

Individual-Level Determinants of Employee Shirking

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Article abstract

Employee shirking, where workers give less than full effort on the job, has typically been investigated as a construct subject to organization-level influences. Neglected are individual differences that could explain why employees in the same organization or work-group might shirk. Using a sample of workers from the health care profession in the United States, the present study sought to address these limitations by investigating subjective well-being (a dispositional construct), job satisfaction, as well as other individual-level determinants of shirking. Results indicate that whites shirk significantly more than nonwhites, and that subjective well-being, job satisfaction, and age have significant, negative effects on shirking. The implications of these results are discussed.

Individual-Level Determinants of Employee Shirking

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Employee shirking, where workers give less than full effort on the job, has typically been investigated as a construct subject to organization-level influences. Neglected are individual differences that could explain why employees in the same organization or work-group might shirk. Using a sample of workers from the health care profession in the United States, the present study sought to address these limitations by investigating subjective well-being (a dispositional construct), job satisfaction, as well as other individual-level determinants of shirking. Results indicate that whites shirk significantly more than nonwhites, and that subjective well-being, job satisfaction, and age have significant, negative effects on shirking. The implications of these results are discussed.

Considerable attention has recently focused on the issue of employee work effort or, more accurately, the lack thereof. Concern over “employee shirking”, as it is often called, has led to the use of electronic monitoring in some workplaces (Chalykoff and Kochan 1989). Such practices have been met with considerable disdain by employees who view this as an infringement upon their privacy (Garson 1988). While problems with employee

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shirking are not unique to any specific type of organization, these problems are thought to be especially pronounced when there is collective production (Ouchi 1977), particularly when large work groups are involved because of the anonymity associated with large group situations (Latane, Williams, and Harkins 1979; Leibowitz and Tollison 1980; Weldon and Gargano 1985; Weldon and Mustari 1988).

Scholars who have examined employee shirking have tended to focus on various policies organizations can use to elicit an optimal level of employee work effort (e.g., Ehrenberg 1990; Jones 1984). A basic premise underlying much of this literature is that in the absence of effective employer monitoring, employees will reduce their work effort (i.e., shirk). The reduction in work effort occurs because employees' interests do not necessarily coincide with those of their employers. If they can avoid detection, employees will prefer greater amounts of on-the-job leisure for a given wage. Because workers are assumed to shirk when the utility gained from shirking exceeds the utility gained from working, the suggested policies either increase the cost of shirking or the value of working.

For instance, the economics literature emphasizes the use of various compensation policies to reduce employee shirking. These include: (1) payment of supracompetitive wages, i.e., efficiency wages (Akerloff 1984; Shapiro and Stiglitz 1984); (2) payment of wages that are at first below and then later exceed current marginal product (Lazear 1979); and (3) the use of "tournaments" whereby workers compete for coveted top-paying positions (Lazear and Rosen 1981). Under efficiency wage and implicit contract models, because of the nature of the firm's compensation scheme, employees value continued employment with the firm, and thus avoid engaging in activities, such as shirking or malfeasance, which might lead to the termination of their employment. This differs from tournament models where increased productivity is thought to occur as a by-product of employee competition to win the "prize."

Similarly, expectancy theory (Lawler 1973) and equity theory (Lawler 1968) are often used in the organizational behaviour literature to emphasize the importance of compensation policies as determinants of employee work effort. Under expectancy theory, employees are thought to work harder when they believe that hard work will be rewarded by the organization. According to equity theory, an employee who perceives him or herself as being over-rewarded compared to some referent other will feel an inequity and seek to redress it (Pritchard 1969). This may lead to an increase in work effort on the part of the employee. In contrast, employees who believe themselves to be under-rewarded will respond by decreasing their work effort.

In addition, organizational behaviour research stresses the design of work procedures or a control system that allows the monitoring of employees'

performance. Jones (1984) suggests two changes in organizational structure which might reduce shirking. First, increasing the level of vertical differentiation, and the consequent development of hierarchical authority, should increase the effectiveness of supervisory monitoring, and hence reduce employee shirking. Second, increasing the level of horizontal differentiation should lead to increases in monitoring effectiveness "because supervisors will have a conception of appropriate subordinate performance based on their own task knowledge" (Jones 1984: 692).

