

Students' Reactions after Cheating: An Attributional Analysis

DONELSON R. FORSYTH
Virginia Commonwealth University

WILLIAM R. POPE
Mary Washington College

AND

JAMES H. MCMILLAN
Virginia Commonwealth University

The hypothesis that students who cheat will externalize the cause of this behavior was tested by contrasting the causal inferences of cheating students and noncheating students. The results supported Kelley's attributional model, for cheaters tended to note the high distinctiveness, high consensus, and low consistency of their actions, while noncheaters noted the low distinctiveness, low consensus, and high consistency of their morally commendable actions. Comparison of the students' attributions with inferences formulated by uninvolved observers also indicated that students tended to formulate self-serving attributions, suggesting that external attributions—in providing students with an excuse for cheating—may work to limit self-concept changes after misconduct.

© 1985 Academic Press, Inc.

Recent research indicates that individuals often attribute positive outcomes to personal, internal causes, while blaming negative outcomes on external, environmental factors (Arkin, Cooper, & Kolditz, 1980). For example, after students perform poorly on an exam, they may seek to externalize their responsibility for this outcome by emphasizing the causal role played by such factors as test difficulty, poor teaching techniques, or bad luck. Conversely, following success students may underscore their personal responsibility by attributing their success to internal factors such as ability and effort (e.g., Covington & Omelich, 1979; Forsyth & McMillan, 1981a). Although the extent to which these attributional patterns are due to defensive egocentrism, logical information processing mechanisms, or self-presentational motives remains unclear (e.g.,

Thanks are extended to Greg Lane and William Scott for their assistance as experimenter and confederate, and to several anonymous reviewers who provided helpful suggestions for revisions. Requests for reprints should be sent to Donelson R. Forsyth, Department of Psychology, Virginia Commonwealth University, 810 W. Franklin St., Richmond, VA 23284.

Bradley, 1978; Miller & Ross, 1975; Weary, 1979), several studies have clearly demonstrated that attributions can be self-serving (Forsyth, 1980).

Attributional processes have been explored primarily in relation to reactions after test performance, but these findings may also describe students' reactions to cheating. Recent work has done much to clarify the frequency and causes of academic cheating (e.g., Bushway & Nash, 1977; Houston, 1977; Leming, 1980), but only a relatively few investigations have examined students' perceptions of their own cheating (e.g., Vanderviele, 1980). Viewed from an egocentrism perspective, cheating represents less of a threat to students' self-esteem if they can attribute this "immorality" to something external to themselves—such as an unfair teacher, pressure from their parents, or the persuasiveness of a fellow student. Such attributions would reduce students' feelings of guilt and immorality after cheating in a classroom situation, and allow them to continue to think of themselves as moral persons who simply bent to environmental pressures. In addition, a self-serving pattern of attributions would also help cheaters maintain an acceptable social image in the educational setting.

The current investigation sought to examine this externalization of responsibility for cheating within the context of Kelley's attribution "cube" model (Kelley, 1967, 1971). Although several theorists have presented attributional perspectives on moral judgments (e.g., Reeder & Spores, 1983; Ross & DiTecco, 1975), Kelley (1971) theorizes that moral judgments are fundamentally based on three kinds of attributional information: distinctiveness, consistency, and consensus. Distinctiveness, at least after cheating, is the extent to which cheating or not cheating is unique to a particular classroom setting. For example, if student *X* cheats in math class, this behavior is nondistinctive if *X* cheats in other classes, has been arrested for theft several times, and also lies to teachers. The cheating would, however, be distinctive if *X* has never engaged in any questionable actions. Consistency is the assessment of actions in similar situations in the past. Has *X* cheated before in math class (high consistency over time), or is cheating unique to this particular time? Lastly, consensus information requires a comparison between student *X*'s behavior and other students. Consensus is high if the attributor feels that anyone in such a situation would have cheated but is low if the attributor thinks that few people would have cheated.

