UNDERSTANDING REACTIONS TO WORKPLACE INJUSTICE THROUGH PROCESS THEORIES OF MOTIVATION: A TEACHING MODULE AND SIMULATION

Mary D. Stecher
University of Northern Colorado

Joseph G. Rosse
University of Colorado at Boulder

Management and organizational behavior students are often overwhelmed by the plethora of motivation theories they must master at the undergraduate level. This article offers a teaching module geared toward helping students understand how two major process theories of motivation, equity and expectancy theories and theories of organizational justice, are related and can be used to manage behavior in the work setting. This integrated approach is suggested to provide a superior learning experience by enabling students to view and utilize extant theories in work motivation as a coherent body of knowledge rather than a distinct and somewhat disparate set of individual theories. Lecture notes and instructional examples covering relevant theories are provided, followed by an experiential exercise and suggestions for guiding class discussion of the exercise and theoretical material.

Keywords: motivation; organizational justice; equity theory; expectancy theory

The following exercise was adapted from a larger study (Stecher & Rosse, 2005) to provide management and organizational behavior students at the undergraduate level with a basic understanding of organizational justice.

Authors’ Note: A portion of a previous edition of this article was presented at the Institute of Applied and Behavioral Management, November 2002. Please address correspondence concerning this article to Mary D. Stecher, Kenneth W. Montfort College of Business, Dept. of Management, Kepner Hall, Campus Box 128, University of Northern Colorado, Greeley, CO 80639; e-mail: terry.stecher@unco.edu

JOURNAL OF MANAGEMENT EDUCATION, Vol. 31 No. 6, December 2007 777-796
DOI: 10.1177/1052562906293504
© 2007 Organizational Behavior Teaching Society
and expectancy theories. Expectancy theory, according to Erez and Isen (2002), “is one of the most central motivation theories, and substantial evidence supports the view that expectancy theory can predict effort and performance” (p. 1055). As noted by Miner (2003) in his analysis of the importance and validity of contemporary organizational behavior theories, “Adam’s equity theory . . . plus the Vroom and Porter and Lawler versions of expectancy theory, deserve detailed exposition, in textbooks and in class” (p. 260). Martinez-Tur, Peiro, Ramos, and Moliner (2006) noted a reemergence of interest in equity theory, particularly in the area of marketing research, and cautioned against deemphasis of the theory in the study of social exchange.

As cognitive process theories of motivation, equity and expectancy theories offer compatible frameworks for understanding work motivation yet are often taught piecemeal—as distinct and unrelated perspectives. Adams’ equity theory (Adams, 1963, 1965) is a prevalent theory of distributive justice that is introduced in most management and nearly all organizational behavior textbooks as a major theory of work motivation. According to Adams, there are several cognitive and behavioral mechanisms available to individuals to reduce the psychological discomfort associated with perceptions of inequity. Although equity theory does not predict which mechanism will be selected, Adams stated that the chosen behavior will be the one of maximum utility.

Expectancy theory (Vroom, 1964), like equity theory, is a cognitive process model of motivation based on the assumption that people are capable of calculating costs and benefits in choosing among alternative courses of action (Landy & Becker, 1987; Wanous, Keon, & Latack, 1983). The incorporation of expectancy theory into discussion of reactions to inequity is therefore useful in helping students understand how people select utility maximizing options to reduce perceptions of inequity and in understanding applications of process theories of motivation in general.

Finally, a comprehensive understanding of the relationship between expectancy and equity theories of motivation requires that students be exposed to the interactive effect of distributive justice and procedural justice on motivation and behavior choice. Briefly, distributive justice theories, such as equity theory, concern the fairness of outcomes distributed by the organization. Such outcomes can involve pay and promotions as well as intangible outcomes such as courtesy and respect (Adams, 1965). At the conceptual level, comparisons between equity ratios among individuals within an exchange are likely to contribute information concerning the probability, or expectancy, that certain outcomes will result from certain contributions in future exchange. Thus, there is some overlap between cognitions involved in equity judgments and expectancy as determinants of motivation. Similarly, in the marketing literature, Martinez-Tur et al. (2006)
noted that a substantial yet undetermined amount of variance is shared between “expectancy disconfirmation,” described as the process through which customers compare expectations of outcomes from previous experience with actual outcomes, and equity judgments as predictors of customer satisfaction.

