

Is Smoking Stigma Clouding the Objectivity of Employee Performance Appraisal?

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This paper examines the relationship between supervisors' and project leaders' perceptions about the smoking behavior of their subordinate employees and their performance appraisals of their employees. Those who were perceived to be smokers were rated lower than those perceived to be nonsmokers on four of nine job performance measures when controlling for age, race, and gender. The findings suggest smoking stigma may negatively affect the perceptions of one's overall job performance, especially in terms of one's professional comportment, working relations with others, and dependability.

The purpose of this research effort is to examine the relationship between smoking tobacco and job performance. Employees who smoke have become stigmatized in the workplace, and this may influence perceptions about their performance on the job.

Changing Societal Attitudes Toward Smoking

Today, smoking is a social stigma; it has not always been that way. At the turn of the 20th century, smokers were socially denigrated. During World War I, use by men became acceptable. By the mid-forties, smoking was socially acceptable and culturally attractive for both men and women, with the cigarette symbolizing social status, personal well being and strength.¹ The tide of social acceptability for smoking in the United States began to turn again starting with the U.S. Surgeon General's report on smoking and health and subsequent supporting studies empirically linking smoking to lung cancer, heart disease, lung disease, and other illnesses.² In other studies, smokers were also singled out for causing industries to incur an additional ninety-five billion dollars in expenses per year as a result of greater absenteeism, higher medical costs, and reduced personal and peer productivity.³

Research And Public Awareness About The Detrimental Effects Of Smoking

Growing Anti-smoking Sentiment

The following facts have contributed to a widespread public anti-smoking sentiment. The Bureau of National Affairs and the Society for Human Resource Management reported that eighty-five percent of responding firms restrict smoking in the workplace.⁴ Smoking is now banned in every federal government facility, the FAA has banned smoking on U.S. domestic flights, and entire restaurant chains like McDonalds have eliminated its use by both its patrons and employees.

Personality Differences Between Smokers And Nonsmokers

Smokers' personalities may further contribute to the smoker being viewed as socially abnormal. Several studies reported smokers to score higher on personality measures associated with emotional coldness, egocentricity, hostility, and/or neuroticism.⁵ Most notable are the findings reported by Gilbert where, following his review of 31 studies pertaining to smoking and extroversion, 31 studies pertaining to smoking and neuroticism, 19 studies pertaining to smoking and depression, 21 studies pertaining to smoking and anxiety, 10 studies pertaining to smoking and hostility and anger, 47 studies pertaining to psychoticism and its component facets (impulsivity, sensation seeking, antisocial, aggressiveness, disagreeableness, rebelliousness, and deviance), and 4 studies pertaining to smoking and schizophrenia, it was concluded that "...individuals characterized by chronic psychological disorders and those who do not adhere to traditional social values are more likely to smoke than are others."⁶ Though the percent of the smoker population who have such psychosocial disorders is likely to be small, any difference between smoker and nonsmoker populations would likely strengthen the negative bias towards smokers in general.

Stigmatization of Smokers

Awareness by others of a person's smoking status generally results in negative evaluations of that person's attributes. Changes in public policy, negative effects on health, social costs, and possible psychosocial disorders, have all contributed to the stigmatization of smoking, with potentially detrimental consequences for the smoker in the workplace.⁷ A recent study supporting this assertion found that supervisors who smoked were rated by their subordinates to be less effective leaders than were supervisors who did not smoke, regardless of the subordinate employee's smoking status.⁸

Smoking As a Social Stigma

Today, cigarette smoking is viewed to be a social stigma.⁹ Social stigma is a result of a person being tainted by a physical or personal attribute that is considered taboo, marking the person as different from others in a category. The bias of stigma is greater than the bias associated with having a particular attribute or merely falling into a stereotype-like category. The extent to which the stigma is attributed to individual conduct (as opposed to innate characteristics beyond one's control) strengthens the likelihood of unfavorable treatment by others. The more visible the attributes associated with the stigma, the more likely the stigma will be formed by others and retained. Where the stigmatized are grouped together in a common location, the stigma towards them is likely to be further heightened.¹⁰

Smoking on the job is commonly thought to be a conduct-type stigma. That is, most view smokers to be smoking as a matter of choice rather than it being an innate characteristic the smoker can't do anything about. Additionally, because smoking on the job is limited to designated areas, smokers are more likely to be seen together, congregating while smoking. Thus, negative bias toward the smoker is likely to be amplified by the simultaneous interplay of the conduct nature of the stigma, the observability of the behavior, and organizational policies requiring smokers to congregate in designated smoking areas away from areas where they are normally expected to perform their jobs.