Although Kelley (1967, p. 196) initially suggested that attributors emphasize external causes whenever "evidence exists as to the distinctiveness, consistency, and consensus of the appropriate effects," he later noted two exceptions when the model is applied to moral judgments (Kelley, 1971). First, Kelley maintained that consensus information has less of an impact on moral judgments. Because attributors generally as-

sume that most people will behave morally, a morally appropriate behavior—such as not cheating—will generally be viewed as high in consensus, while an inappropriate behavior—such as cheating—will be perceived to be low in consensus. Second, evidence (Forsyth & Pope, 1983) indicates that moral or immoral behavior is attributed to internal factors when distinctiveness is low and consistency over time is high, but to external factors when distinctiveness is high and consistency is low (rather than high). In consequence, if students cheat, internal causes (such as characterological defects) should be cited if the attributor feels that these students also lie and steal (low distinctiveness) and have cheated in the past (high consistency). Conversely, if students refuse to cheat, they will not be morally praised if the attributor feels that they engage in other immoral actions (high distinctiveness) and have cheated in the past (low consistency).

The hypotheses derived from Kelley's model were based on the assumption that students' attributions would be self-serving (Forsyth, 1980). Just as students externalize the cause of failure, we presumed that they would emphasize the importance of external causes when they cheated, but would note the causal significance of internal factors when they did not cheat. Furthermore, to effect this attributional asymmetry the students would claim that their actions were distinctive and low in consistency over time when they cheated, but low in distinctiveness and high in consistency when they did not cheat. To test these predictions students were placed in a testing setting and pressured to cheat by a confederate. For approximately half of the subjects the confederate persisted in his demands until he obtained compliance, while for the remaining subjects the confederate ceased his pressuring before the subject cheated. Afterward, students rated the causal significance of internal and external factors in determining their action in the situation, and also described the distinctiveness of the act, the number of people who would have behaved similarly or differently, and the consistency of their current behavior with past behaviors. In addition, in order to obtain a contrasting observer condition, a second group of subjects watched a videotaped reenactment of the test administration and completed a matched version of the actor–subject questionnaire.

METHOD

Subjects

A total of 51 college students, 39 females and 12 males, were recruited from their courses (psychology) to take part in the study. They were told that, for course credit, they would be asked to take a test while working with one other member of their class. Observer subjects were asked to view a brief videotape and to make some judgments about a stimulus

person in the videotape. Both actor subjects and observer subjects received course credit for participating.

Procedure

Actor subjects. As each actor subject ($n = 22$) arrived to take the test a male confederate of the experimenter also arrived. The two "subjects" were greeted by a male experimenter, who explained that the research examined group problem solving in all-male groups versus sexually heterogeneous groups. The subject and confederate, after agreeing to participate, were given a series of extremely difficult anagrams to solve during the 10 min the experimenter was absent from the room. After 3 min of working individually on the problems, the confederate broke his pencil's point and looked for a new one in an in-basket located on the table where the subject and confederate were working. The confederate found a pencil, but he also discovered the answer key to the anagram task, commenting "Here's the answer key." The confederate did not use the key to answer any of the items, however, but simply replaced it in the in-basket.

After 10 min the experimenter returned. Upon reviewing the success of both "subjects" he stated "Most people usually get at least three right on this test. You've already got two [pointing to the confederate], but you [pointing to the subject] haven't got any. It's very important to me that your team gets at least six right. How about if I give you 5 more minutes to work on it?" The experimenter then left, and the confederate stated "Well, this thing really seems important to him so I am going to take one answer." As he took the answer key from the basket, the confederate also glanced at a sheet of paper that stated the particular subject's experimental condition. Following a random order, approximately one half of the subjects were pressured into cheating. In this *cheat condition* the confederate reiterated the importance of scoring well, and suggested that the subject must hold up his or her end of the task. Virtually all subjects cheated at this point, although some required additional persuasion. (One subject assigned to the cheat condition refused to cheat. His session was terminated prior to completion of the dependent measures.) The remaining subjects were assigned to the *no cheat condition*; in this case the confederate took an answer from the sheet, and did not pressure the subject to do the same.