Recent empirical research examining employee shirking, most of which has been conducted by economists, focuses on how firms' compensation policies influence productivity or firm performance (e.g., Raff and Summers 1987; Abowd 1990; Asch 1990; Becker and Huselid 1992; Ehrenberg and Bognanno 1990; Kahn and Sherer 1990; Knoeber and Thurman 1994; Machin and Manning 1992). Without specifically reviewing each of these studies, the general conclusion they reached is that firms' compensation policies affect worker performance in the manner suggested by the shirking literature. Similarly, the few empirical studies of shirking, or social loafing as it is sometimes called, in the social psychology literature found effort to be significantly affected by a variety of task-related variables, including task identity (Williams, Harkins, and Latane 1981), task difficulty, and task variety (Harkins and Petty 1982).

The empirical research suggests that organizational policies affect employee work effort. Unfortunately, the organizational focus of the shirking literature ignores its individual-level determinants. Given that organizational factors are not deterministic of employee shirking, attention should be paid to individual-level variables. Each employee brings to the organization a "bundle" of characteristics which significantly affect their participation within the organization. Further, employees in similar work environments may form very different perceptions of their jobs based on past experience and other personal characteristics (e.g., dispositions). Attention should be given to personal characteristics of employees which might cause differences in the degree of shirking for employees who work under similar working conditions or compensation schemes.

In this paper, we develop and test a model of individual-level determinants of shirking, focusing on (1) employee affect, (2) alternative employment opportunities, and (3) employer monitoring. Knowledge of individual-level determinants of shirking may provide helpful information regarding possible remedies to shirking.

MODEL OF EMPLOYEE SHIRKING

Since employee shirking, like other forms of withdrawal behaviour on the job, may result in either actual or potential termination of employment,

research on such behaviour may help identify individual-level determinants of shirking. Drawing on research in economics and organizational behaviour which examines employee shirking and other forms of withdrawal behaviour, employee shirking is specified to be a function of an employee's job satisfaction¹ and dispositional affect (AFFECT), their alternatives in the labour market (LABMKT), and the extent of employer monitoring (MONIT). That is,

$$\text{SHIRKING} = f(\text{AFFECT}, \text{LABMKT}, \text{MONIT}).$$

In this model, shirking is defined as a lack of employee work effort. An employee's tendency to give less than full effort represents shirking, with greater deviations from 100 percent effort representing greater levels of shirking. This is distinct from performance because work effort is more within the individual's control than performance (Porter and Lawler 1968; Schwab, Olian-Gottlieb, and Heneman 1979), and is less subject to the complex array of factors that influence performance.

Affect

Although affect can be derived from many sources, a useful distinction may be to dichotomize affect as that experienced from the job (job satisfaction), or that experienced in general (overall well-being) (George 1989). Research suggests that workers who dislike their jobs more frequently engage in withdrawal or adaptive behaviour on the job, such as quitting (Mobley, Horner, and Hollingsworth 1978), absenteeism (Rosse and Hulin 1985), tardiness (Adler and Golan 1981), and unionization (Bigoness 1978). Because shirking can be viewed as a withdrawal behaviour, JOB SATISFACTION should negatively predict shirking.

As noted by George and Brief (1992) and Isen and Baron (1991), positive affective states have been found to influence a number of organizationally-relevant outcomes, including prosocial or citizenship behaviour, higher creativity, and higher levels of persistence in completing ambiguous work assignments. Recent dispositional research suggests that those unhappy with their lives are more likely to be dissatisfied with their jobs (Staw, Bell, and Clausen 1986), more likely to try to change their behaviour at work (George 1989), and less likely to display vigor for one's activities in life (Diener 1984). George (1989) found that mood at work significantly influenced absenteeism and intentions to leave the organization. Furthermore, Staw and Barsade (1993) found that dispositional affect facilitated managerial

1. Although job satisfaction is not solely an individual difference variable, it is inherently a personal judgment subject to many perceptual influences unique to the individual (Hulin, Roznowski, and Hachiya 1985) and thus can be construed as a variable that differs between individuals.

performance in terms of better decision making and interpersonal relations, and Wright and Staw (1994) found that dispositional affect significantly the predicted job performance of social welfare workers. Seligman and Schulman (1986) linked the tendency to use an optimistic explanatory style to job performance and turnover of insurance agents. Given these findings, general affective states, as manifested by subjective well-being (SUBJECTIVE WELL-BEING), should negatively predict shirking.

