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THE SALIERI SYNDROME

Consequences of Envy in Groups

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A model of the impact of envy in groups is proposed and tested in a longitudinal study of 143 groups. Envy was directly and negatively related to group performance. Moreover, envy indirectly influenced group performance, absenteeism, and group satisfaction by increasing social loafing and reducing both group potency and cohesion. This study provides an initial step in identifying the processes through which envy impacts group effectiveness. Implications are discussed and future research directions are identified.

Who dares to say that the ever proud Salieri could stoop to envy, like a loathsome snake, trampled upon by men, yet still alive and impotently gnawing sand and dust? . . . But now—myself I say it—yes now I do know envy—Yes, Salieri envies! O Mozart, O Mozart!
—Pushkin (1832/1964)

Until recently, the experience of negative emotion at work received relatively little attention from social science researchers (George, 1990, 1992a). However, interest in the study of negative emotion and its consequences is growing as researchers recognize the cumulatively negative effects these emotions have on important organizational outcomes such as performance, employee withdrawal, sabotage, and turnover (e.g., Ashforth & Lee, 1990). One potentially important, yet virtually ignored, emotion deserving attention in organizational research is the experience of envy (Bedeian, 1995; Vecchio, 1995). Although scarcely researched, the experience of envy has a long, colorful history, including the infamous story of Mozart and his contemporary, Salieri.

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ENVY DEFINED

Often confused with jealousy, envy occurs when the perception exists that a “person lacks another’s superior quality, achievement, or possession and either desires it or wishes that the other lacked it” (Parrott & Smith, 1993, p. 906). According to these authors, the experience of envy is best conceptualized as a constellation of various distinguishable affective elements that typically occur during episodes of envy. Such affective reactions may include, but are not limited to, inferiority, longing, resentment of one’s circumstances, shame, depression, helplessness, insecurity, frustration, and ill-will toward the envied person.

As the previous constitutive definition suggests, social comparison with one’s peers is often the trigger for envy. Given that much of one’s self-worth is derived from social comparison (see Tesser & Campbell, 1990, for an example), it is not surprising that when one’s accomplishments, talents, and possessions are perceived to compare poorly with those of another individual, private and public self-esteem may suffer (Parrott, 1991). In addition to envy arising from decreases in esteem and public stature, negative social comparison is theorized to lead to envy by “heightening one’s awareness” that “one’s own deprivation” and suffering are not shared by all (Parrott, 1991, p. 7).

Despite the fact that little systematic research examining the antecedents and consequences of envy in the workplace is conducted (see Vecchio, 1995, for an exception), it is easy to imagine how the nature of organizational life gives rise to frequent social comparisons that may give rise to envy. For example, competition for and allocation of scarce organizational rewards in the form of merit raises, office space, promotions, grants, valued assignments, and promotions are all potential catalysts for social comparison among colleagues. Merely noticing the superior work achievements of another may also result in envious social comparisons between oneself and a colleague (Tesser & Campbell, 1990). As the Cinderella myth suggests, a person who is simply striving to meet personal standards may arouse the resentment of others merely for that fact alone (Ulanov & Ulanov, 1983). Finally, as Bedeian

(1995) notes, any situation in which one employee obtains an advantage at the expense of other employees may provoke coworker envy.

CONSEQUENCES OF ENVY

Feelings of envy often lead to a variety of affective and behavioral reactions that generally are believed to be aimed at repairing damaged self-esteem and social status (Salovey & Rothman, 1991). Results from studies in social psychology suggest that such damage control-based reactions often occur at the expense of the individual and/or the rival. Responses to envy include depressed mood and anxiety, avoidance of the comparison person (Salovey & Rodin, 1986), overt hostility (Parrott & Smith, 1993), degrading comparison individuals and their accomplishments (Silver & Sabini, 1982), and attempting to prevent the rival's successful performance (Tesser & Smith, 1980). White and Mullen (1989) identified nine major coping strategies for dealing with jealousy and envy (family, friend, and romantic), which Vecchio (1995) then synthesized with the organizational setting. According to Vecchio's work-adapted model, potential reactions to envy may include sabotaging the rival's work, back-stabbing a competitor, harassment or ostracism of the rival, pretending to be disinterested in the rival, and bolstering one's own self-image.

Unfortunately, although envy-related reactions receive some empirical attention in the social psychology literature, we are aware of only one empirical study to date (Vecchio, 1995) that examined the effect of envy on outcomes typically considered relevant in work contexts. Results of this study indicated that envy of one's colleagues was significantly related to propensity to quit, job dissatisfaction, and supervisor dissatisfaction. In sum, although envy is a pervasive and commonplace emotion with important implications for understanding organizational behavior, researchers only "reluctantly acknowledged the inhibiting and destructive aspects of this emotion in the workplace" (Bedeian, 1995, p. 50).