Research Problem

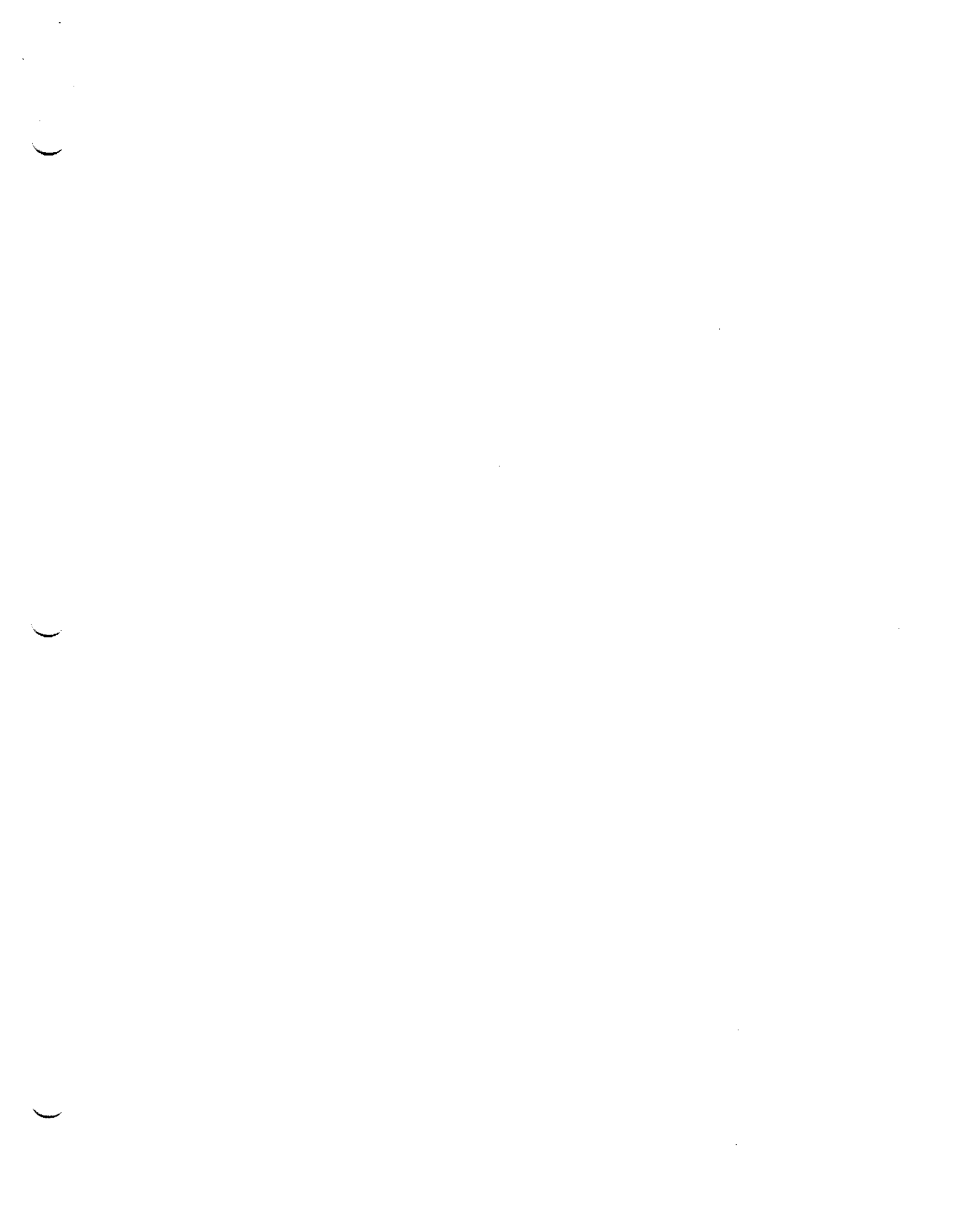
Social stigma theory would suggest that employees who are perceived to smoke would be more likely to be rated lower in job performance than those who are perceived to be nonsmokers. This research inquiry compares performance ratings of smokers and nonsmokers in organizations. Given that smokers have been identified as a stigmatized social group, those who are perceived to be smokers would be expected to be rated lower than those perceived to be nonsmokers.