Labour Market Alternatives

Since the penalty for shirking may be termination of employment, workers with more favorable alternative employment opportunities risk less by shirking (Shapiro and Stiglitz 1984). Thus, personal characteristics of workers and labour market conditions which reduce the cost of job search should increase employee shirking.²

For instance, employees who have received other job offers, or who believe it would not take long to find a job of comparable pay, will view shirking as less costly. Thus, TIME TO FIND JOB OF COMPARABLE PAY should negatively affect shirking and OFFER IN LAST YEAR should positively affect shirking. Further, consistent with equity theory, the difference between the wage one would predict employees to have and their actual wage (WAGE RESIDUAL) should positively affect shirking.

Due to their possible effects on productivity, and because they serve as signalling devices, higher levels of education and professional certification should provide individuals with more favorable employment opportunities. Consequently, being discharged for shirking should be less onerous for those possessing these characteristics. Thus, EDUCATION and CERTIFICATION should positively affect shirking.³

Research indicates that job changes are less likely late in a person's working career (Hall 1982). Older workers' preferences to avoid late-career job changes should make them less likely to engage in behaviour such as shirking that might lead to termination of their employment. In addition, the

2. Price and Mueller (1981) and Steel and Griffeth (1989) make similar predictions regarding the role of the labour market in influencing turnover. Because estimated time to find a job may depend on factors that actually cause employment opportunities, time to find a job of comparable pay was regressed on education, certification, and offer in the last year. Predicted values from this equation were then substituted into the shirking equation. Since no coefficient changed significance, treating time to find a job of comparable pay as exogenous is valid.
3. As noted by Wallace Hendricks on an earlier draft of this paper, if EDUCATION and CERTIFICATION represent ability, these factors may positively affect shirking because high ability employees could expend less effort than those with lower ability to meet performance standards.

psychological burden of providing, if only in part, for one's family may make married workers and workers with children less likely to engage in behaviour that endangers their dependents' source of support. Marriage also is thought to have a "stabilizing influence" on people (Viscusi 1980), which could reduce their involvement in "risky" behaviour at work; similar arguments can be made with regard to parenthood. Thus, AGE, MARITAL STATUS, and CHILDREN should negatively affect shirking.

Monitoring

Departments where the number of employees per supervisor, SPAN OF CONTROL, is high enable employees to shirk more due to the lower probability that shirking will be detected (Jones 1984). Thus, SPAN OF CONTROL should positively affect shirking. Because minority employees may be more scrutinized, perhaps due to being seen as members of an outgroup (Pfeffer 1983) and subjects of tokenistic pressures (Kanter 1977), minorities may face a higher probability of being caught shirking than nonminorities. Thus, minority status (RACE) should negatively affect shirking.

DATA AND METHODS

Data for this paper were collected from a survey of health care professionals at a large nonunionized clinic in the Midwest region of the United States. Respondents included medical office assistants, licensed practical and registered nurses, and nurse clinicians and technicians. All but two respondents were women. Approximately 80% of those eligible completed usable surveys (N=252). Participation was completely voluntary and confidentiality was emphasized to ensure accurate responses.

Respondents completed five different subjective well-being scales, chosen for their desirable measurement properties (Diener 1984). Workers also responded to questions assessing their job satisfaction and reported if they had received an offer for alternative employment in the last year, if they had been professionally certified, their educational attainment, age, race, marital status, the number of children they had under the age of 18, their wage rate, and the time it would take them to find a job of comparable pay. It should be noted that all of the employees surveyed were subjected to the same company policies and all were subjected to the same compensation practices. Thus, the study's design controls for organizational practices which might cause differences to be observed in the propensity of employees to shirk.⁴ Table 1 contains a description of all variables used in

4. The study's design does not account for departmental or workgroup effects on employee shirking. For instance, the extent to which an employee shirks may be affected by group norms (e.g., Akerloff 1982; Marwell and Ames 1981).

the study along with their means and standard deviations, and a description of the measures used to form the psychological constructs (subjective well-being, job satisfaction, and shirking).