After this manipulation the confederate returned the answer key to the in-basket and at the end of 5 min the experimenter returned. The confederate was ushered from the room by the experimenter, who gave the subject a questionnaire containing the following five measures: (1) internality ("I cheated because of my basic personality characteristics"); (2) externality ("I cheated because of factors present in the experimental setting"); (3) distinctiveness ("Was your behavior in this experiment distinctly unique or nonunique?"); (4) consensus ("Do you think many other people would have cheated in this situation?"); and (5) consistency over time ("Was your behavior in this experiment [cheating] consistent with the way you have acted in the past?"). These items were reworded for subjects in the no cheat condition (e.g., "I refrained from cheating because of my basic personality characteristics"). All were based on measures previously used by Forsyth and McMillan (1981b), who found that subjects (1) are able to understand these kinds of questions and (2) can distinguish between the three attributional dimensions. Nine-point Likert-type scales were used with each item.

After completing the instrument, all subjects were thoroughly debriefed by the senior author. The purpose of the research was examined, and subjects—particularly in the cheat condition—were assured that their behavior had been constrained by the pressures of the experimental setting (their actions were likened to a mild social infraction, such as crossing the street with a large group of pedestrians when the "no walk" sign is flashing). All of their questions concerning the project were answered, and subjects were invited to leave

their addresses so they could receive a copy of the research report. None of the subjects reported experiencing any distress over the experience.

Observer subjects. Observers ($n = 29$) were run in groups and were told by a male experimenter that the study investigated perceptions of cheating. Observers viewed a videotape that was an exact reenactment of the procedure experienced by subjects. Observers saw the student either cheat or refuse to cheat, and completed a questionnaire containing the same dependent measures given to the subject. For observers, however, the items requested information about the causes of the portrayed student's actions.

RESULTS

Preliminary analyses revealed no gender effects, so this variable was ignored in subsequent analyses. Because of the nonorthogonality of the design, all effects were calculated using a least-squares regression procedure that adjusted each effect for those of equal or lower order. When justified by significant main effects or higher order interactions, post hoc comparisons among means were conducted using Duncan's new multiple range test.

Cube Variables

A 2 (behavior: cheating vs not cheating) \times 2 (perspective: actor vs observer) \times 3 (dimensions: distinctiveness, consensus, and consistency) analysis of variance with repeated measures on the final factor yielded a significant three-way interaction, $F(2, 92) = 12.85, p < .05$. This interaction is plotted in Fig. 1. First, for observers we see that not cheating was viewed as lower in distinctiveness and higher in consistency than cheating (p 's $< .05$); no differences, however, were found on the consensus dimension. Second, actors also described not cheating as lower in distinctiveness and higher in consistency than cheating (p 's $< .05$), but for actors these differences were much more pronounced. Indeed, actors rated cheating as more distinctive and less consistent than observers (p 's $< .05$), and rated not cheating as less distinctive (but not more consistent) than observers ($p < .05$). Third, unlike observers, actors rated cheating and not cheating differently in terms of consensus: they claimed consensus was higher after cheating than not cheating ($p < .05$). Thus, while actors' and observers' attributions followed similar patterns across two of the three dimensions of the cube, actors' attributions were more extreme.

