# A Policy Capturing Approach to Individuals' Decisions to be Absent 

Joseph J. Martocchio<br>University of Illinois at Urbana-Champaign

Timothy A. Judge
Cornell University

Follow this and additional works at: https://digitalcommons.ilr.cornell.edu/cahrswp
Thank you for downloading an article from DigitalCommons@ILR.
Support this valuable resource today!

This Article is brought to you for free and open access by the Center for Advanced Human Resource Studies (CAHRS) at DigitalCommons@ILR. It has been accepted for inclusion in CAHRS Working Paper Series by an authorized administrator of DigitalCommons@ILR. For more information, please contact catherwood-
dig@cornell.edu.
If you have a disability and are having trouble accessing information on this website or need materials in an alternate format, contact web-accessibility@cornell.edu for assistance.

## A Policy Capturing Approach to Individuals' Decisions to be Absent


#### Abstract

This study provided a within-subjects assessment of the factors associated with an individual's decision to be absent, and examined whether there were differences between individuals in their decisions. A sample of maintenance and clerical employees at a large Midwest university responded to scenarios describing factors that might contribute to their decisions to be absent on a particular day. Illness explained more variance than any other factor in individuals' absence decisions. Several other withinsubject and between-subject influences were identified. The relative importance of the antecedents of absence decisions varied widely by individual, lending support to Johns and Nicholson's (1982) argument that absence decisions are phenomenologically unique.

\section*{Keywords}

CAHRS, ILR, center, human resource, job, worker, advanced, labor market, job, satisfaction, employee, work, manage, management, training, HRM, employ, model, industrial relations, absent, job satisfaction, absence, work, organizational behavior

\section*{Comments}

\section*{Suggested Citation}

Martocchio, J. J., \& Judge, T. A. (1991). A policy capturing approach to individuals' decisions to be absent (CAHRS Working Paper \#91-11). Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. http://digitalcommons.ilr.cornell.edu/cahrswp/343


A Policy Capturing Approach to Individuals' Decisions to be Absent<br>Joseph J. Martocchio<br>University of Illinois at Urbana-Champaign<br>Timothy A. Judge<br>Cornell University<br>Center for Advanced Human Resource Studies<br>Working Paper \# 91-11

This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research, conferences, and projects available to others interested in human resource management in preliminary form to encourage discussion and suggestions.


#### Abstract

This study provided a within-subjects assessment of the factors associated with an individual's decision to be absent, and examined whether there were differences between individuals in their decisions. A sample of maintenance and clerical employees at a large Midwest university responded to scenarios describing factors that might contribute to their decisions to be absent on a particular day. Illness explained more variance than any other factor in individuals' absence decisions. Several other within-subject and between-subject influences were identified. The relative importance of the antecedents of absence decisions varied widely by individual, lending support to Johns and Nicholson's (1982) argument that absence decisions are phenomenologically unique.


## A Policy Capturing Approach To Individuals'

Decisions To Be Absent
As with much of the emphasis on explaining variance in dependent variables in organizational behavior research (Schwab, 1980), the literature on employee absenteeism has focused on explaining variance in the frequency and duration of absence occurrences in between-subjects designs (Fichman, 1991; Staw \& Oldham, 1978). However, meta-analytic estimates (Farrell \& Stamm, 1988; Hackett \& Guion, 1985; Martocchio, 1989a) of the proportion of variance explained in absence occurrences by demographic factors and other individual differences revealed relatively small effects (Cohen, 1977).

More recently, researchers have studied absence occurrences based on the assumption that individuals make decisions to be absent and such decisions predict absence occurrences (George, 1989; Harrison, 1988; Harrison \& Hulin, 1989; Judge, 1990; Martocchio, 1989b) or that absence versus attendance is a motivational process enacted by individuals over time (Fichman, 1988, 1991). The focus of much of this research has been the examination of individual time allocations between work and nonwork alternatives based on event history analysis. Inferences about the decision making antecedents of absence occurrences have been made from complex statistical models of absence occurrences. Some of these researchers (Harrison, 1988; Martocchio, 1989b) have demonstrated, based on a theory of reasoned action (Ajzen \& Fishbein, 1980), that intentions to be absent (one primary
component of the decision to be absent) are the most immediate predictor of absence occurrences for a variety of individuals.