TABLE 1

Variables Used in the Analysis of the Propensity to Shirk

SHIRKING* is a composite variable comprised of 5 measures, all assessed on a 1–5 scale: (1) worker report of how often they had given less than 100% in the past; (2) worker report of their intentions to give 100% in the future (reverse scored); (3) worker report of how often they perform duties not formally required by the department (reverse scored); (4) supervisor report of how often the worker had given less than 100% in the past; and (5) supervisor report of how often the worker fails to perform tasks not formally required by the department. The latter two items were included to avoid sole reliance on self-report data. The reliability α of the shirking measure was .52 (\bar{x} =15.86, S.D.=2.48).

SPAN OF CONTROL represents the number of employees reporting to each supervisor in the worker's department (\bar{x} =14.28, S.D.=19.95).

RACE is a dichotomous variable representing the worker's race (1=white; 0=otherwise) [\bar{x} =.98, S.D.=.13].

WAGE RESIDUAL represents the difference between the workers' actual hourly wage rate and their predicted wage rate based on personal characteristics (\bar{x} =.03, S.D.=2.00).

CERTIFICATION is a dummy variable representing if the worker is professionally certified (1=yes; 0=no) [\bar{x} =.52, S.D.=.50].

TIME TO FIND A JOB OF COMPARABLE PAY represents the estimated time it would take a worker to find a job of comparable pay measured on a 1–6 point scale (1=a day or two; 6=about 2 years) [\bar{x} =2.23, S.D.=.86].

SUBJECTIVE WELL-BEING* represents the average level of overall happiness the worker has experienced in the past (\bar{x} =0.00, S.D.=18.94). It is a composite variable comprised of three continuous scales and two single-item measures, chosen for their desirable measurement properties (Diener 1984). These measures were the following: (1) a modified version of the Affects Balance Scale (see Diener 1984), a list of 22 adjectives describing hedonic states (e.g., nervous, sad, elated, delighted) (α =.92); (2) the "percent time happy" item (Fordyce 1977), which Diener (1984) concluded to have high predictive validity for a single-item measure of hedonic level; (3) a modified version of Underwood and Froming's (1980) measure of hedonic level (α =.91); (4) the Satisfaction with Life Scale (Diener, Emmons, and Griffin 1985), a five-item measure of life satisfaction (α =.86); and (5) the G.M. Faces scale (Kunin 1955), which Andrews and Withey (1976) found to be a valid measure of life satisfaction.

MARITAL STATUS is a dichotomous variable representing if the worker is married (1=yes; 0=no) [\bar{x} =.74, S.D.=.44].

TABLE 1 (continued)

CHILDREN represents the number of children under 18 years old that the respondent has ($\bar{x}=1.07$, S.D.=1.06).

AGE represents the age of the worker ($\bar{x}=37.10$, S.D.=9.22).

OFFER IN LAST YEAR is a dichotomous variable representing whether the worker received a job offer in the past year (1=yes; 0=no) [$\bar{x}=.48$, S.D.=.50].

JOB SATISFACTION represents the level of job satisfaction workers have with their job in general ($\bar{x}=67.07$, S.D.=22.71). Job satisfaction was measured by the Job Descriptive Index (JDI; Smith, Kendall, and Hulin 1969). Consistent with past research, the overall job satisfaction measure was constructed by summing the five facets of the JDI: pay ($\alpha=.88$), promotion ($\alpha=.92$), supervision ($\alpha=.91$), co-workers ($\alpha=.86$), and the work itself ($\alpha=.85$).

EDUCATION represents the highest educational attainment achieved by the worker measured on a 1–5 point scale (1=high school diploma, 5=master's degree) [$\bar{x}=2.31$, S.D.=.92].

TRAINING represents the worker's level of training measured on a 1–5 scale (1=medical office assistant; 2=licensed practical nurse; 3=registered nurse without Bachelor of Science in Nursing; 4=registered nurse with Bachelor of Science in Nursing; 5=clinical specialist or certified nurse practitioner (Masters degree required) [$\bar{x}=3.08$, S.D.=1.43].

EXPERIENCE represents the worker's number of years of work experience ($\bar{x}=12.09$, S.D.=7.87).

* Variables whose components were standardized prior to computation due to unequal scales.

Shirking was measured by asking respondents how often they give 100% on the job, their intentions to give 100% in the future, and how often they perform duties not formally required by the department (all reverse scored).⁵ Intention information has been found to be an accurate predictor of withdrawal behaviour (Hanisch and Hulin 1990; Martocchio 1989; Miller, Katerberg, and Hulin 1979; Mobley, et al. 1978; Rosse 1983). Additionally, to avoid sole reliance on self-reported data, supervisors assessed how often the respondent gives less than 100% on the job, and how often the respondent fails to perform tasks not formally required by the department.