Locus Variables

A 2 (behavior) \times 2 (perspective) analysis of variance on the externality item revealed only a significant main effect of behavior, $F(1, 46) = 18.56, p < .05$. Both actors and observers felt that external factors were important causes of behavior when the actor cheated rather than refrained from

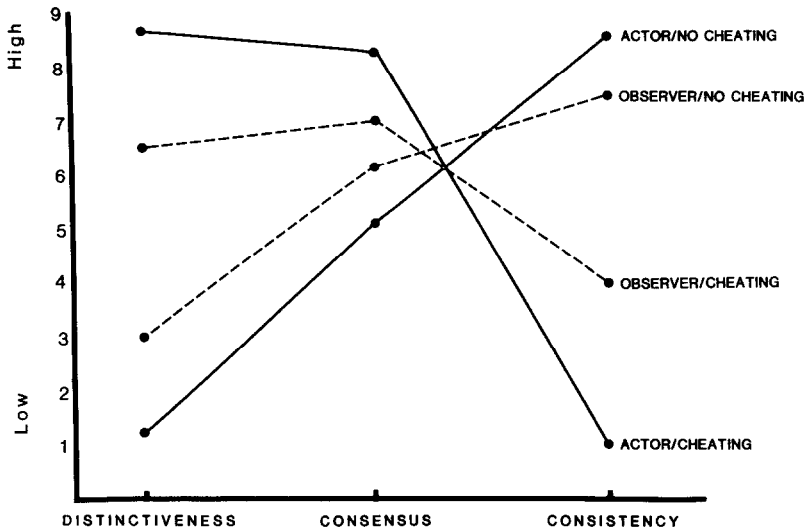


FIG. 1. Descriptions of distinctiveness, consensus, and consistency offered by students who cheated or did not cheat and observers who watched a student cheat or not cheat.

cheating, and the means were 6.8 and 3.8, respectively. A similar analysis, however, revealed a significant two-way interaction of behavior and perspective on the internality item, $F(1, 46) = 14.79, p < .05$. When the behavior in question was not cheating, both actors and observers emphasized the causal impact of internal personality factors; the means in this condition were 8.7 and 7.6, respectively. When the actor had cheated, however, actors deemphasized internal factors more than observers ($p < .05$); the means were 1.4 and 4.4, respectively. Thus, observers were harsher in their attributions of morality than were actors.

Correlational Evidence

Table 1 presents the correlations between the two locus of causality items and the three cube dimensions, computed across conditions and within conditions. The overall correlations indicate that internal and external attributions are more closely associated with distinctiveness and consistency than consensus. Furthermore, the link between the dimensions of the cube and internal/external attributions was stronger for actors than observers and after cheating rather than not cheating. Indeed, for actors the correlation between distinctiveness and consistency and internal factors approached unity, while these same correlations reached only the .50 level for observers. In addition, the link between dimensions of the cube and attributions to internal and external factors was relatively weak for not cheating, but became more pronounced—at least for internal factors—after cheating.

TABLE 1
CORRELATIONS BETWEEN THE THREE DIMENSIONS OF THE CUBE AND ATTRIBUTIONS TO INTERNAL (INT) AND EXTERNAL (EXT) CAUSAL FACTORS

Dimension	Condition														
	Overall			Actors			Observers			Cheating			Not cheating		
	INT	EXT		INT	EXT		INT	EXT		INT	EXT		INT	EXT	
Distinctiveness	-.77***	.40**		-.96***	.57**		-.53***	.23		-.56**	-.21		-.36	.07	
Consensus	-.42**	.09		-.59**	.04		-.15	.11		-.42*	.18		-.02	-.37	
Consistency	.82***	-.44***		.97***	-.58**		.55***	-.24		.68***	.08		.21	.03	

* $p < .05$.

** $p < .01$.

*** $p < .001$.

DISCUSSION

The current findings clarified students' attributional reactions following cheating or not cheating while supporting the Kelley attribution model (1967, 1971). As anticipated, after cheating actors described their behaviors as high in distinctiveness and consensus, but low in consistency. This pattern reversed when they did not cheat, for in this condition they claimed that their actions were low in distinctiveness, low in consensus, and high in consistency. Furthermore, the relationship between the three axes of the cube and internality versus externality was further substantiated by the correlations between subjects' attributional descriptions.