Johns and Nicholson (1982) have argued that absence events are phenomenologically unique to each individual (i.e., absence may mean different things to different people at different times). In particular, they recommend research strategies that permit assessment of the significance of absence events within the work and nonwork domains of an individual's life. Furthermore, although some researchers view absence occurrences as having volitional antecedents, Johns and Nicholson (1982) argue that there are individual differences that may be related to the absence phenomenon. Absence researchers have focused almost exclusively on maximizing variance in the absence dependent variable using between-subjects designs without sufficient attention to the decision or motivational processes by which alternatives (absence versus attendance) are enacted. Thus, the purpose of this study is to provide a within-subjects assessment of the factors associated with an individual's decision to be absent that allows a direct assessment of potentially absence-inducing events. This gets closer to the absence decision process as opposed to indirect assessment of potential absence determinants through post-hoc interpretation of correlations between the events and absence. Further, such a design permits assessment of the degree to which absence decisions are phenomenologically unique. Finally, we examine whether there are differences between individuals in their
decisions based on individual characteristics suggested by prior theory and research.

## LITERATURE REVIEW

## Absence as Phenomenologically Unique Events

Johns and Nicholson (1982) have critiqued the absence literature by arguing that absence researchers have typically assumed that similar absence events have functionally and psychologically equivalent meaning for all employees. One way in which this has been manifested is in the widely repeated practice of examining absence as an outcome of psychological factors such as job satisfaction. Indeed, since the Johns and Nicholson (1982) review, absence researchers have addressed absence as undifferentiated events, which have similar psychological meaning across individuals and contexts. Specifically, meta-analytic reviews (based on validity generalization assumptions; see Hunter, Schmidt, \& Jackson, 1982, for a discussion) of the job satisfaction-absence relationship (Farrell \& Stamm, 1988; Hackett \& Guion, 1985) showed that various facets of job satisfaction accounted for a substantively small percentage of variance (less than $5 \%$ ) in absence after controlling for the effects of sampling error and measurement unreliability. ${ }^{1}$ These findings tend to undermine the assumption that absence has an equivalent psychological meaning across individuals. ${ }^{2}$ If absence had an

1 See Hulin (1991) for methodological explanations of these results.
2 An alternative explanation for the low correlation between absence and job satisfaction is that constraints against being absent may have prevented employees from responding to their dissatisfaction through absenteeism (Herman, 1973; Smith, 1977). However, it is not necessarily the case that job satisfaction causes absenteeism (Clegg, 1983). Therefore, this alternative
equivalent meaning across individuals, one would expect consistently moderate to strong relationships (Cohen, 1977) between job satisfaction and absence across a variety of employment contexts and employee occupations.

Another way in which researchers have addressed similar absence events as having functionally and psychologically equivalent meaning for all employees is through the use of between-subjects research designs (in contrast to within-subjects designs) employed in virtually all published absence research. In the case of choosing to be absent, between-subjects designs do not permit researchers to examine the relative importance of factors that antecede each individual's decision to be absent. In effect, variability in what is salient and relatively important to one's absence choice is masked by between-subjects designs. Within-subjects designs, however, offer an alternate strategy that overcomes these problems. A recent study by Hackett, Bycio, \& Guion (1989) demonstrated the advantages of within-subjects investigations using an idiographic design.

Policy capturing represents a within-subjects method for measuring the relative importance of decision variables, or factors, to a decision maker's choice among alternatives. Policy capturing as a methodology falls in the information processing paradigm (Zedeck, 1977). That is, the purpose of this approach is to capture, in a mathematical equation, an individual's process for combining information to make a decision (Zedeck,

[^0]1977). This approach captures the relative importance of information to a decision maker who is faced with alternatives from which to choose. Factors are varied by the investigator in descriptions or scenarios, and the importance of these factors are inferred from individuals' choices. Rather than focusing on an individual's explicit rankings or ratings, this approach infers the influence of these factors from an individual's choices (Zedeck, 1977). This approach has gained favor because some research has demonstrated that individuals often overestimate the relative importance of minor factors in subjective ratings, sometimes due to social desirability (Arnold \& Feldman, 1981).