Proposition: Employees perceived to be smokers receive lower performance ratings than those viewed to be nonsmokers when controlling for other possible influences.

Methods

Employee Sample

The sample data are supervisor and project leader ratings of non-supervisory employees from two military organizations consisting of both military and civilian personnel. Each supervisor and project leader



rated each of the employees assigned to them (N=854 employees). In Group 1 both supervisors and projects leaders served as raters, while in Group 2, only supervisors were used to assess employee performance. Group 1 was located in a large metropolitan area on the east coast. Group 2 was located in a moderately large metropolitan area on the west coast. Demographic descriptives are provided as Table 1 and suggest a high degree of similarity across the two groups.

Table 1 Demographic Descriptives of Sample Groups

	Group 1	Group 2	Total
Black ¹	205(42.5%)	74 (20.7%)	279 (33.2%)
Caucasian	255(52.9%)	229 (64.0%)	484 (57.6%)
Other	22 (4.6%)	55 (15.4%)	77 (9.2%)
Age			
Mean	38	43	40
Median	40	40	40
Gender			
Male	255 (53.2%)	203 (55.0%)	459 (54.0%)
Female	224 (46.8%)	166 (45.0%)	390 (46.0%)

¹African-Americans and others not classified as Caucasian, Hispanic, or Other

In total, 572 (74.6%) of the subjects' supervisors disagreed that the employee smoked tobacco, and 195 (25.4%) agreed. Thus, 572 (74.6%) of the sample subjects were classified as nonsmokers in this study with 195 (25.4%) classified as smokers. Due to the small number of smokers found in each of the groups and for purposes of improving the statistical validity and power of tests employed, the samples described above were combined. The percentage of employees reported to smoke was similar among the two groups.

Validity of the Employee Performance Instrument

Using a five point Likert type scale (1=strongly disagree ; 5=strongly agree), supervisors responded to statements about their employee's performance embedded in a larger employee assessment instrument. The empirically derived 60 item measure was validated in prior research and incorporates eight highly reliable dimensions of performance and a

larger global measure of job performance.¹¹ A ninth global measure of performance is comprised of 27 of the dimension items and two unique items, and was derived using a quartermax rotation. The statistical application used to derive the measures employed in this study was factor analysis using principal components and varimax rotation.

The nine factorially derived job performance characteristics, number of factor items in each scale, and scale reliabilities (coefficient alpha) are included as Appendix I. The validity of the level of overall job performance was assessed using two one-item measures embedded in the survey that asked to what extent the individual's overall performance and productivity was in one of six percentile ranges relative to all employees.

Procedure

Stepwise multiple regression analysis (with the computer eliminating variables with p-values greater than .05) was used to determine if there were significant differences among smokers and nonsmokers while controlling for the impact of other factors (control variables) that may be related to job performance assessment. We elected to use stepwise regression as opposed to the full-model approach because the latter approach results in more interpretable variable coefficients in the event that the independent (predictor) variables are highly correlated. Also, the stepwise approach tends to prevent two highly correlated variables from appearing together in the final model. Given that our interest was to establish whether perceived smoking status was significantly related to job performance rather than an explicit interest in predicting performance, a stepwise approach to regression was viewed to be the more appropriate technique.

Control Variables

Control variables were selected from demographic data on the raters (supervisors and project leaders) and the rated subordinates. They include the age of the subject employee and gender and race of both the rater (supervisor or project leader) and the subject employee. The impacts of the supervisor and the subordinate being of different gender or race were assessed. These factors were used as controls because they were available in the database and because they might also have an effect on job performance appraisals.

Age

Six different age groups were used (16-24, 25-30, 31-40, 41-50, 51-64, and 65-80). Although age could have been treated as a continuous variable, the use of categories was preferable so that any non-linearities in its relationship with performance appraisal could be identified. The

omitted (reference) category in the analysis was arbitrarily chosen to be the group from 16 to 24 years old. The stepwise multiple regression analysis identifies any age groups that have significantly lower or higher assessments than this group.