Observer's judgments contrasted with actors' attributions in several ways. Recognizing the strength of the situational pressures placed on the student to cheat, observers felt that an immoral action was somewhat distinctive and inconsistent with past behavior, while a moral action was less distinctive and more consistent with past action. Perceptions of consensus, however, remained moderate irrespective of whether the stimulus person cheated or refused to cheat. In addition, only distinctiveness and consistency judgments were significantly correlated with attributions to internal factors: the less distinctive the act and the more consistent the act the more internal personality factors were emphasized as causes. Judgments of consensus, however, were not significantly correlated with attributions to internal factors.

Although the failure to find a link between consensus estimates and attributions to internal versus external factors is inconsistent with Kelley's early predictions, this result is quite consistent with previous studies that have attested to the lesser importance of consensus data relative to distinctiveness and consistency data (e.g., Eisen, 1979; Forsyth & Pope, 1983; Hansen & Lowe, 1976). This underutilization of consensus data by actors may stem from a failure to consider base rate information (e.g., Borgida & Brekke, 1981), but Kelley (1971) suggests that situation-based consensus information may be dismissed by the attributor, who assumes that the causal significance of moral norms is so great that consensus is always high for moral actions and always low for immoral actions. In consequence, attributors ignore the behavior of other persons in the situation, while instead relying on their own personal assumptions concerning the frequency of cheating and not cheating.

These theoretical specifications stemming from the deemphasis of consensus information when the cube is applied to student cheating hold only for observers. Although studies looking at attributions concerning behaviors that are not morally evaluatable—such as thirstiness (Hansen & Donoghue, 1977) and reactions to musical selections (Hansen & Lowe, 1976)—generally suggest that consensus information influences observers more than actors, this conclusion does not hold when the action

in question is cheating. Consistent with Stevens and Jones (1976), students used the three dimensions of the cube to externalize the cause of cheating. However, attributional defensiveness (externalizing when cheating) was stronger than attributional agrandizement (internalizing not cheating). Relative to observers, students more strongly emphasized the low distinctiveness, low consensus, and high consistency of not cheating, but on the internal and external items no differences between actors who refrained from cheating and observers who watched a noncheater emerged.

Clear differences between actors and observers were obtained, but a number of explanations can account for this effect. First, attributors may have sought to use their attributions defensively and egocentrically to avoid loss of self-esteem. Second, actors and observers may have possessed different amounts of information about the setting, and they may have processed this information differently. Third, the differences between actors and observers may have resulted from the observers' tendency to generalize from situationally based moral indiscretions to basic personality and morality factors (Reeder & Spores, 1983); in other words, actors were more "accurate" than observers. Fourth, subjects may have been using their questionnaire responses as a means of self-presentation. Although care was taken to avoid confronting subjects who had cheated when they were given the questionnaire (the form simply stated that the researcher was aware of the subject's "actions" in the experiment), their attributions may have been "causal claims" designed to shore up a damaged social identity.

The current findings suggest a number of implications concerning cheating, but several limitations should also be noted. First, only college students' attributions were examined; differing patterns might be obtained in younger pupils. In addition, in order to manipulate cheating a contrived experimental situation was utilized and strong pressures were placed on students to cheat. In consequence, generalizations to more natural settings should be made with caution. Last, because the presence of an observer (even hidden behind a one-way mirror) would have prevented cheating, the observer subjects could not be paired with actor subjects.

In spite of these limitations, the current research demonstrates that cheating is often followed by externalization. Although in the classroom setting a reverse sequence of causality may sometimes occur—with students who externalize responsibility being more prone to cheat—the experimental nature of the current research verified that in this case cheating was the cause, while externalization was the effect. In consequence, these findings suggest one possible reason why students are able to cheat without incurring any sense of moral wrongdoing or changes in

their self-esteem. Those who cheat insulate themselves from the esteem-damaging consequences of their behavior, so the self-regulatory processes that encourage conformity to norms of morality—such as self-condemnation, guilt, shame—do not work to limit cheating. Unfortunately, measures of affective reactions after cheating, such as shame and guilt, were not included in the current research so this possibility must be treated as speculative. However, such an explanation does suggest that cheating can be reduced by shifting cheater's attributions away from external causes toward more internal causes, and thereby strengthening their self-regulatory mechanisms.