ESTIMATION AND FINDINGS

In order to test the model specified above, the following equation was estimated (see Table 1 for variable definitions):

5. Because for many positions (like nursing) all behaviour cannot be specified in advance (Katz and Kahn 1966), it can be argued that individuals who refuse to work beyond simple role prescriptions are shirking by giving less than full effort when the situation may require it (Katz 1964). In fact, performance of only those duties found in one's job description ("working to the rules") is recognized as a form of slowdown (Fossum 1989).

SHIRKING = f(SUBJECTIVE WELL-BEING, JOB SATISFACTION, OFFER IN LAST YEAR, TIME TO FIND A JOB OF COMPARABLE PAY, WAGE RESIDUAL, MARITAL STATUS, CHILDREN, AGE, CERTIFICATION, EDUCATION, SPAN OF CONTROL, RACE) + e.

The effects of the independent variables on shirking were estimated using two procedures. First, all independent variables except WAGE RESIDUAL were assumed to be exogenous, and the equation was estimated using ordinary least squares (OLS). Second, for reasons explained shortly, JOB SATISFACTION was specified as endogenously determined, and the resulting structural equations model was estimated using LISREL 7 (Jöreskog and Sörbom 1989).

Because multiple measures were used to assess shirking, job satisfaction, and subjective well-being, confirmatory factor analysis was conducted. Results for the overall measurement model revealed that the different measurements of job satisfaction, subjective well-being, and shirking adequately represented their respective constructs.⁶ The other variables in the analysis were treated as manifest and assumed to be measured with negligible error.

The coefficient alpha reliability estimate for the shirking construct was .52. While modest, this is comparable to other behavioural measures (e.g., Bateman and Strasser 1984). Also, Bollen (1989) has discussed limitations with classical estimations of reliability, and has recommended using the coefficient of determination for the latent construct, which ranges from 0 to 1, to estimate reliability. In this case, a model estimated with the five measures of shirking loading on a single shirking construct yielded a coefficient of determination of .90, suggesting that the measures well represent the construct (Jöreskog and Sörbom 1989). Further, all loadings of the five measures on the construct were significant, and overall the model provided a good fit to the data (chi-square = 1.3, ns; adjusted goodness of fit index = .99; root mean square residual = .02). Finally, breaking the shirking measure into two parts, self-report and supervisor evaluation, did not yield a significant increase in fit (difference in chi-square = 0.35; ns), which suggests that they are measures of the same construct. Thus, both reports are necessary to form an overall measure of the construct.

WAGE RESIDUAL, as described in Table 1, is the residual of actual minus predicted wage. The endogenous estimation of wage was based on the following structural equation:

WAGE=f(TRAINING, EDUCATION, EXPERIENCE, EXPERIENCE², CERTIFICATION, AGE, RACE) + e.

The coefficient of determination for this equation was .46. The actual minus predicted values were included in the shirking equation.

6. The fit statistics for the overall measurement model were: Chi-square = 78.58; Chi-square/Degrees of Freedom = 1.27; Goodness of Fit Index = .935; Root Mean Square Residual = .049. All measurements significantly loaded on their respective factors ($p < .01$).

Results with Job Satisfaction Treated as Exogenous

The ordinary least squares results (OLS) are presented in Column 1 of Table 2. As hypothesized, white workers were significantly more likely to shirk, and older workers were significantly less likely to shirk. Finally, those who were dissatisfied with their job and these who were unhappy in general (low subjective well-being) were significantly more likely to shirk.