Given the serious consequences resulting from envy-laden interpersonal relationships, it is imperative that employees who are experiencing negative emotions such as envy “be the object of study in order to more accurately determine what protagonists, targets, and rivals actually do, feel, and think” (Vecchio, 1995, p. 216). Considering the increase in employee violence and workplace sabotage, as well as the increasing costs of deviant workplace behavior (e.g., Robinson & Bennett, 1995), calls for further research are clearly warranted. This article is intended to begin to fill this gap by exploring the consequences of the experience of envy in groups.

ENVY IN THE GROUP CONTEXT

Vecchio (1995) suggests that the recently popular approach to increasing organizational commitment through the use of self-managed work teams may result in diminished feelings of workplace jealousy and envy. Briefly, Vecchio theorizes that shared responsibility for task completion and mutual work dependence in groups may serve to attenuate the competitiveness found in traditional workplace settings. Although this may be true, it should be recognized that work groups may also be an ideal setting for incidences of envy in the workplace. That is, the occurrence of envy in groups may be especially likely because group members work closely together. The result is that group members interact often and come to know each other very well. As Tesser and Campbell (1990) suggest, the closer an individual is to someone, the more likely that envious comparison processes will occur. Envy in groups may be especially detrimental given the proclivity of envious individuals to engage in deviant behaviors (e.g., social loafing, sabotage), which may cause harm not only to themselves, but to other group members. The ultimate result may be a diminishment of group performance and other positive group outcomes. These factors, combined with the fact that organizations are continuing to emphasize team- or group-based work, suggest that research examining envy in work groups is a critical area for study.

THE PRESENT STUDY

Figure 1 depicts the conceptual framework underlying this study. Envy in the work group is proposed to influence group outcomes (e.g., group performance, absenteeism, and group satisfaction) both directly and indirectly. Drawing on theory from social psychology, we propose that higher levels of envy within the group result in lower levels of group performance and group satisfaction and higher absenteeism rates. The experience of envy has been described as a consuming emotion in which one's weaknesses or flaws feel physically apparent. Low self-esteem, anxiety, hostility, depression, or decreased self-efficacy may result. To the extent that envy interferes with the ability to perform, increases in envy within the group should be associated with decreases in group performance. In addition, because withdrawal is often a coping strategy for dealing with envy, it is predicted that higher levels of envy would result in increased absenteeism. Finally, if group members are increasingly resentful of one another and of each other's accomplishments, group dissatisfaction should be another consequence.

In addition to these direct effects, we propose that envy indirectly influences group outcomes through social loafing, cohesion, and potency. First, drawing on social psychology literature, we propose that increased levels of envy will be associated with higher levels of social loafing which, in turn, will be detrimental to group functioning (Latané, Williams, & Harkin, 1979). As previously noted, responses to envy are believed to include avoidance of the comparison person(s), hostility, and attempts to prevent a rival's successful performance (Parrott & Smith, 1993). This occurs even at the expense of one's own success. Social loafing behavior represents an ideal method of simultaneously sabotaging a rival's performance (by refusing to participate in the group effort) and manifesting hostility in a passive-aggressive manner (e.g., not following through on group-related commitments) (George, 1992b; Latané et al., 1979). These behaviors then would be expected to diminish group effectiveness.

Envy is also proposed to be associated with decreased levels of group cohesiveness and potency, which are then hypothesized to

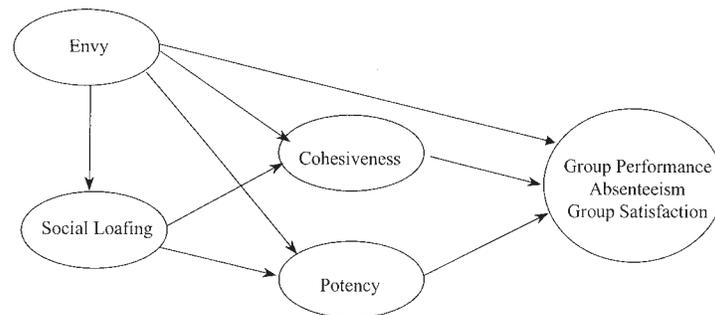


Figure 1: Hypothetical Model

influence group outcomes. Cohesiveness includes elements of interpersonal attraction and group commitment and is consistently positively related to group effectiveness (e.g., Evans & Dion, 1991; Gully, Devine, & Whitney, 1995; Mullen & Copper, 1994; Reizenstein & Burke, 1996). Groups that direct more energy toward the desired outcomes through increased commitment, rather than toward internal conflict and conflict management, should perform more effectively (Reizenstein & Burke, 1996; Wolfe & Box, 1988). Envy is associated with higher levels of hostility, anxiety, and back-stabbing (Parrott & Smith, 1993; White & Mullen, 1989). Such feelings could be expected to decrease the “we” feeling of group members captured by group cohesion.