Theories of procedural justice address the fairness of the decision-making processes that determine outcome distributions (Folger & Greenberg, 1985). Although the relationship between procedural justice and expectancy theories is ambiguous, results of a field study of salesperson territory realignment indicated that perceptions of fairness (procedural and distributive justice) were more important determinants of motivation than expectations when realignment resulted in lost territory (Smith, Jones, & Blair, 2000). These authors suggested that in potential-loss situations, perceived fairness may drive motivation even when expectancy is low. These findings may reflect, in part, that the concern for procedural fairness replaces a concern for immediate personal gain under the assumption that fair processes result in fair outcomes over time.

Moreover, because procedural justice is valued, in part, for its instrumentality in achieving fair outcomes (Leventhal, 1980), it is likely that perceptions of procedural justice will enhance the expectancy that constructive work behaviors will be associated with desirable work outcomes (Cropanzano & Folger, 1991). Indeed, perceptions of procedural fairness in the workplace are associated with positive attitudes and behaviors such as organizational commitment and trust in supervision (Folger & Konovsky, 1989; Hubbell & Chory-Assad, 2005; Konovsky & Cropanzano, 1991), overall job satisfaction and performance (Konovsky & Cropanzano, 1991), organizational citizenship behavior (Moorman, Niehoff, & Organ, 1993; Stecher, Rosse, Miller, & Levine, 1994), and intent to remain with the organization (Dalley & Kirk, 1992). In an investigation of the relationship between fairness and motivation in an instructional setting, Chory-Assad (2002) found that distributive and procedural justice were significantly correlated with student motivation and that procedural justice explained significant variance in motivation and affect toward the course. It is interesting to note that in an experimental study, Erez and Isen (2002) found that positive affect significantly enhanced motivation through its effect on expectancy, valence, and instrumentality perceptions. The link between positive affect and motivation found in this initial study strongly suggests that positive attitudes toward authorities and institutions associated with perceptions of procedural justice may partially account for the effect of fair procedures on expectancy formula factors.

Although it is important for students to understand the distinct cognitive processes hypothesized by equity, expectancy, and justice theories, a richer
understanding of volitional behavior requires that the interrelationship among perspectives be explicated. We suggest that when these theories are presented in combination, students are better able to grasp the confluence of process theories of motivation and to understand and manage perceptions of organizational injustice in the workplace.

This teaching module is designed to be administered in two 75-min sessions, or three 50-min sessions. In several administrations during the past 3 years, we have found that the exercise is most appropriate for junior-level students enrolled in general management and organizational behavior classes. The experiential exercise involves a workplace scenario in which an arguably deserved promotion is denied under varied conditions of procedural justice. Lecture material that introduces students to expectancy, equity, and procedural justice theories is provided to enable students to evaluate the simulation in terms of relevant theory. Suggestions for discussion prompt students to think about how they might react to the simulation, specifically by using expectancy theory to determine their choice among inequity-reducing mechanisms as articulated by Adams’ (1963, 1965) equity theory. Managerial interventions that may help ameliorate perceptions of injustice or that provide a motivational basis for positive—rather than negative—reactions to perceived injustice are emphasized.

Lecture Notes

EQUITY THEORY

Lecture and reading material on equity theory is provided to familiarize students with the outcome-to-input ratio comparison process, referents used for comparisons, and the cognitive and behavioral mechanisms suggested by Adams (1963, 1965) to be available to individuals to restore perceptions of equity. Asking students to relate their own experiences of, and reactions to, unfair treatment usually generates discussion. We have found that asking students to discuss their experiences in pairs and to select a situation that they are willing to share with the class facilitates discussion. This process helps to engage introverted students who may be reluctant to participate in full-class discussion and generate relatively uninhibited exchange of personal experiences. Students are then invited to share their experiences in sufficient detail so that outcome–input ratios can be articulated for class analysis. Alterations of the ratios due to reported reactions to experiences are then analyzed in terms of how they may or may not have restored equity.

The lecture may be supplemented by provision of simple numerical examples to demonstrate alterations in the formula resulting from the various inequity reduction mechanisms. For example, to demonstrate a reaction
of acting on the referent’s inputs to restore equity, peer pressure is applied to cause the referent to increase work effort so that the inequitable situation of U.S. $10/20 < $20/20 becomes $10/20 = $20/40. Because substantial evidence supports the theory’s prediction that people respond to inequity by reducing work effort (Andrews, 1967; Goodman & Freidman, 1968, 1971; Harder, 1991), absenteeism (Stepina & Perrewe, 1991), intentions to turnover (Finn & Lee, 1972), and theft (Greenberg, 1993b), these reactions are emphasized in the lecture material.