TABLE 2
Empirical Estimates Predicting Shirking Behaviour

<i>Variable</i>	<i>OLS estimates Unstandardized Coefficient (1)</i>	<i>MLE Parameter Estimate (2)</i>
Span of Control	-0.0002 (0.004)	-0.044 (0.078)
Race	1.073* (0.547)	0.107 (0.079)
Wage Residual	0.007 (0.034)	0.011 (0.055)
Certification	-0.028 (0.140)	-0.005 (0.080)
Time to Find Job of Comparable Pay	0.050 (0.082)	0.022 (0.081)
Subjective Well-being	-0.007* (0.004)	-0.162* (0.104)
Marital Status	-0.241 (0.164)	-0.082 (0.082)
Age	-0.020** (0.008)	-0.203** (0.080)
Offer in Last Year	-0.064 (0.141)	-0.055 (0.081)
Job Satisfaction	-0.017** (0.005)	-0.279* (0.117)
Education	0.104 (0.076)	0.076 (0.084)
Children	0.056 (0.069)	0.044 (0.082)
Intercept	-0.500	-
R2 (Shirking)	0.153	0.230
Overall R2		0.391
Chi-Square/Degrees of Freedom		1.780
Goodness of Fit Index		0.884
Adjusted Goodness of Fit Index		0.831
Root Mean Square Residual		0.061

* $p < .05$; ** $p < .01$ (one-tailed test); $N = 252$.

In contrast, span of control did not significantly affect shirking, nor did a number of the labour market variables. Although the set of independent variables explained only 15% of the variance in shirking, this result is quite similar to that reported by Price and Mueller (1981) with respect to turnover of nurses.

In order to determine if differences in shirking varied according to occupational categories, dummy variables representing the occupational level of the nurses (e.g., medical office assistant, licensed practical nurse, registered nurse, and certified nurse practitioner) were added to the regression equation. However, none of these variables were significant, and no coefficient in the hypothesized model changed significance. Thus, it does not appear that the hypothesized individual effects are confounded by occupational differences among the nurses.

We also examined whether job satisfaction and perceived labour market alternatives interact in determining employee shirking. For instance, a dissatisfied worker with few labour market alternatives may shirk in reaction to job dissatisfaction while those that have more labour market opportunities may quit. However, an interaction between job satisfaction and perceived time to find a job of comparable pay did not add a significant amount of variance when added to the shirking equation.

Results with Job Satisfaction Treated as Endogenous

Dispositional studies on job satisfaction suggest that job satisfaction depends on worker well-being (Staw, Bell, and Clausen 1986), as well as on wages, education, and labour market factors (Hulin, Roznowski, and Hachiya 1985). Furthermore, Price and Mueller (1981) and Price (1989) have suggested that job satisfaction was most appropriately considered as a mediating variable. In their study, many exogenous variables influenced turnover through their effect on job satisfaction. As a result, the total (direct plus indirect) effect of some independent variables on shirking may be understated by failing to account for the endogeneity of job satisfaction. The job satisfaction equation was:

$$\text{JOB SATISFACTION} = f(\text{WAGE RESIDUAL, CERTIFICATION, TIME TO FIND JOB, SUBJECTIVE WELL-BEING, OFFER IN LAST YEAR, EDUCATION}) + e.$$

The coefficient of determination for this equation was .28.⁷ The predicted values for job satisfaction were substituted for the actual values in the shirking equation.

7. Specific results for the job satisfaction equation are not reported but are available upon request.

Using maximum likelihood estimation with (MLE) job satisfaction treated as endogenous did not substantially affect the OLS results. Column 2 of Table 2 reveals that, with the exception of race, all the variables that were significant in the OLS estimation remain significant in the LISREL estimation. The total effects of the independent variables were similar to the direct effects reported in Column 1 of Table 2, except that subjective well-being had a significant indirect effect ($-.126$; $p < .05$) on shirking, making the total effect $-.288$ ($p < .01$). All fit statistics, reported in Table 2, indicate that the data fit the model well.⁸

To investigate whether the relationships between affect and shirking were due to common method response bias, measures of subjective well-being were collected from "significant others" (e.g., spouses, family members, or friends).⁹ Adding significant other evaluations to the self-report measures of subjective well-being did not change the significance of any coefficient in the model. Apparently, the relationship between the affect variables and shirking was not due to response bias.