Race

Caucasian race was used as the reference category for the variable "race," and the stepwise regression includes "black race" in the model if blacks have significantly higher or lower assessments than caucasians. All subjects who were neither caucasian nor African-American were eliminated from the study because there were too few respondents in any other single category to support any statistical inference about them.

Gender

Males were used as the reference category for gender, and "female gender" was included in the final regression model if females have significantly higher or lower ratings than males. With regard to the variables related to the difference of gender or race among supervisors and subordinates, the reference categories were "same gender" and "same race," and variables representing differences in gender or race among supervisors and subordinates enter the stepwise models only when they have significantly different assessments than the reference categories.

Results

As indicated in Table 2, all nine job performance dimensions were significantly correlated with the survey measures of overall performance and productivity.

Table 2 Zero Order Correlations of Performance Dimensions with Overall Performance and Overall Productivity

	Overall Performance ¹	Overall Productivity ²
Overall Job Perf.	.715 (.000)	.690 (.000)
Partnership	.573 (.000)	.530 (.000)
Commitment	.703 (.000)	.695 (.000)
Tech. Competence	.719 (.000)	.719 (.000)
Humor	.432 (.000)	.401 (.000)
Dependability	.540 (.000)	.520 (.000)
Pos. Work Rel.	.246 (.000)	.232 (.000)
Prop. Comport.	.498 (.000)	.460 (.000)
Tendency Spk. Up	.165 (.000)	.179 (.000)
	n=831	n=831

¹ Overall performance was determined by a response to the following item: "Overall, I would rate this person to be among the _____ of subordinates I have had." The item had 6 potential responses with regard to the employee's performance (top 10%, top 11-25%, top 26-50%, bottom 26-50%, bottom 11-25%, bottom 10%).

² Overall productivity was determined by a response to the following item "In terms of productivity, this person is among the _____ of subordinates I have had." The item had 6 potential responses with regard to the employee's performance (top 10%, top 11-25%, top 26-50%, bottom 26-50%, bottom 11-25%, bottom 10%).

Table 3 presents the significant variables related to each of the job performance characteristics including the aggregate measure of overall job performance. Also included are the regression coefficient and p-value for each significant characteristic. The overall R2 provided represents the proportion of variation in the assessments that is explained by all variables in the model.

Table 3 Stepwise Multiple Regression Results

Dependent Variable	Significant Independent Variables	Regression Coefficient	p-value	R2
Overall Job Performance	Smoker	-.089	.038	.0079
	Black Race	-.087	.015	.0154
	Sex Interaction	.086	.006	.0228
Partnership with Supervisor	No Variables Significant			
Commitment To The Job	Age 25-30	.103	.016	.0107
	Age 31-40	.129	.001	.0252
Technical Competence	Black Race	-.110	.010	.0122
	Age 65-80	-.099	.002	.0220
Sense of Humor	Age 51-65	-.118	.006	.0140
	Sex Interaction	.102	.001	.0242
	Supv. Sex (F)	.095	.000	.0333
Dependability	Smoker	-.131	.002	.0171
	Black Race	-.094	.001	.0260
	Supv. Sex (F)	-.091	.000	.0342
Positive Working Relations	Race Interaction	.135	.002	.0181
	Smoker	-.122	.000	.0329
	Female	-.115	.000	.0462
	Age 41-50	-.192	.000	.0546
Tendency To Speak Up	No Variables Significant			
Proper Compartment	Smoker	-.130	.002	.0168

As noted in the table, smoking status was identified as being significantly associated with lower ratings in overall job performance, dependability, proper compartment, and positive working relations. In each case, smokers had significantly lower ratings in the performance characteristic compared to nonsmokers, when controlling for the impact of the other variables in the model.

For the four characteristics in which smokers had significantly lower scores, the average assessment score for smokers ranged from -.089 to -.131 points lower than nonsmokers (see the regression coefficients in Table 2) after having controlled for the other variables. Also, for three of these characteristics, smoking was the strongest variable in the regression model. For all of these characteristics, the p values for the variable "smoking" were highly significant. The R² values, which denote the ability of the overall model to explain the variation in supervisor ratings, were very small. This indicates that most of the variation could be explained by factors not in the model or may have been related to the relatively small range in the rating scale. Nevertheless, smoking status did prove to be highly associated with perceived job performance after having controlled for other factors.