EXPECTANCY THEORY AND CHOICE OF INEQUITY REDUCTION MECHANISMS

Expectancy theory is presented by the general equation: \( MF = E \sum (V \times I) \) (Mitchell, 1974; Wanous et al., 1983). Depending on the depth of analysis desired, and the level and capabilities of students, numerical or nonnumerical examples (in which factors are assigned values from high to low) may be used. However, numerical examples, if thoroughly explained, often provide students with a richer understanding of the cognitive processes involved in process theories of motivation such as expectancy theory and result in a discrete numerical basis for comparison among choices. For numerical examples, the following parameters, suggested by Mitchell (1974) are provided: as a probability, the expectancy, that each alternative action will lead to a certain outcome is defined between 0 (no probability) and 1 (certainty); the valence of second-level outcomes is rated from –7 (highly undesirable) to 7 (highly desirable); and the instrumentality of the first-level outcome in obtaining each second-level outcome is rated between –1 (detracts from achievement of the outcome) and +1 (perfectly instrumental in achievement of the outcome). Students are informed that people can generally process between five to seven relevant second-level outcomes (Landy & Becker, 1987). Figure 1 provides an example of an analysis of the choice between remaining at a current job position and accepting a new job. The current position is characterized by a low probability of promotion and low status that allows for manipulation of expectancy and instrumentality values. The new job requires relocation, an undesirable factor, that introduces a negatively valent second-level outcome into the formula.

When students are comfortable manipulating variables in the basic expectancy theory formula, the incorporation of equity, as a potentially valent second-level outcome, is introduced. For example, given a situation of underpayment inequity, students might be asked to determine their motivation to ask for a raise. Different scenarios can then be introduced to demonstrate how high and low expectancies of obtaining the raise result in selection of different choices of inequity reduction. Because certain
Inequity reduction strategies (i.e., reduction of work effort, turnover, and sabotage) can have negative implications for organizations and individual employees, it is important to stress that managers treat employees in a manner that encourages positive responses to perceptions of inequity. This, in turn, has implications for employee motivation and job satisfaction.

Motivation To Remain At Current Position

\[ MF = E \times \sum (V \times X \times I) \]

\[ \begin{align*}
  \text{Leisure} & : 2 \times 0.5 = 1.0 \\
  \text{Child care} & : 7 \times 0.6 = 4.2 \\
  \text{Home} & : 7 \times 0.5 = 3.5 \\
  \text{Status} & : 4 \times -0.5 = -2.0 \\
\end{align*} \]

\[ 0.2 \times \sum 6.7 = 1.34 \]

Motivation to Apply for New Job

\[ MF = E \times \sum (V \times X \times I) \]

\[ \begin{align*}
  \text{Leisure} & : 2 \times 0.5 = 1.0 \\
  \text{Child care} & : 7 \times 1.0 = 7.0 \\
  \text{Home} & : 7 \times 0.7 = 4.9 \\
  \text{Status} & : 4 \times 0.4 = 1.60 \\
  \text{Relocation} & : -5 \times 1.0 = -5.0 \\
\end{align*} \]

\[ 0.6 \times \sum 9.5 = 5.7 \]

**Figure 1: Numerical Example of Choice Among Alternative Courses of Action**

NOTE: MF = motivational force, V = valence of first-level outcome, E = expectancy that effort will lead to outcome, X = indicates multiplication, I = instrumentality of first-level outcome in obtaining second-level outcome. MF in the first and second formulas is the motivational force to remain at the current position, based on the probability of a promotion, or to apply for a new job respectively. The current position is a low-status position in which the incumbent has a low probability of being promoted. The probability of being hired in the new, higher status job is moderately high; however, this alternative involves the negatively valued need to relocate.
part, will have to do with the manager’s ability to make actual changes to
the situation if appropriate, and/or to ensure a climate of procedural justice.

**PROCEDURAL JUSTICE**

Coverage of procedural justice is based on Leventhal’s (1980) six rules
of procedural justice: (a) procedures should be applied consistently across
persons and over time, (b) the decision should be free of bias stemming
from the decision maker’s self-interest, (c) the decision must be based on
accurate information, (d) mechanisms for correcting poor decisions must be
available, (e) the concerns of all parties should be fully represented, and (f)
procedures must conform to prevailing ethical and moral standards. Not
only are these rules reasonable, and readily understood by students, they
have also been widely accepted as valid and comprehensive indicators of
the construct of structural procedural justice as conceptualized by Leventhal
(Greenberg, 1990).