Furthermore, the characteristic back-stabbing attitudes and behaviors of envious group members should also diminish the performance expectations or potency (Shea & Guzzo, 1987) of the group. Potency is the belief that the group can be effective (Guzzo, Yost, Campbell, & Shea, 1993) and can be thought of as a type of self-efficacy or high expectancy for the group (Campion, Medsker, & Higgs, 1993). Hackman (1987) proposed that group potency facilitates commitment to the group and greater effort from group members, ideas that are completely at odds with envious emotion.

Obviously, if envy results in higher levels of social loafing, group potency would be diminished and group effectiveness would be compromised. Moreover, as envy redirects energy away from group activities, the belief of the group as a whole that it can succeed may be diminished, reducing group effectiveness. It should be explicitly noted that the focus and context of our study is on the emotion or state of envy elicited by the current members of an individual's group. The study of envy, although sparse, also includes the examination of trait or dispositional enviousness (e.g., Smith & Turner, 1996), which is beyond the scope of this study.

METHOD

SAMPLE

Participants in the study were 566 upper-division undergraduate students enrolled in group-based classes at a large southern university. The sample included 143 groups ranging in size from three to seven members. The sample was 61% male with a mean age of 22 years. Three self-report questionnaires were administered at three time periods over a 16-week term. Participants were guaranteed confidentiality and were assured that participation was voluntary. Each participant in the study signed a waiver that allowed the research team to collect performance information from class instructors at the end of the term. The data collections were temporally separated by a period of 8 weeks, in part to reduce the response bias associated with common method and fatigue from long questionnaire administration (Ganster, Fusilier, & Mayes, 1986). The first data collection occurred during the first week of class and before participants were assigned into groups. In this collection, background information and ability (e.g., grade point averages) measures were collected. The second wave of data was collected in the week following midterm, about 8 weeks after the first administration. This collection included the envy, social loafing, cohesiveness, and potency measures. Explicit oral instructions at Time 2

cued participants to respond to questionnaire items with regard to their assigned work group in the focal class only. Moreover, the written instruction sets for each relevant section of the Time 2 questionnaire prompted participants to respond to the group items with reference to their current group in that class. Group satisfaction and absenteeism measures were collected in the final data collection during the last week of class or approximately 16 weeks after the first questionnaire administration. Following the term, group performance and group size for each group was collected from course instructors.

GROUP CONTEXT

Participants were enrolled in courses taught in a format in which a large part of an individual's course grade was based on the performance of their assigned group. All of the course instructors required groups to work on projects during and outside of class time. Participants reported working with their group outside of class for an average of 2.27 hours per week during the term, or roughly 36 hours outside of class in addition to in-class projects. Thus, although the use of undergraduate students to simulate work environments has been the subject of much debate, the participants had substantial interactions with group members over a 4-month period in a simulated work-group environment. These simulated conditions are similar to the context in a recent study by Wagner (1995).

MEASURES

All measures were operationalized at the group level. Thus, except where noted, the mean level for the group forms the measure. Also, except where noted, all items were in a Likert-type format with seven response options. Coefficient alpha reliabilities for the scales are reported on the main diagonal in Table 1.

Independent variables. Envy was measured with five items adapted from a scale created by Vecchio (1995). The items were

TABLE 1: Descriptive Statistics and Correlations Among All Study Variables

	M	SD	1	2	3	4	5	6	7	8	9
1. Group performance	0.00	1.00	#								
2. Absenteeism	3.62	9.83	-.05	#							
3. Group satisfaction	5.33	1.35	.26**	.25**	(.84)						
4. Envy	2.92	0.71	-.28**	.19*	-.24**	(.75)					
5. Social loafing	4.43	1.03	-.20*	.10	-.33**	.40**	(.81)				
6. Cohesiveness	4.97	0.84	.20*	-.25**	.59**	-.30**	-.46**	(.83)			
7. Potency	5.27	0.69	.35**	-.12	.54**	-.33**	-.26**	.58**	(.90)		
8. Ability	3.27	0.82	.04	-.10	.01	-.12	-.06	.06	.07	#	
9. Group size	4.52	1.12	.08	.12	.23**	.01	.02	.05	.22**	.06	#