REFERENCES

- ARKIN, R., COOPER, H., & KOLDITZ, T. (1980). A statistical review of the literature concerning the self-serving attribution bias in interpersonal influence situations. *Journal of Personality*, **48**, 435–449.
- BORGIDA, E., & BREKKE, N. (1981). The base rate fallacy in attribution and prediction. In J. H. Harvey, W. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 3). Hillsdale, NJ: Erlbaum.
- BRADLEY, G. W. (1978). Self-serving biases in the attribution process: A reexamination of the fact or fiction question. *Journal of Personality and Social Psychology*, **36**, 56–71.
- BUSHWAY, A., & NASH, W. R. (1977). School cheating behavior. *Review of Educational Research*, **47**, 623–632.
- COVINGTON, M. V., & OMELICH, C. L. (1979). Are causal attributions causal? A path analysis of the cognitive model of achievement motivation. *Journal of Personality and Social Psychology*, **37**, 1487–1504.
- EISEN, S. V. (1979). Actor-observer differences in information inference and causal attribution. *Journal of Personality and Social Psychology*, **37**, 261–272.
- FORSYTH, D. R. (1980). The functions of attributions. *Social Psychology Quarterly*, **43**, 184–189.
- FORSYTH, D. R., & McMILLAN, J. H. (1981a). Attributions, affect, and expectations: A test of Weiner's three-dimensional model. *Journal of Educational Psychology*, **73**, 393–403.
- FORSYTH, D. R., & McMILLAN, J. H. (1981b). The attribution cube and reactions to educational outcomes. *Journal of Educational Psychology*, **73**, 632–641.
- FORSYTH, D. R., & POPE, W. R. (1983). The attribution cube and moral evaluations. *Bulletin of the Psychonomic Society*, **21**, 117–118.
- HANSEN, R. D., & DONOGHUE, J. M. (1977). The power of consensus: Information derived from one's own and other's behavior. *Journal of Personality and Social Psychology*, **35**, 294–302.
- HANSEN, R. D., & LOWE, C. A. (1976). Distinctiveness and consensus: The influence of behavioral information on actors' and observers' attributions. *Journal of Personality and Social Psychology*, **34**, 425–433.
- HOUSTON, J. P. (1977). Cheating behavior, anticipated success–failure, confidence, and test importance. *Journal of Educational Psychology*, **69**, 55–60.
- KELLEY, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (Vol. 15). Lincoln, NE: Univ. of Nebraska Press.
- KELLEY, H. H. (1971). Moral evaluation. *American Psychologist*, **26**, 293–300.
- LEMING, J. S. (1980). Cheating behavior, subject variables, and components of the internal–

- external scale under high and low risk conditions. *Journal of Educational Research*, **74**, 83–87.
- MILLER, D. T., & ROSS, M. (1975). Self-serving biases in the attribution of causality. Fact or fiction? *Psychological Bulletin*, **1975**, **82**, 213–225.
- REEDER, G. D., & SPORES, J. M. (1983). The attribution of morality. *Journal of Personality and Social Psychology*, **44**, 736–745.
- ROSS, M., & DiTECCO, D. (1975). An attributional analysis of moral judgments. *Journal of Social Issues*, **31**, 91–109.
- STEVENS, L., & JONES, E. E. (1976). Defensive attribution and the Kelley cube. *Journal of Personality and Social Psychology*, **34**, 809–820.
- VANDERVIELE, M. (1980). Perception of causes of and attitudes towards cheating at school by Senegalese secondary school children. *Psychological Reports*, **46**, 207–210.
- WEARY, G. (1979). Self-serving attributional biases: Perceptual or response distortions? *Journal of Personality and Social Psychology*, **37**, 1418–1420.