Lecture material emphasizes the role of procedural justice perceptions
on motivation and performance particularly when work-related outcomes
are unfavorable. Because of its intuitive appeal, the fair process effect (see
Folger & Greenberg, 1985) is readily demonstrated through examples that
contrast conditions of procedural justice in situations in which unfair or
unfavorable outcomes have been distributed. Typical examples include the
denial of a pay raise or promotion based on a fair versus unfair performance
appraisal process and receipt of a low class grade based on an exam con-
taining “trick” versus straightforward questions. Both examples provide a
basis for in-class analysis of the extent to which decision-making proce-
dures conform, or fail to conform, to Leventhal’s (1980) rules. Furthermore,
they allow for analysis of how such variations in decision-making processes
influence reactions to unfavorable situations. Students usually react more
negatively to situations involving procedural impropriety (i.e., report inten-
tions to complain about the decision maker) than to situations in which pro-
cedures are justifiable (i.e., report intentions to improve performance).
Research substantiating the robustness of the fair process effect (Brockner
& Wiesenfeld, 1996) is briefly reported to the class to confirm that their
reactions were indeed true to theory.

**The Simulation**

This exercise utilizes a scenario involving an inequitable work situation
in which the focal person fails to receive a desired and apparently deserved
promotion. The scenario involves two variations: In the procedurally just
variation, the inequitable outcome is the result of fair procedures while
in the procedurally unjust variation, the inequitable outcome is the result
of unfair procedures. Findings from a previous study in which procedural justice was assessed with a three-item measure on a scale from 1 to 7 indicate that differences in perceptions of procedural justice between those in the high procedural justice condition \( (M = 4.1) \) and those in the low procedural justice condition \( (M = 2.3) \) were significantly different, \( t(30) = 5.14, p < .001 \) (Stecher & Rosse, 2005).

To fully illustrate procedural impropriety for instructional purposes, variations of procedural justice were further strengthened in this exercise by incorporating biased decision making in the form of nepotism. Although the hiring of family members is generally frowned on in the United States (Friedman, 1987), this may not always be the case. For example, some businesses are traditionally family owned and managed while others may operate in different countries in which familial relations in the workplace are the norm. In this exercise, nepotism is presented in a negative light as it represents favoritism toward a family member with no regard to the contributions of the incumbent. However, students should be instructed to look for more subtle violations in the unfair procedures condition as well (see Appendix A for scenario).

**DISCUSSION METHOD**

Students should be divided into two groups that, depending on class size, may be further subdivided into smaller teams to allow for small group discussion. One group is given the scenario with the fair procedures condition, and the other is given the scenario with the unfair procedures condition. Students should be instructed to read the case and to imagine that they are the focal person. After reading the scenario they received, students are instructed to discuss their reactions to the scenario among group members and attempt to arrive at a consensus concerning the fairness of the case. Allow at least 30 mins for students to read and discuss the case within their groups.

**ROLE-PLAY METHOD**

The scenario may also be administered as a role-play that, we have found, generates somewhat stronger differences in responses. For role-play administration, students should be separated into fair and unfair conditions and provided with the scenario but without the two procedural justice variations (last sections). After students role-play the scenario, a discussion of the apparent inequity of the situation is conducted.

At this point, students lack information about the procedural propriety of the decision and, in our experience, become quite interested in, and attentive to, subsequent information that might provide an explanation for the focal person’s outcomes. Such heightened interest is consistent with findings
that information presented first is weighted most heavily in justice judgments (van den Bos, Vermunt, & Wilke, 1997). Thus withholding information about the procedural justice of the decision-making process may prime students for subsequent information by inducing a greater degree of vicarious inequity tension. A student then reads the last paragraph that contains the unfair (low) procedural justice variation to the class. After discussion of the procedural impropriety in the unfair condition, the fair (high procedural justice) condition is read. Students are then encouraged to discuss the difference in their reactions to the fair versus the unfair condition.

GUIDED DISCUSSION

Students from both conditions participate as a class in the discussion of the scenario. Following a general discussion of reactions to the exercise, a specific discussion of the distributive justice characteristics of the scenario (regardless of whether a role-play is utilized) is conducted.