For the three specific performance characteristics with which smoking was significantly related, the level of significance was very strong: Dependability (P=.002), Positive Working Relations (P=.002), and Proper Comportment (P=.002). The overall job performance measure was weaker (P=.038). Smoking status was not significantly related to Partnership with the Supervisor, Commitment to the Job, Technical Competence, Sense of Humor, and Tendency to Speak Up. In none of the nine job areas was smoking found to be a more positive influence on employee job performance ratings than nonsmoking.

Discussion

Findings from this study indicate that even after controlling for known bias factors such as age, gender, and race, employees who are perceived to be smokers are more likely to be rated lower by their supervisors in some key measures of job performance. The data also reveal that the discrediting association is selective rather than global in its application when rating employee performance. Perceived smoking status was significantly associated with the global measure of job performance, as well as measures of dependability, positive working relationships, and proper comportment. Perceived smoking status was not significantly associated with five of the nine performance dimensions, including partnership with the supervisor, commitment to the job, technical competence, sense of humor, and tendency to speak up.

The proposition posed in this paper was that Employees perceived to be smokers would receive lower performance ratings than those viewed to be nonsmokers when controlling for other possible influences. The study results provide support for this proposition in four of the nine performance categories. Because of the field nature of this research effort, it was not possible to control for personality disorders among smokers and organizational policies, both of which might be associated

with lower performance ratings. The results of this study are consistent with stigmatization as revealed by the lower evaluation of those who are smokers. The negative relationships between perceived smoking and job performance ratings are discussed below.

Dependability

The lower ratings in this measure are supported by previous research findings pertaining to smoking and absenteeism, psychological disorders, and organizational policies that separate smokers from nonsmokers. Studies have identified smokers to have greater incidences of illness and absenteeism than nonsmokers.¹² Smokers were also identified to be more impulsive, anti-social and rebellious than nonsmokers.¹³ If, indeed, smokers tend to be more impulsive and anti-social than nonsmokers, it is likely they would be perceived to be less dependable at work in terms of punctuality, meeting deadlines, and keeping their commitments to others.

Positive Working Relations

Employees rated high in positive working relations are viewed to be more congenial, pleasant, and friendly than others. They are also more apt to speak positively about others. Those who are rated lower in this measure are perceived as less congenial, as having lower social skills, and more anger and hostility. In previous research, identified nonsmokers were rated as more considerate than smokers by both nonsmokers and smokers.¹⁴ Gilbert, et.al. identified supervisors who smoke to be rated lower by their subordinate employees on relationship behaviors than supervisors who do not smoke.¹⁵ These relationship behaviors with subordinates included partnership, friendship, enjoyableness, and networking-type behavior. Such lower ratings were attributed to smoking supervisors by both smoking and nonsmoking employees.

Proper Comportment

By definition, those who rate high on this measure project a highly desirable social image. It is signaled via their dress, courtesy, speech, poise, manners, tact, and general appearance. Given that smoking is a social stigma, employees who are perceived to smoke would not be expected to be rated as high on this measure as those who are not perceived to smoke.

Overall Job Performance

When rated on this general measure of job performance (consisting of 29 items), those who were perceived to smoke scored lower than those who were nonsmokers.

These results suggest that in addition to its detrimental impact on health and longevity, perceived smoking may be harmful to one's adjudged performance on the job. This finding is consistent with outcomes associated with individuals targeted by social stigmas and supports the proposition posed in this study.