The Substance of Absence Decisions
Some researchers (Johns \& Nicholson, 1982; Nicholson, 1977) maintain that absence is a differentiated phenomenon based on causes attributed to absence occurrences by the absentee. Specifically, Nicholson (1977) proposed that potential absenceinducing events should be classified by the freedom absenceinducing events provide an individual in deciding whether or not events justify staying away from work. For example, Nicholson and Payne (1987) reported results of home interviews of a variety of employees who were asked to make attributions of their prior absences as well as potential future absences. Nicholson and Payne (1987) found that the vast majority of individuals attributed prior and potential future absence to factors beyond personal control, specifically, illness, rather than to events within their own control, such as leisure activities. They
concluded that attributing absence to medical illness is consistent with evolving social beliefs about what constitutes acceptable reasons for absence in a particular context. This conclusion is consistent with research which showed that medical absence was systematically related to work and nonwork motives (Rushmore \& Youngblood, 1979).

Some research suggests possible factors related to one's decision to be absent from work. Morgan and Herman (1976), using an expectancy theory framework to examine absence, identified hobby and leisure time, kinship responsibilities, and personal illness as influences on absence decisions. Youngblood (1984) found that absence was related to the value of nonwork hours, which supports the view that absence is a function of motivation processes extant in work and nonwork domains. While these studies suggest several factors relating to absence decisions, this area of research is largely in an exploratory stage. Thus, an open elicitation study (Ajzen \& Fishbein, 1980) was used as a basis to identify relevant factors associated with one's decision to be absent (see Method section for details).

Six principal factors related to one's decision to be absent were identified in the elicitation study. These included (a) hobbies/leisure activities unrelated to one's employment, (b) community or religious activities unrelated to one's employment, (c) day of the week (either the day before or after a weekend; or, in the middle of the work week), (d) kinship responsibilities that include either dependent children or other family responsibilities (e) work demands (i.e., whether there is a heavy
work load and pressing deadline; or, an average or light work load and no pressing deadlines); and, (f) personal illness (i.e., no illness, a minor illness, or a major illness). The relevance of these factors is supported by the research reviewed above.

Based on the results of the elicitation study and past research reviewed above, each factor was hypothesized to affect individuals' decisions to be absent. Specifically:

H1: The presence of hobby/leisure activities will lead to a higher estimated likelihood of absence on a particular day.

H2: The presence of community/religious activities will lead to a higher estimated likelihood of absence on a particular day.

H3: The beginning or end of the work week will lead to a higher estimated likelihood of absence on a particular day.

H4: The presence of kinship responsibilities will lead to a higher estimated likelihood of absence on a particular day.

H5: The presence of pressing work will lead to a higher estimated likelihood of absence on a particular day.

H6: The presence of personal illness will lead to a higher estimated likelihood of absence on a particular day.

## Differences Between Subjects in Absence Decisions

Several variables that influence absence decisions are likely to differ between individuals. The influence of job satisfaction on absence has been the subject of some controversy. The meta-analytic results do not support a strong influence of job satisfaction on absence (Hackett \& Guion, 1985), yet Hulin (1991) has argued that the low estimated correlations may be due to the distributional properties of absence. Because of the low base rate of absence (see Rhodes \& Steers, 1990), the
distributions of archival measures of absence are positively skewed (Harrison \& Hulin, 1989). Therefore, uncorrected parametric tests of satisfaction with archival measures of absence will likely yield consistent underestimates of the underlying relationship (Hulin, 1991). The design used in the present study may alleviate some of these problems because absence decisions are aggregated across situations, thereby improving the distribution of the phenomenon (Hulin, 1991). Rosse and Miller (1984) presented a psychological model that hypothesizes that individuals who dislike their jobs will adapt to the dissatisfaction by engaging in behaviors aimed at increasing their job satisfaction. Absence, where employees may adapt by attending a job they dislike less often, is one such behavioral example. Accordingly, it is expected that those employees who dislike their present jobs will evaluate a given scenario as more likely to lead to absence on their part.