NOTE: Pairwise deletion procedure used to generate the correlation matrix. $N_s = 130-143$.
 $*p < .05$. $**p < .01$. Two-tailed tests.

adapted to reflect feelings of envy with respect to one's group members in this study. These items were designed to assess feelings of resentment and inferiority relative to group members. A sample item is, "Most of my team members have it better than I do." Social loafing was measured with three items adapted from a scale by George (1992b). The measure taps self-report social loafing behavior. The items examined the extent to which an individual tended to do less than his or her share of work when other group members were available to do the work. A sample item is, "Sometimes I let my team members do the work that I should do." Cohesiveness was measured with a four-item scale developed by Seers (1989). A sample item is, "This group has a strong sense of togetherness." Group potency was measured using an eight-item scale developed by Shea and Guzzo (1987). A sample item is, "This group believes it can produce extraordinary work."

Control variables. We included two control variables that may be related to the independent or dependent variables: group size and ability. Groups should be large enough to handle group tasks, but small enough to control coordination needs (e.g., Campion et al., 1993; Gladstein, 1984), and consequently, group size may be related to performance and group process. Group size was collected from the instructor of each course. In addition, we controlled

for the average ability level of group members utilizing a commonly used proxy for ability, grade point average (Wagner, 1995). Gross ability levels are used as a control because they may be related to performance levels in groups (Saavedra & Kwun, 1993). Participants reported their cumulative grade point average during the first data collection. The mean level for the group forms the measure. Although not the central focus of the study, inclusion of these variables makes the results more generalizable and reduces the potential for alternative explanations of the findings.

Group performance. Performance or effectiveness can be operationalized or measured on several dimensions (Campion et al., 1993). We measured the performance of the group along three dimensions: overall group performance, group satisfaction, and absenteeism. Overall group performance represents the part of performance in the class solely attributable to the group. This variable was not an aggregation of individual performance, but rather a true group-level measure. This variable was collected from course instructors following the term. The variable was standardized by class for comparability across the sample. Group satisfaction was measured with a three-item scale adapted from a scale developed by Cammann, Fichman, Jenkins, and Klesh (1983). A sample item is, "All in all, I am satisfied with my team." Absenteeism was operationalized as the number of times participants were absent from class over the course of the term and was reported by the participants. This measure was collected during the final data collection.

ANALYSIS STRATEGY

Correlational analyses were used to investigate the hypothesized bivariate relationships. Path analysis (Cohen & Cohen, 1983) was used to obtain path estimates for the hypothesized model. A full path analysis for each of the three group performance outcomes was conducted following procedures described by Cohen and Cohen (1983). Group size and ability measures were used as control variables in all steps of the path analysis. To estimate model fit, the Q statistic (Pedhazur, 1982) was used.

RESULTS

Descriptive statistics and correlations among all study variables are shown in Table 1. As expected, envy was related to each of the three group-performance measures in the zero-order correlations. Envy was negatively related to group performance ($r = -.28, p < .01$) and group satisfaction ($r = -.24, p < .01$) and positively related to absenteeism ($r = .19, p < .05$). Furthermore, the relationship between envy and each of the intermediate variables in the model was also significant and in the predicted direction. Envy was positively related to social loafing ($r = .40, p < .01$), and negatively related to cohesiveness ($r = -.30, p < .01$) and potency ($r = -.33, p < .01$). More interesting, however, are the path analyses that allow an assessment of these relationships in context.

The results of the path analyses regression are reported in Table 2. In each of the equations, the relationships of interest are examined after partialling the effects of group size and ability. The results of the three path analyses are also depicted graphically in Figures 2 through 4. For clarity, control variables are not included in the figures. In each figure, solid lines denote the significant paths.

Overall, the control variables were not strong predictors. Group size was only related to group satisfaction ($\beta = .16, p < .05$) in the full equation, whereas the ability measure was not a significant predictor in any equation. These results mirror the bivariate relationships reported in Table 1.

The path analyses indicated that envy was positively associated with social loafing in the group ($\beta = .36, p < .01$) and negatively related to potency ($\beta = -.34, p < .01$) and cohesiveness ($\beta = -.18, p < .05$). Interestingly, and contrary to expectations, envy was not directly related to the group effectiveness measures, although the relationships with group performance ($\beta = -.16$) and absenteeism ($\beta = .17$) approached significance.