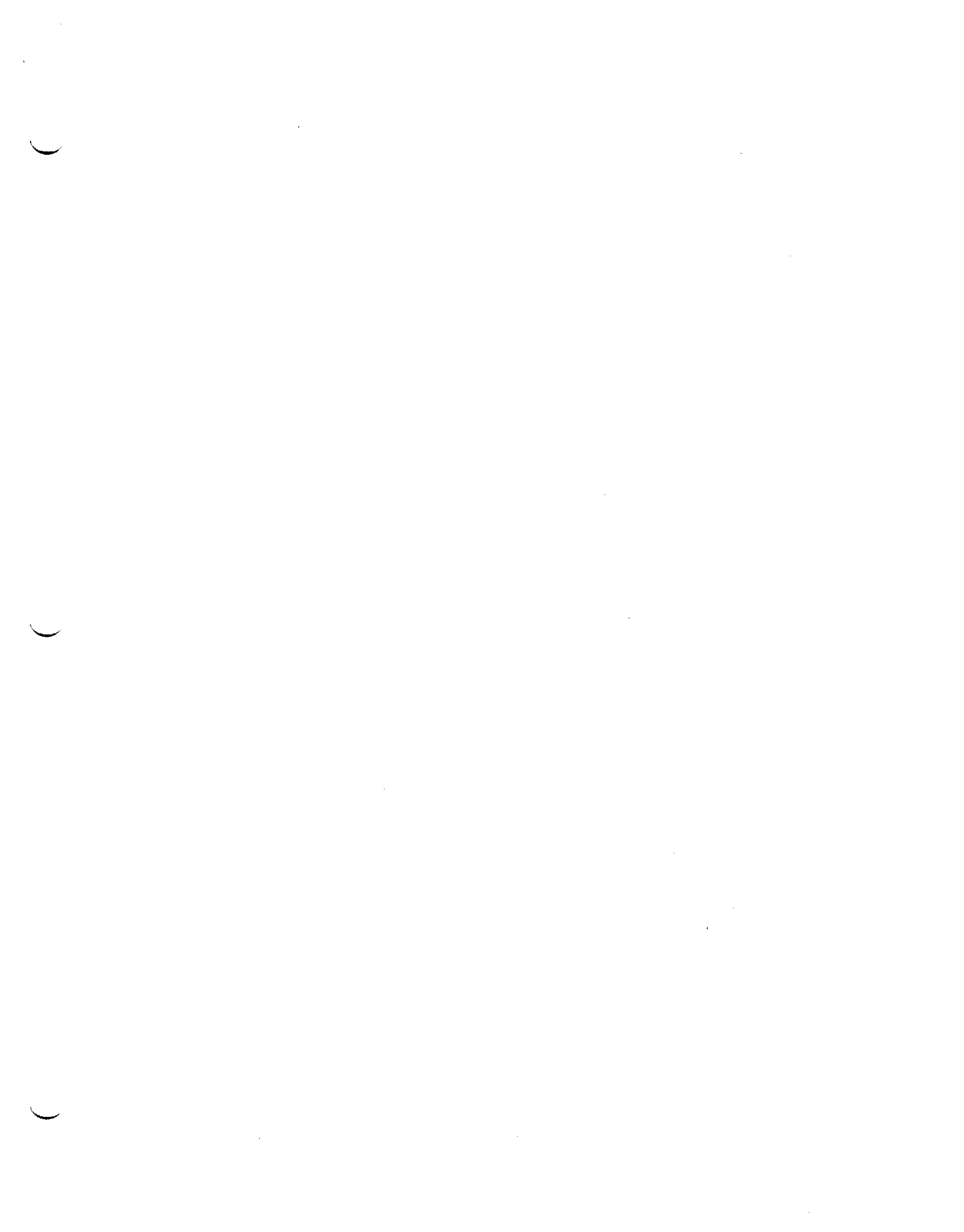
Directions for Further Research

If smoking is associated with inferior performance, it may be a result of: 1) Smokers losing valuable production time as a result of their having to smoke in designated areas away from the work environment; and/or 2) Smoking directly impacting one's physical health, motivation and/or ability; and/or 3) Raters of job performance incorporating "smokerism" bias into their performance ratings.

These potential causes can be addressed only in subsequent studies that explore the reasons why smokers receive inferior ratings. The answers to these questions are far from trivial given that approximately 20 percent of adults in the United States smoke.

The study findings demonstrate that more research is needed in both government and the private sector to shed further light on the relationship between smoking and job performance. The following specific explorations are recommended:

1. Replicate the study design to gain more knowledge about smoking and performance appraisal. It would be useful to determine if the results are replicable with objective measures of performance. Actual observations of employee smoking habits, incidence of smoke breaks, and attendance records would be invaluable in such a study, yet, in practical terms, difficult to acquire. Relationships between objective performance measures and smoking status might also be compared to the relationship between subjective performance measures and smoking status. Additional subjective measures of employee performance, beyond those in the present study (supervisor or project leader), should be incorporated to provide a multi-rater approach to measuring performance. These comparisons would help identify where true differences versus smokerism bias exist.
2. Create more rigorous research designs that investigate cause-effect relationships of social stigma, psychological/emotional characteristics, organizational policies, and the job performance of employees who smoke. Given the likelihood that employees who still smoke are psychologically/emotionally different than those who do not, the incidence of their smoking may only be a moderating effect, while the actual difference in observed behavior may partially be due to actual personality or biological differences. Further research into this area is



indicated to gain greater insight into the behavioral aspects of smokers and nonsmokers.