EQUITY THEORY

All students are asked to identify the outcome of the case for the focal person and the referent—that is, the referent received the promotion while the focal person did not. At this point, we place these outcomes on the board or visual display as the numerator of the equity equation. Second, students are asked to identify the respective inputs of the focal person and referent. These inputs are placed in the denominator area of the equation as they are generated during the discussion. In both conditions, the focal person has worked for the company 2 years longer than the referent and has completed a business degree. Furthermore, the focal person possesses substantial skills in financial management, has developed the expansion plan, and has presented the plan to investors. The referent, in contrast, has less tenure and has only completed a portion of her degree. However, the referent possesses substantial skills in negotiation and conflict management, has served as assistant to the focal person in developing the expansion plan, and has defended the plan during the presentation. We generally arrive at a representation of inequity similar to that depicted in Table 1.

After the students have analyzed the situation, they may be asked to raise their hands if they felt that they were unfairly treated in the exercise. We often find that despite the apparent inequity, more students in the unfair procedures condition raise their hands than in the fair procedures condition. With role-play administration, almost all students raise their hands as they have not been exposed to procedural justice variations. (As noted in a later section, the equity of the situation is somewhat ambiguous to justify the decision from the employer’s point of view.)
PROCEDURAL JUSTICE

Students are then instructed to focus on the last part of their case that contains variations in procedural justice beginning with the statement, “Shortly after the meeting . . .” Students are then guided through a discussion concerning the extent to which their scenario reflected conformity to, or violation of, Leventhal’s (1980) rules of procedural justice. Variations in the unfair procedures condition were designed to violate the bias, accuracy, and representativeness rules of procedural justice. A contrast in conditions highlights these violations.

In the unfair procedures condition, decision makers failed to ensure that the process was based on accurate information about both applicants. Applicant credentials were only cursorily reviewed. Furthermore, the hiring decision was based on a set of limited observations of each applicant’s performance occurring during the investor meeting. In contrast, in the fair procedures condition, applications from the focal person and referent, and past performance, were judiciously reviewed.

The unfair condition also depicts a situation in which the concerns of all parties were not adequately represented—the owner, who had knowledge of the focal person’s total performance contributions, failed to represent those contributions to decision makers. In the fair condition, the discussion of the respective credentials and past performance of both candidates implies that the owner fully represented the concerns of both parties to the investor committee. The most obvious violation of procedural propriety is the apparent nepotism that biased the hiring decision to assuage a powerful investor. Given the combination of violations in the unfair condition, it may also be argued that the ethicality rule was violated in that decision makers failed to exercise due diligence in the promotion decision.

At this point, the importance of providing adequate explanations for personnel decisions, as was done in the fair procedures condition, is emphasized.
Because most employees are not privy to information concerning the fairness of decision-making procedures, such explanations are vitally important in helping them to understand the justification for their outcomes, particularly those that are unfavorable (Greenberg, 1993a).

DISTRIBUTIVE AND PROCEDURAL JUSTICE

At this point, students from both groups have been made aware of the differences between the cases and have been guided through an informed evaluation of those differences. As a result, we have found that students generally agree (with nods of realization and thoughtful expressions) that the procedurally just condition is considerably fairer than the procedurally unjust condition. The importance of procedural justice on reactions to unfair or unfavorable outcomes in the work setting is established when students realize that in the procedurally unfair and fair cases, the outcome was the same.

This fair process effect may also be demonstrated through differences in behavioral intentions in reaction to the scenarios. Students subjected to the fair procedures condition will typically report intentions to react in a more positive manner (work harder, develop skills, etc.) than those in the unfair procedures condition (who are more likely to report intentions of quitting or reducing work effort). The relationship between the expectancy factor of the motivational force formula and perceptions of procedural fairness is addressed in the following section.

INCORPORATING EXPECTANCY THEORY INTO THE DISCUSSION

The expectancy theory formula is visually displayed for student reference in understanding the motivational force to react to the inequity in the scenario in a particular manner. Highly valent, second-level outcomes of the formula should involve inequity reduction and may, at the instructor’s (or students’) choice, include higher pay and intrinsic needs that may have been activated by the situation in the simulation (i.e., needs from content theories of motivation such as achievement, esteem and recognition may be relevant). Following articulation of this portion of the expectancy theory formula, students are asked to report their own responses to the inequity in the scenario. Differences in the direction of behaviors motivated by each condition reflect the perceived utility of various courses of action under high and low conditions of procedural justice.