Social loafing was found to be associated with decreased potency ($\beta = -.18, p < .05$) and cohesiveness ($\beta = -.40, p < .01$), as expected. Although social loafing was negatively related to both group performance and satisfaction at the bivariate level, there was no direct effect of social loafing on these outcomes when entered in

TABLE 2: Path Analysis Results

	Intermediate Dependent Variables			Group Performance Variables		
	Social Loafing	Potency	Cohesiveness	Group Performance	Absenteeism	Group Satisfaction
Control variables						
Ability	.02	.01	.04	-.02	-.08	-.03
Group size	.00	.15	.05	-.00	.13	.16*
Independent variables						
Envy	.36**	-.34**	-.18*	-.16	.17	.03
Social loafing		-.18*	-.40**	-.12	-.07	-.09
Cohesiveness				-.08	-.29**	.37**
Potency				.27*	.08	.28**
Total R ²	.131**	.227**	.231**	.147**	.109*	.429**

NOTE: Standardized regression coefficients are reported for all variables. *N* = 129.
p* < .05, two-tailed. *p* < .01, two-tailed.

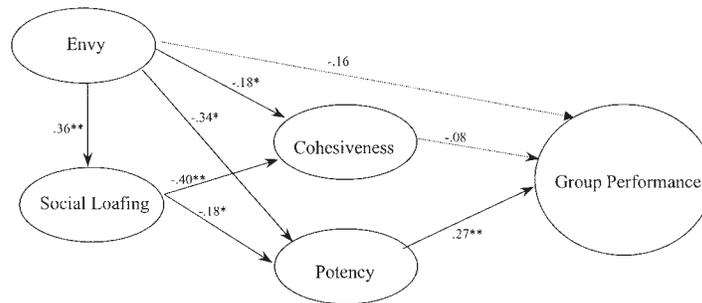


Figure 2: Path Model With Group Performance as the Dependent Variable

NOTE: Solid lines denote significant paths.

the regression equation with other variables. Thus, the relationship between social-loafing and group performance measures is mediated by potency and/or cohesiveness.

The path analyses also indicated that cohesiveness was negatively related to absenteeism ($\beta = -.29, p < .01$) and positively related to group satisfaction ($\beta = .37, p < .01$). However, there was

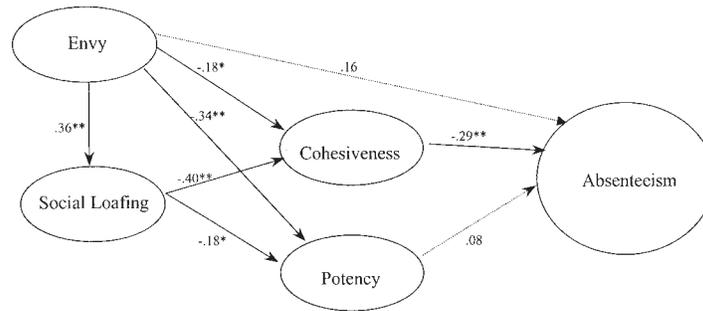


Figure 3: Path Model With Absenteeism as the Dependent Variable
NOTE: Solid lines denote significant paths.

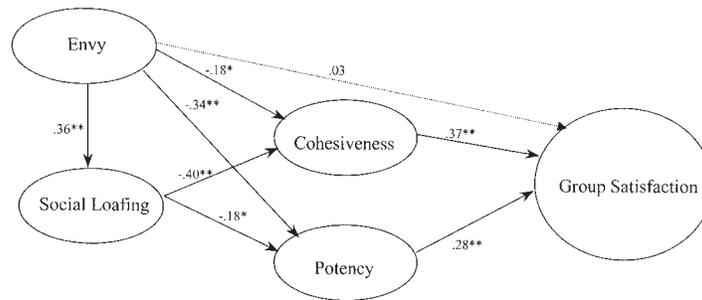


Figure 4: Path Model With Group Satisfaction as the Dependent Variable
NOTE: Solid lines denote significant paths.

no significant relationship between cohesiveness and group performance ($\beta = -.08, ns$). Interestingly, potency was found to be significantly related to group performance ($\beta = .27, p < .05$) and group satisfaction ($\beta = .28, p < .01$), but not to absenteeism ($\beta = .08, ns$).

Lastly, as shown in Figures 2 through 4, the following indirect paths were found to be significant: (a) envy and group performance through potency as well as through social loafing; (b) envy and group satisfaction through potency, cohesiveness, and social loafing; (c) envy and absenteeism through cohesiveness and social

loafing; (d) social loafing and group performance through potency; (e) social loafing and group satisfaction through cohesiveness and potency; and (f) social loafing and absenteeism through cohesiveness.