3. Future research on job performance appraisal should also be based on a larger, more representative sample of workplace situations. Such research might also correct for the limitation of the present study of the inability to determine the interaction effect of supervisor smoking status with employee smoking status to determine if a moderating effect occurred when statuses are equal.

4. Assess organizational policies as they pertain to smoking in the workplace. Currently, public organizations have developed policies that may actually enhance the smokerism bias. At the very time public organizations are encouraging the valuing of diversity among all in the workplace, smoking policies are being designed and enforced that may actually intensify social stigma toward smokers. This would seem to have serious ethical and legal implications and merits the direct attention of human resource managers. It is the obligation of public personnel management to ensure organizational fairness. In the case of smoking and organizational policy, research is needed to identify both the causes of smoking and the most effective alternative approaches to dealing with smoking in the workplace, while fostering fairness and respect for all.

Conclusions

Based on social stigma theory, the present study supports the proposition that perceived smoking status is related to performance appraisal outcomes, with those perceived to be smokers tending to be rated lower than nonsmokers. The implication for smoking employees is that if they stop smoking they will likely improve their job performance ratings. The implications for the organization appear to be even greater.

First, this study gives cause to question the validity of the performance appraisal system as it pertains to employees who smoke, as it may be influenced by smokerism on the job. The appraisal method used to measure employee performance needs to be a valid assessment of the employee's contribution and not a function of smoking stigma held by the appraiser.

Second, if the cause of smoking is tied to innate characteristics of personality, then the manner by which smokers are treated on the job would have even more far reaching implications--especially given that about one-fifth of the working adult population smoke.

If lower employee ratings of smokers are, indeed, based on supervisor bias, stereotype or stigma, the social implications are considerable. Just as ageism, sexism, and racism are unfair organizational practices, smokerism would also be a practice that is unfair and would merit

positive attention by organizational leaders. Attendant organizational policies pertaining to smoking need to be examined in order to learn more about their effects on organizational performance, employee performance appraisal, and the valuing of diversity.

APPENDIX I

Job Performance Characteristics

1. Overall Job Performance Followership (FOL)

An overall measure of one's general performance on the supervisor's team. It includes items from the following eight dimensions and reflects the employee's willingness and ability to do the job, loyalty, productivity, accuracy, responsibility, dependability, and the like (29 factor items with Alpha .96).

2. Partnership With The Supervisor (PAR)

This pertains to the level of perceived trust and sense of confidence a supervisor has that he or she can count on the subordinate to represent the supervisor's interest. It measures the extent to which a supervisor feels the subordinate is on his or her team (14 factor items with Alpha .96).

3. Commitment To The Job (MOT)

Professional loyalty, ambition, and having a "Can Do" attitude are examples of people who score high in this dimension (14 factor items with Alpha .94).

4. Technical Competence (COM)

This dimension assesses one's knowledge, skills, and abilities to do the job from the perception of his or her supervisor (7 factor items with Alpha .88).

5. Sense Of Humor (HUM)

Sharing humor with one's supervisor was found to be a behavior associated with subordinates rated high by their supervisors. This characteristic moderates tension and stress and is often found on high performing teams (7 factor items with Alpha .84).

6. Dependability (DEP)

Getting the job done on time, being dependable, and keeping good attendance are examples of the characteristics that comprise this dimension (4 factor items with Alpha .82).

7. Positive Working Relations (POS)

Leaders rely on subordinates who can work well with others and not engage in destructive game playing on the job. This dimension assesses the extent to which a worker is a positive influence and a supporter of others on a team (4 factor items with Alpha .67).

8. Proper Comportment (PRO)

This dimension refers to the manner by which a subordinate presents him/herself--one's sense of professionalism on the job. It includes dress, grammar, speech, and the like. Individuals who score high here are viewed to be well mannered and have a commanding presence (4 factor items with Alpha .68).

9. Tendency To Speak Up (SPE)

Supervisors respect subordinates who will speak up and share their points of view rather than withhold information. The tendency for the subordinate to offer information to the supervisor and others rather than withhold such information is characterized by this dimension (4 factor items with Alpha .77).

Notes

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