DISCUSSION AND CONCLUSION

To summarize, this research suggests that the several individual-level variables are significant predictors of employee shirking. Employees who are more dissatisfied with their jobs shirk more than employees who are less dissatisfied and employees who are more dissatisfied with life in general shirk more than employees who are less dissatisfied. Also, older employees, who may have the most to lose from shirking, and black employees, who may be subject to more employer monitoring, shirk less.¹⁰

8. Specifically, the Chi-square/df ratio meets the 2:1 standard discussed by Marsh and Hocevar (1985), Carmines and McIver (1981), and Hertig (1985). The goodness-of-fit index meets the .90 standard, and the adjusted goodness-of-fit index meets the .80 standard, used by other authors (Mumford, et al. 1988; Thacker, Fields, and Tetrick 1989). Finally, the root-mean-square residual is below the .10 standard, which implies a reasonable fit (Mumford, et al. 1988; Rock, Bennett, and Jirele 1988; Vance, et al. 1988).
9. Significant others completed the same scales as the focal employee. We provided the significant other a detailed set of instructions about how to rate the focal employee (i.e., not to discuss the survey with the focal employee, to rate the employee as objectively as possible, assurance that ratings would not be shared with significant other). The significant other surveys were given to the focal employee and they were asked to give it to their significant others. While this introduces a potential bias in that the significant other may have been selected because he would provide positive ratings or the focal employee may have completed the survey herself, other research has found these issues not to be problems using similar designs (e.g., Judge and Locke 1993).
10. There are some potential limitations with these findings. Because age will be highly correlated with tenure, the negative and significant effects of age on employee shirking

In contrast, neither increased opportunities to monitor employee behaviour associated with a lower employee to supervisor ratio or labour market factors affected the degree of employee shirking. It should be noted that the unstructured nature of the respondents' work, their specialized skills, the sharing of task responsibility, and the importance of their work may have negated any shirking effects generally associated with increased opportunities for direct supervision (Jones 1984; Harkins and Petty 1982). Furthermore, Steel and Griffeth's (1989) meta-analysis of the effect of perceived labour market variables on turnover yields the same weak effect as was observed between labour market variables and employee shirking. Gerhart (1990) and Steel and Griffeth (1989) suggest that samples of occupationally heterogeneous workers would likely yield higher effects of perceived employment opportunity on turnover. Given the relatively narrow range of occupations in the present sample, the same argument may apply to employee shirking. This study needs to be replicated using different samples of workers.

We believe that this study values provides several contributions to the shirking literature. First, it was the first attempt to operationalize shirking as employee work effort rather than using a measure of employee productivity or firm performance. Productivity and performance measures are useful, but they are measures of shirking outcomes rather than shirking itself. While the potential social desirability of the shirking measure must be acknowledged as a limitation of this research, other research has found little correlation between social desirability bias and self-reports of negative behaviour (Erez 1994). Admittedly this does not speak directly to the issue of whether the evaluations of shirking were biased by socially desirable responding; however, it does imply that social desirability bias may not be a serious problem with our study.

Second, this is the first time a model of employee shirking which includes measures of job satisfaction and employee affect (subjective well-being) has been developed. The significant impact of job satisfaction and subjective well-being on shirking extends existing literature which examines the impacts of these factors on other forms of employee withdrawal behaviour.

Third, we believe that the results of this study may shed further light on how human resource managers can deal with employee motivation problems. One rather obvious implication is that, since job dissatisfaction predicted shirking, human resource managers could reduce shirking by making the work environment more satisfying. While this may seem like a naive recommendation given the likely costs involved in raising employee satisfaction,

may indicate that this firm has successfully identified and ridded itself of "shirkers." In addition, the same conditions that cause black employees to fear being caught shirking may cause them to underestimate the degree to which they shirk. Also, black nurses may be less willing to admit shirking because of greater first-hand knowledge of discrimination.

some interventions, such as making work more enriching to employees, do not necessarily entail prohibitive costs (Hackman and Oldham 1980).

The practical implications of the other findings are limited. Hiring workers on the basis of race and age is prohibited by law, and it is unclear whether selecting happy workers is a desirable objective from either an ethical or a legal perspectives (Wright and Staw 1994). Although efforts to reduce negative attitudes likely have positive effects on employee well-being (Judge, Boudreau, and Bretz 1994), changing workers' level of happiness might involve intrusion into their personal lives, which most organizations would be reluctant to attempt. In addition, subjective well-being displays considerable stability over time, making changes in affect difficult (Staw, et al. 1986). These limitations notwithstanding, the fact that those unhappy in life are more likely to shirk is an important fact for organizations to consider; certainly, this finding suggests that shirking is not wholly determined by organization policies and practices.