The goodness of fit for each model was tested using the Q statistic (Pedhazur, 1982). The Q statistic is the “ratio of explained variance to the variance to be explained” (Pedhazur, 1982, p. 619). More formally,

$$Q = \frac{1 - R_m^2}{1 - M}$$

In the formula, R_m^2 is equal to $(1 - (1 - R_1^2)(1 - R_2^2) \dots (1 - R_p^2))$, where R_i^2 is the “ordinary squared multiplication correlation coefficient of the i^{th} equation in a fully recursive system” (Pedhazur, 1982, p. 619). R_m^2 can be interpreted as the “ratio of explained variance to the variance to be explained” (Pedhazur, 1982, p. 619). M is defined as the squared multiple correlation coefficient for a reduced model in which nonsignificant paths are deleted. The Q statistic can vary from zero to one, with values approaching one indicating excellent model fit (Pedhazur, 1982). Q is not biased by sample size as are measures of fit such as chi-square, and thus represents a more precise way to assess goodness of fit. In the present study, the Q statistic for group performance and absenteeism by group were .79 and .85, respectively, indicating good model fit. Q for group satisfaction was .98, indicating excellent model fit.

DISCUSSION

The results of this study shed new light on how groups function and the processes by which envy diminishes the overall group effectiveness. Given that the cost of deviant behavior in the work place is prohibitive (Vecchio, 1995), and because social-psychological studies show envy to be related to a plethora of damaging individual behaviors and attitudes (e.g., Parrott & Smith, 1993), it is important that more be known about the influence of

envy in group dynamics. This study was aimed at investigating whether envy diminishes group effectiveness. Moreover, this study represents a first attempt at peeking into the “black box” and exploring how envy influences group effectiveness. We examined a path model of envy’s influence using longitudinal data on 129 groups. Based on previous research at the individual level, it was hypothesized that the level of envy in the group would increase social loafing and diminish group cohesion and potency that would, in turn, diminish group effectiveness. The results generally supported these expectations.

The strong relationship between envy and social loafing is consistent with existing theory. Previous research in social psychology shows that envious individuals often pretend to be disinterested in their rivals (Vecchio, 1995; White & Mullen, 1989). It appears that this disinterest may be translated into higher levels of social loafing in groups. The result is damage to the processes through which groups function effectively, which consequently lowers the level of group effectiveness. Interestingly, social loafing was not directly related to any of the outcome measures; the effects of social loafing on performance, absenteeism, and group satisfaction were completely mediated by the group-process measures of cohesiveness and potency.

Envy was also directly related to group cohesiveness and potency. Cohesiveness includes both elements of interpersonal attraction and group commitment (Gully et al., 1995), factors theoretically at odds with the back-stabbing, harassing nature of envy. The empirical results reported here support this theoretically predicted negative relationship. In addition, cohesiveness mediated the relationship between envy and absenteeism and envy and group satisfaction. However, potency mediated the relationship between envy and group performance. Although empirical research with respect to potency is rather scarce, these results confirm speculations with respect to potency. Potency is theoretically proposed as a performance dimension or a type of efficacy or high-expectancy for the group (Campion et al., 1993), and these results tend to bear this out. Higher levels of potency were strongly related to group

performance, but not to the other outcomes. Findings that show potency to be related to performance, and cohesiveness to be related to group-member attitudes (e.g., satisfaction) and behaviors (e.g., absenteeism) support much of the current theory on group functioning (e.g., Campion et al., 1993).

More importantly, these results show the encompassing detrimental influences of envy in groups. Envy is associated with effort reduction in the group, but the sabotaging nature of envy also damages intragroup relations, lowering cohesion, which increases absenteeism and results in lower levels of satisfaction. Absenteeism, in particular, has a rich history in the organizational sciences (e.g., Beehr & Gupta, 1978) and is among a set of withdrawal behaviors that can be considered critical facets of group effectiveness (Blau, 1995). The finding that envy results in increased absenteeism in groups is noteworthy. Moreover, envy whittles away the members' beliefs that they can perform effectively as a group, lowering group potency, which results in lower levels of group performance.