These differences become apparent when listed on a display according to condition. In the fair procedural justice condition, students typically respond with positive attempts to increase their present and future outcomes. Because perceptions of procedural fairness in the work setting
strengthen the expectation that positive behaviors will be followed by appropriate and justifiable outcomes, motivation to engage in positive behaviors is enhanced. Furthermore, positive attitudes toward decision makers and the organization engendered by procedural fairness (previously reviewed) are likely to increase the valence of second-level outcomes that preserve the standing of the person within the organization. Thus, positive behaviors, or those that are instrumental in reducing inequity and maintaining good standing within the organization, are typically selected. Responses have included requesting a raise or a position in finance that is comparable in status to the referent’s new position, attempting to contract for a career path with the owner, and maintaining or improving current levels of effort and performance.

Responses to inequity in the unfair procedures condition tend to be less positive. Here it can be emphasized that perceptions of procedural impropriety, particularly of an ongoing nature, should reduce employee expectations that positive work behaviors will be followed by deserved and/or justifiable outcomes. As a result, motivation to engage in positive behaviors will decrease while the perceived utility of inequity reduction mechanisms with negative organizational implications may increase. Because there is likely to be an absence of positive feelings for decision makers and the organization, the behavior that is most instrumental in reducing inequity will be selected regardless of its consequences to the organization. By far, the most common response to the scenario from students in the unfair procedures condition is to quit the job. Other responses have included reducing work effort, withholding assistance to the referent in her new position (to potentially reduce her outcomes), attempting to lower the referent’s outcomes by denigrating her contributions in the eyes of decision makers, and taking legal action against the owner.

ADDITIONAL COMMENTS

During the discussion students may become somewhat confused about the apparent paradox of an unfair outcome resulting from fair procedures. This is a good opportunity to remind students that equity judgments are perceptual in nature and, as such, are subject to perceptual bias. As stated by Mowday (1991), “In behavioral terms, the objective characteristics of the situation are of less importance than the person’s perceptions” (p. 113).

Both conditions were designed to be perceived as inequitable from the perspective of the focal person. Furthermore, and to the extent that students actually identified with the focal person, experienced inequity is likely to have been exacerbated by self-serving bias. It is important to note that because the owners are motivated to enhance firm performance, it is likely that their valuation of the inputs of the focal person and the referent will
vary considerably from the valuation made by the focal person. This is evident in the owner’s statement in the fair procedures condition that, “Ann was selected because her negotiating and problem solving skills . . . were considered more important.” Here it is useful to return to the visual display of the equity formula depicted in Table 1. Although the focal person has obviously made substantial contributions to the exchange, it is plausible that decision makers, given the conflict-ridden nature of rapid organizational growth, have weighted the conflict resolution and negotiating skills of the referent as more valuable than the combined contributions of the focal person.

We have also encountered a few students who assert that the unfair condition was distributively and procedurally just. In exploring their positions, we found that these students were utilizing a generalized internal referent standard (sometimes from their own past experience) to judge the fairness of the situation rather than utilizing the actual discrepancy in ratios between the focal person and referent. These students stated that the scenario was fair because “that’s business,” or “that’s the way it goes in the real world.”

We have found the exercise to be a useful and fun means of supplementing lecture-based instruction on justice and motivation theories and for providing students with an experiential foundation for understanding relatively complex material. In a recent (paper–and-pencil) administration of the exercise to a junior-level management class of 29 students, 24 reported that the exercise was “very useful,” or “useful,” in response to the question, “How useful was this exercise in teaching management students about justice and motivation theories?” included on an anonymous feedback form attached to each case.

During the following semester, a comparison of mastery of subject material between two junior-level management classes, only one of which was exposed to the exercise, was conducted. For assessment purposes, nine multiple-choice items pertaining to motivation and justice theory were interspersed within a 50-item, multiple-choice, final examination. Final examination items were identical for both classes. Responses to the nine items were aggregated (summed) to create a combined measure for comparison of learning between the experimental (n = 33) and control classes (n = 36; Appendix B contains the nine test items).

Analysis of the percentage of students who answered all nine items correctly was conducted under the assumption that they had integrated material more thoroughly than those with less-than-perfect scores. As expected, 27% of students in the experimental class answered all nine items correctly compared with only 17% in the control class. However, despite the positive direction of results, this difference was not statistically significant, \( t(69) = 1.06 \) (ns). A comparison of summed scores (number of scale items answered correctly) between classes (\( M = 7.45 \) for the experimental group and
\( M = 7.25 \) for the control group) also failed to produce significant results, 
\( t(69) = .65 \) (\( ns \)).

