierarchies, especially with respect to fostering a debilitating pattern of misconstrual and misattribution. A better understanding of these irrational bases of distrust and suspicion is a first step towards the development of more efficacious behavioral technologies for building and restoring trust in organizations.

Relatedly, the term sinister attribution error implies a mistaken or flawed process of inference, again seeming to cast aspersions on the cognitive competence of the hapless organizational actor. Insofar as the results of the present study do document that psychological processes such as self-consciousness and rumination lead to systematic distortions in the attribution process, the term error or bias seems quite appropriate. However, it is important not to misconstrue such cognitive errors as errors in a more existential sense. In many organizations, the risks and costs associated with misplaced trust may be quite substantial. In highly political organizations, for example, a propensity towards vigilance with respect to detecting others'

lack of trustworthiness may be quite prudent and adaptive. In such environments, it is often better to be safe than sorry.

Such possibilities prompt consideration of other adaptive functions of paranoid cognitions in organizations. While the arguments up to this point have emphasized almost exclusively their maladaptive consequences, there are several ways in which the psychological processes associated with paranoid cognitions (i.e., heightened vigilance, self-consciousness, and rumination) may have adaptive consequences, especially for individuals who are relatively disadvantaged with respect to their power or status. First, as noted above, distrust is not always irrational. Even though the fears and suspicions of organizational actors may sometimes be exaggerated, this does not mean that their distrust is necessarily without foundation. The expression, "Just because you're paranoid doesn't mean they *aren't* out to get you," often contains more than a kernel of truth.

When viewed from this perspective, psychological states such as vigilance and rumination may be quite useful. In much the same way that defensive pessimism has been shown to contribute to a form of adaptive preparedness when individuals anticipate challenging events (Norem & Cantor, 1986), so might paranoid cognitions help individuals maintain their motivation to overcome perceived dangers and obstacles within their social environments, even if those dangers and obstacles are — from the perspective of a more neutral observer — exaggerated. After all, at the very heart of the dilemma for organizational members is not simply whether to trust or distrust, but rather how much trust and distrust are appropriate in a given situation. Ultimately, the question becomes not whether distrust and suspicion are good or bad, but rather, "How much is enough?"

APPENDIX

Sample Vignette Items from Study 1

1. You call a [first/second] year student one night in the middle of finals week and leave a message on their phone that you have an urgent question regarding a final exam and could they please call you back that evening, no matter how late. You never hear from them.
How likely is it that

   (a) they never received your message and/or were unavailable to call you back.
   (b) they heard your message but decided not to call you back.

2. You run into a [first/second] year student during midterms. You don't know the person well, but you have talked a few times at informal social gatherings in the business school. The person seems rather frantic and asks whether they can borrow some money for lunch, promising to pay you back after the exams are over. You loan them $5.00. Later, during the following quarter, you run into the person in the cafeteria again. They are buying a cup of coffee and have a ten dollar bill in their hand. They are quite pleasant to you, making small talk, but never raise the issue of the loan or offer to pay you back.

How likely is it that

(a) they simply forgot about the loan.
(b) they were never serious about repaying it.

3. You are having lunch with a group of students that you have just met. You are telling a joke that you consider quite funny. Suddenly, in the middle of telling the joke, one of the [first/second] year students in the group gets up and leaves.

How likely is it that

(a) they thought your joke was uninteresting.
(b) they actually did have an appointment.

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