This study should be viewed in light of potential weaknesses. The study utilized a student sample, a subject of much debate. Counteracting this limitation is the fact that the group context in this sample is similar in some ways to group contexts found in real organizational contexts. The groups worked together over a 16-week period for an average of 2.27 hours per week outside of the classroom, in addition to in-class assignments. Also, the participants were upper-division undergraduates, preparing to enter the full-time workforce in the near future, and may be considered similar to a young professional workforce. Another strength of the study is the fact that the data were collected over time and that one of the key dependent variables, group performance, was collected from a separate source. Absenteeism was collected through self-reports, calling into question the validity of the measure. Participants in the study were assured confidentiality throughout the project, and members of the research team reminded participants at each stage of the project that instructors would not have access to individual information. Specific instructions with regard to

confidentiality and absenteeism were given during the final data collection. These steps should have reduced participant fear concerning reporting their absence. To the extent that all participants underreported their absence behavior, the results would not be biased except in the absolute magnitude of absenteeism. Predictor variables were collected 2 months before the outcome measures. Among the many benefits of examining dynamics over time is the reduction in common method variance in the study (Ganster et al., 1986). Despite these counteractions, it is obvious that similar studies in other group contexts are needed.

The results of this study suggest several opportunities for future research, including investigations examining the extent to which the relationships found in this study hold over time and across different contexts. The identification of alternative mediators of the relationship between envy and group outcomes would also be an interesting avenue for future research. Although this study examined the dynamics of envy, group process variables, and outcomes, another potentially fruitful area for future research is the etiology of envy. Such studies could include investigations of how and why envious persons choose their envied comparison persons. In a related vein, future research could explore aspects of the workplace or a managerial style that foster envy among coworkers.

Future investigations could also focus on personality and individual difference variables as determinants of envy, and the differences between the emotional state of envy and dispositional enviousness. In this study, we focused on the emotion of envy, and in particular, feelings of envy with regard to the group at hand. However, a few studies (e.g., Smith & Turner, 1996) do focus on the trait of enviousness, a stable disposition to feel envious. Such a distinction calls to mind the burgeoning literature on positive and negative affectivity that is seen theoretically, and demonstrated empirically, as both an emotion (e.g., Isen & Baron, 1991) and a dispositional trait (e.g., Shaw, Duffy, Jenkins, & Gupta, 1999). To date, little research concerns the personality component of envy or thoroughly describes a nomological network of correlates of dispositional envy. Are some individuals more prone to envy? Do individual

differences determine whether a person will experience the emotion of envy when faced with a negative social comparison? Although we were unable to address the dispositional component of envy in this research, we did compare, post hoc, the profile of participants who reported varying levels of envy. These results showed that the relationships between envy and age, gender, class standing (e.g., junior, senior), previous experiences in teams, and general self-esteem were not statistically significant, but envy was negatively related to grade point average ($r = -.14, p < .01$), interest in the subject matter in the class ($r = -.14, p < .01$), self-efficacy ($r = -.20, p < .01$) and was higher among those with an external locus of control ($r = .24, p < .01$). Although preliminary and possibly more informative with regard to the emotion of envy in this particular context, these results may suggest that the state of envy may be triggered both by a lack of confidence with regard to particular tasks and a perceived lack of control over relevant events. These preliminary and exploratory findings may provide a direction toward a certainly interesting and a potentially fruitful area for future research.¹

Moreover, research examining vertical comparisons in organizations may offer some potentially interesting insights into the consequences of envy in groups and organizations. A final suggestion for future research concerns a test of Vecchio's (1995) proposition that the use of work groups in organizations has the potential to reduce feelings of envy among coworkers. Vecchio argues that shared responsibility and mutual work dependence in groups may attenuate workplace competition, and in turn, reduce envy. However, social psychology suggests that intense interactions with others increases envy. A study that compares feelings of envy in the traditional work design with envy in a group work design would be a highly interesting test of these competing predictions.