It is important to note that, and consistent with previous experience, 
student participation in discussion and apparent interest in material was 
markedly higher in the group exposed to the exercise. Clearly, students 
understood and appeared to be enlightened by the positive effects of proce-
dural justice on their reactions to the unfavorable outcome in the scenario. 
We strongly suspect that this enthusiasm accounted for some differences in 
results.

It should also be noted that the method used to test for the effectiveness 
of the exercise may have seriously attenuated differences in scores. The 
final examination, which contained the effectiveness measure, was admin-
istered as open book and/or open note. This test method was deemed appro-
riate for both management classes as each class covered large amounts of 
somewhat unrelated material. However, this method allowed students who 
were not exposed to the exercise access to identical text and PowerPoint 
lecture notes as the experimental class in responding to test items. 
Consequently, a fair comparison of effects of the exercise may not have 
been produced. We strongly expect that a closed book test, or a more 
focused follow-up exam on theoretical material covered in the exercise, 
would have provided more robust results. Taken together, although weak, 
triangulation of results (student interest, reported perceptions of usefulness, 
and positive test results) suggest that the module and exercise is a valuable 
addition to lecture material on the critical relationship between fairness in 
the workplace and work motivation.

**Conclusion**

A sense of justice is vital to psychological well-being on and off the job. 
It is critically important that management students gain a clear understand-
ing of how perceptions of injustice, and motivation to redress injustice, 
affect employee intentions to engage in positive or negative work-related 
behaviors. The ability to manage perceptions of injustice in the workplace 
requires a thorough knowledge of specific motivation theories and the abil-
ity to concurrently draw from and apply related aspects of each theory to 
particular management situations. The presentation of process theories of 
motivation in an integrated fashion as suggested herein should promote 
these capabilities in management students.

Utilization of experiential exercises that induce a vicarious experience of 
injustice and to which relevant theory can be applied provides students with 
a framework for understanding a rather complex body of knowledge and 
common ground for entertaining and lively class discussion.
Appendix A
Exercise Scenario

Sunbolt, Inc. is a small, highly successful entrepreneurial firm that services and repairs high-tech sound systems. Its expert in-house electronics staff and quality service have contributed to higher-than-average earnings and a reputation of excellence.

The company was set up in 1998 when the owner, an electronics engineer, decided that he was tired of working for others and wanted to begin his own business. The business has been so successful that the owner is currently in the process of negotiations with several private investors to obtain financial backing for a regional expansion. Currently, the one shop employs nine sound technicians and two administrative employees, yourself and Ann.

You were hired during the first year of operations to assist the owner with the financial and administrative aspects of the business. You hold a BS in business administration with an emphasis in small business. Your understanding of financial management has been an invaluable asset as the firm has grown beyond the management capabilities of the owner. Your position can be best described as finance and administrative officer of the business.

In addition to your regular duties, the owner has asked you to develop a general strategy for implementing the expansion. The plan should include your projections of the staffing and financial needs of expanded operations, strategies for acquisition of new outlets, and a tentative time frame for full implementation. The owner has assured you that when the expansion is approved, you are one of the prime candidates for a management position at the regional level.

Ann, the niece of a major investor in the expansion, was hired 2 years after you to assist you with administration of the growing firm. She is currently in the process of completing her business degree (with an emphasis in management) through a local university that offers evening classes. Ann can be described as a bright and competent assistant administrator who has an unusual talent for negotiation and problem solving. Ann has also applied for the regional management position.

Among the job requirements for the regional management position are (a) knowledge of finance and financial markets through which funding for the firm’s growth must be obtained and (b) skill in oral communication, negotiation, and conflict resolution to effectively deal with problems and conflicts that may result as the company changes and expands.

During the past few months you had met several times with individual investors who were interested in financing the expansion so that each member could contribute his or her ideas to the expansion plan. After extensive consultation with each investor, you had finalized a draft of the plan and had prepared a formal presentation of the plan for the entire group.

At this point, you have just presented the formal plan during a meeting attended by the owner, Sunbolt employees, and the group of investors. During the meeting, a couple of the investors disagreed with you on some issues; one investor disagreed with the others about the proposed location of outlets and felt that the projected time frame for full implementation was unnecessarily long.
Ann aggressively defended the plan during the discussion. On those points that could not be agreed on, she was able to suggest reasonable alternatives and negotiate solutions that were, in the end, acceptable to everyone. The expansion was approved, and the group moved on to making staffing decisions for top positions at the regional level. At this point, you, Ann, and the other employees were asked to leave the meeting.