Finally, the significance of individual-level determinants of shirking revealed in this study suggests the need to expand future research on employee shirking beyond its current focus on organizational factors. However, recognizing that it is difficult to make comparisons across studies, our results do not suggest that individual-level factors are more important determinants of employee shirking than organizational factors. Nonetheless, it may be that organizational policies, which have been the primary focus of the shirking literature, have different effects on shirking depending on its individual-level determinants. For instance, if job dissatisfaction is a major cause of shirking, only organizational policies that remove the source of the dissatisfaction are likely to significantly reduce employee shirking.

The considerable amount of variance left unexplained by individual-level variables, combined with the failure of organizational-level variables to completely predict employee shirking, suggests that other factors not accounted for in previous research need to be considered. Future research might benefit from examining the impact on employee shirking of group-level variables that reflect group norms regarding employee work effort (Akerloff 1982; Marwell and Ames 1981) and perceived altruism among co-workers (Spicer 1985). Much more needs to be learned about the determinants of employee shirking, if firms are to address adequately the problem.

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RÉSUMÉ

Les déterminants individuels de la flânerie au travail

On s'est beaucoup intéressé récemment à la question de l'effort des employés au travail ou, plus exactement, au manque de tel effort (flânerie). Examinant ce problème de flânerie des employés, nos collègues ont eu tendance à se concentrer sur les différentes politiques que les organisations peuvent utiliser pour atteindre un niveau maximal d'effort au travail chez les employés. Une hypothèse de base sous-jacente à de telles recherches est à l'effet qu'en l'absence de surveillance efficace de l'employeur, les employés vont réduire leurs efforts au travail. Parce qu'en fait l'hypothèse que les employés vont flâner lorsque l'utilité marginale du flânage est plus grande que celle du travail, les politiques patronales tentent de réduire le

flânage en augmentant le coût de celui-ci ou, inversement, en augmentant la valeur du travail.

Malheureusement, toute cette documentation organisationnelle ignore les causes du flânage chez les individus. Cela est un oubli significatif vu que les caractéristiques personnelles des employés peuvent causer des différences dans le degré de flânage parmi ces employés qui connaissent des conditions de travail ou des plans de rémunération similaires.

Nous présentons et vérifions ici un modèle des déterminants du flânage au niveau des individus. Ce modèle établit que le flânage est fonction de la satisfaction au travail de l'employé, de son bien-être subjectif, de ses alternatives sur le marché du travail et de l'étendue du contrôle de l'employeur.

On définit le flânage comme un manque d'effort au travail de l'employé. La tendance d'un employé à donner moins que le plein effort représente le flânage. Le plein effort reflète 100 %. Plus le niveau de flânage est grand, plus l'écart avec ce 100 % est grand. Nous avons utilisé de multiples mesures pour évaluer le flânage, la satisfaction au travail et le bien-être subjectif et de nombreuses variables pour illustrer les autres composantes du modèle de flânage.

Utilisant les données d'une enquête de professionnels de la santé dans une grosse clinique non syndiquée du Midwest américain, nous avons trouvé que les employés qui ont le plus à perdre en flânant, comme les plus vieux, flânent moins. De plus, les facteurs propres au marché du travail ne déterminent pas le degré de flânage chez les employés.

Les résultats suggèrent aussi que la satisfaction au travail et le bien-être subjectif sont des prédicteurs significatifs du flânage. Les effets négatifs de la satisfaction au travail sur le flânage proposent que l'identification des sources possibles d'insatisfaction au travail et l'implantation de programmes correctifs peuvent réduire le flânage. L'effet négatif du bien-être subjectif relie cette dernière variable au flânage. Les résultats suggèrent que le flânage n'est pas totalement déterminé par les politiques et pratiques organisationnelles.

Finalement, nos résultats indiquent que les employés de race noire flânent moins que ceux des autres races, probablement parce qu'ils croient faire face à une plus grande possibilité de se faire prendre à flâner, i.e. plus de contrôle de l'employeur. Cependant, des occasions accrues de surveiller le comportement des employés, doublées à un plus bas rapport employé/supérieur n'a pas réduit le flânage de façon significative.

L'importance des déterminants individuels du flânage suggère plus de recherche au-delà de la concentration actuelle sur les facteurs organisationnels. La recherche à venir devrait tenter d'établir la mesure dans laquelle la possibilité des effets organisationnels sur le flânage peut dépendre des caractéristiques individuelles spécifiques. Elle devrait également examiner l'influence de variables du groupe sur le flânage.