NOTE

1. We thank an anonymous reviewer for highlighting many of these ideas.

REFERENCES

- Ashforth, B. E., & Lee, R. T. (1990). Defensive behavior in organizations: A preliminary model. *Human Relations, 43*, 621-648.
- Bedeian, A. G. (1995). Workplace envy. *Organizational Dynamics, 23*, 49-56.
- Beehr, T., & Gupta, N. (1978). A note on the structure of employee withdrawal. *Organizational Behavior and Human Performance, 21*, 73-79.
- Blau, G. (1995). Influence of group lateness on individual lateness: A cross-level examination. *Academy of Management Journal, 38*, 1483-1496.
- Cammann, C., Fichman, M., Jenkins, G. D., Jr., & Klesh, J. R. (1983). Assessing the attitudes and perceptions of organizational members. In S. E. Seashore, E. E. Lawler, III, P. H. Mirvis, & C. Cammann (Eds.), *Assessing organizational change: A guide to methods, measures, and practices* (pp. 71-138). New York: John Wiley.
- Campion, M. A., Medsker, G. A., & Higgs, C. A. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology, 46*, 823-850.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Evans, C. R., & Dion, K. L. (1991). Group cohesion and performance: A meta-analysis. *Small Group Research, 22*, 175-186.
- Ganster, D. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology, 71*, 102-110.
- George, J. M. (1990). Personality, affect, and behavior in groups. *Journal of Applied Psychology, 75*, 107-116.
- George, J. M. (1992a). The role of personality in organizational life: Issues and evidence. *Journal of Management, 18*, 185-213.
- George, J. M. (1992b). Extrinsic and intrinsic origins of perceived social loafing in organizations. *Academy of Management Journal, 35*, 191-202.
- Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly, 29*, 499-517.
- Gully, S. M., Devine, D. J., & Whitney, D. J. (1995). A meta-analysis of cohesion and performance: Effects of level of analysis and task interdependence. *Small Group Research, 26*, 497-520.
- Guzzo, R. A., Yost, P. R., Campbell, R. J., & Shea, G. P. (1993). Potency in groups: Articulating a construct. *British Journal of Social Psychology, 32*, 87-106.
- Hackman, J. R. (1987). The design of work teams. In J. W. Lorsch (Ed.), *Handbook of organizational behavior* (pp. 315-342). Englewood Cliffs, NJ: Prentice-Hall.
- Isen, A., & Baron, R. (1991). Positive affect as a factor in organizational behavior. *Research in Organizational Behavior, 13*, 1-53.
- Latané, B., Williams, K., & Harkin, S. (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology, 37*, 822-832.
- Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin, 115*, 210-227.
- Parrott, W. G. (1991). Experiences of envy and jealousy. In P. Salovey (Ed.), *The psychology of jealousy and envy* (pp. 3-30). New York: Guilford.

- Parrott, W. G., & Smith, R. H. (1993). Distinguishing the experience of envy and jealousy. *Journal of Personality and Social Psychology, 64*, 906-919.
- Pedhazur, E. J. (1982). *Multiple regression in behavioral research: Explanation and prediction*. Fort Worth, TX: Harcourt Brace.
- Pushkin, A. S., & Whittaker, C. H. (1984). *Alexander Pushkin: Epigrams and satirical verse*. Ann Arbor, MI: Ardis.
- Reizenstein, R. M., & Burke, M. J. (1996, April). *Another look at the relationships between group cohesion and group performance*. Paper presented at the annual conference of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal, 38*, 555-572.
- Saavedra, R., & Kwun, S. K. (1993). Peer evaluation in self-managing work groups. *Journal of Applied Psychology, 78*, 450-462.
- Salovey, P., & Rodin, J. (1986). Coping with envy and jealousy. *Journal of Social and Clinical Psychology, 50*, 1100-1112.
- Salovey, P., & Rothman, J. (1991). Envy and jealousy: Self and society. In P. Salovey (Ed.), *The psychology of jealousy and envy* (pp. 280-290). New York: Guilford Press.
- Seers, A. (1989). Team-member exchange quality: A new construct for role-making research. *Organizational Behavior and Human Decision Processes, 43*, 118-135.
- Shaw, J. D., Duffy, M. K., Jenkins, G. D., Jr., & Gupta, N. (1999). Positive and negative affect, signal sensitivity, and pay satisfaction. *Journal of Management, 25*, 189-205.
- Shea, G. P., & Guzzo, R. A. (1987). Group effectiveness: What really matters? *Sloan Management Review, 3*, 25-31.
- Silver, M., & Sabini, M. (1982). The perception of envy. *Social Psychology, 41*, 105-117.
- Smith, R. H., & Turner, T. J. (1996). Envy and Schadenfreude. *Personality and Social Psychology Bulletin, 22*, 158-169.
- Tesser, A., & Campbell, J. (1990). Self-definition: The impact of the relative performance and similarity of others. *Social Psychology Quarterly, 43*, 341-347.
- Tesser, A., & Smith, J. (1980). Some effects of task relevance and friendship on helping: You don't always help the one you like. *Journal of Experimental Social Psychology, 16*, 582-590.
- Ulanov, A., & Ulanov, B. (1983). *Cinderella and her sisters: The envied and the envying*. Philadelphia: Westminster.
- Vecchio, R. P. (1995). It's not easy being green: Jealousy and envy in the workplace. *Research in Personnel and Human Resources Management, 13*, 201-244.
- Wagner, J. A. (1995). Studies of individualism-collectivism: Effects cooperation in groups. *Academy of Management Journal, 38*, 152-172.
- White, G. L., & Mullen, P. E. (1989). *Jealousy: Theory, research, and clinical strategies*. New York: Guilford.
- Wolfe, J., & Box, T. M. (1988). Team cohesion effects of business game performance. *Simulation and Games, 19*, 82-98.

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