The group agreed that no outside hiring for regional-level positions was desirable or necessary, at least for the present. Two technicians from the shop were selected to manage the centralized inventory system and the recruitment of technical personnel for the new outlets. Ann was selected as the new regional manager.

HIGH PROCEDURAL JUSTICE CONDITION

Shortly after the meeting, you met with the owner to discuss how the group had arrived at their promotion decisions. The owner stated that the group had spent a considerable amount of time reviewing your and Ann’s credentials, and interpersonal skills. They wanted to make sure that the decision was completely fair to both of you and, at the same time, fully met the unique managerial needs of the growing firm. He stated that your education, background, and experience in finance were considered a real plus. He also assured you that the fact that Ann was the niece of one of the investors had nothing to do with the decision—in fact, the other investors were not aware that the two were related, and this particular investor abstained from voting on the promotion decision. Ann, he stated, was selected because her negotiating and problem-solving skills, that she had demonstrated through her past performance, and through her work with the investors, were considered more important to the position. He explained that the group thought it was essential to hire someone who was able to manage the internal conflicts that often occur during growth and expansion. Moreover, it was considered critical that the new regional manager have the ability to establish and negotiate long-term, favorable agreements with external agents (such as bankers and suppliers) through whom needed financial and material resources could be acquired.

LOW PROCEDURAL JUSTICE CONDITION

Shortly after the meeting, you met with the owner to discuss how the group had arrived at their promotion decisions. The owner reported that the group came to its decision to hire Ann very quickly. He stated that everyone was exhausted after the long meeting and that no one felt like spending a lot of time reviewing the applications. He reminded you that Ann was the niece of one of the major investors. It was also clear, he stated, that Ann’s impressive performance during the meeting was a determining factor in the promotion decision.
Appendix B
Nine Items Interspersed Within a 50-Item Multiple Choice Final Examination Aggregated to Assess Learning from Exercise

1. Motivation to work hard results from
   
a. beliefs that decision-making procedures concerning promotions and other desirable rewards are fair.
   b. high expectations that performance will lead to rewards.
   c. the free-form essay method of performance appraisal is used.
   d. a & b

2. According to equity theory, inequity results when ________________
   
a. one’s outcomes are greater than another’s.
   b. one’s concerns are not represented.
   c. the ratio of one’s outcomes to inputs are unequal to another’s.

3. You feel underpaid compared to a coworker. You earn $10 per hour for 20 units of input while your coworker earns $20 per hour for the same units of work input. You decide to use peer pressure to get your coworker to work harder so that your equity ratios are equal. To be successful you must be able to get your coworker to raise his or her work inputs to _____
   
a. 10 units.
   b. 20 units.
   c. 30 units.
   d. 40 units.

4. The perceived fairness of a performance appraisal system that influences promotions and pay raises is:
   
a. distributive justice.
   b. procedural justice.
   c. selective perceptions.
   d. stereotyping.

5. One rule of procedural justice is ________________
   
a. decisions should be free from bias.
   b. the ratio of outcomes to inputs should be equal.
   c. one’s outcomes are equal to another’s outcomes.
   d. decisions should be ethical.
   e. a & d
6. According to the “fair process effect” people experience less anger over unfair outcomes when ________________________________

   a. procedures are also unfair.
   b. procedures are fair.
   c. they can project the blame onto others.
   d. they can externalize the cause of the outcome to someone other than themselves.

7. Valence, according to Vroom, is the product of the ________________________________

   a. instrumentality of second-level outcomes and expectancy of success.
   b. probability that behavior will lead to a particular outcome.
   c. instrumentality of the first-level outcome in obtaining second-level outcomes and the valence of second-level outcomes.
   d. expectancy that behavior will lead to a particular outcome and the importance of second-level outcomes.

8. An example of responding to inequity by acting on another’s inputs is ________________________________

   a. to pressure the person to work harder.
   b. to help the person with his or her work.
   c. to steal from the person.
   d. to ask for a raise.

9. The belief in procedural justice in the organizational decision-making process concerning allocation of rewards is most closely related to which of the following factors of Vroom’s model?

   a. Expectancy  
   b. Valence  
   c. Instrumentality  
   d. Equity

References