H7: Those dissatisfied with their jobs will be more likely to indicate that they will be absent on a particular day.

Judge (1990), building upon the work of George (1989), hypothesized that those unhappy in life will be more likely to be absent. Staw and Ross (1985) argued that disposition would likely indirectly affect withdrawal behaviors such as absence. However, it is also possible that affective disposition has a direct effect on absence. Researchers in the personality literature have found that unhappy individuals will often seek to change their lives, calling this process mood repair (Holahan \& Moos, 1987; Pelicier, 1987). Some of these changes may involve
the job, some may not. Judge (1990) found that those unhappy with their lives in fact were more likely to be absent, even controlling for the effect of job satisfaction on absence. Judge (1990) noted that future research, utilizing different measurements and research designs, would need to examine the replicability of the results. It is possible that the use of different measures and methodologies result in different estimates of the effect of affective disposition on absence.

H8: Those with low levels of subjective well-being will be more likely to indicate that they will be absent on a particular day.

Research by Hall (1982) indicates that, as workers get older, they prefer to remain with their current employer. In addition, Martocchio's (1989a) meta-analysis of the age-absence relationship demonstrated that employee age and voluntary absence are inversely related. He explained this relationship using an interactionist perspective (Bowers, 1973). The interactionist perspective maintains that situations are as much a function of a person's behavior as a person's behavior is a function of the situation. Schneider (1983) suggested that people tend to choose proactively to locate themselves in environments that are compatible with their own behavior tendencies. Therefore, to the extent that absence is conceptualized in terms of a form of withdrawal from an unsatisfactory work situation, one would expect less absence as a person-situation fit is developed over time.

H9: Older workers will be less likely to indicate that they will be absent on a particular day.

Educated workers have often been found to have lower absence rates (Rhodes \& Steers, 1990). Therefore, it is expected that educated workers will be less likely to evaluate a given scenario as leading to absence on their part.

H10: Educated workers will be less likely to indicate that they will be absent on a particular day.

Familial demands may draw a worker away from the job more often (Ilgen \& Hollenback, 1977). Therefore, it was expected that those with substantial kinship responsibilities will likely see a given scenario as more likely to lead to absence on their part. This effect is similar to that hypothesized in H4, but this refers to the degree to which responsibilities already influence each absence scenario, not the degree to which manipulated changes in responsibilities lead to different estimated absence frequencies.

H11: Those having substantial kinship responsibilities will be more likely to indicate that they will be absent on a particular day.

Several other between-subject variables were expected to influence absence decisions. Absence rates have been found to vary widely by occupation (Rhodes \& Steers, 1990). Therefore, occupation was instituted as a control. However, no specific direction was hypothesized. The degree to which individuals expect to be absent is likely to affect their evaluation of a given scenario. Those individuals who intend to be absent in the future are likely to see more scenarios as leading to absence on their part.

H12: Those who intend to be absent in the future will be more likely to indicate that they will be absent on a particular day.

Past research has shown that females have higher absence rates than males (Rhodes \& Steers, 1990). This may be due to the traditional division of household work.

H13: Women will be more likely to indicate that they will be absent on a particular day.

Finally, the percent income workers contribute to total household income may influence their absence decisions. Those that are the prime wage earners may realize that their absence is likely to have a disproportionate impact on household income (assuming that unlimited paid absences are not allowed by the organization).

H14: The lower percent income individuals report relative to total household income, the more likely they will indicate that they will be absent on a particular day.

## Method

## Setting, Subjects, and Procedure

Surveys were administered to employees at a large Midwestern university. Respondents came from a variety of departments in the university. Respondents consisted of two broad occupational categories: service/maintenance (85\%), and library/clerical (15\%). Individuals completed surveys while at work. Participation was voluntary; anonymity and confidentiality were assured in advance. Surveys were administered to 144 and employees. Of those, six returned blank surveys (i.e., six employees refused to participate). One hundred and thirty-eight useable surveys were completed.

Average age of respondents was 40 years. Average tenure with the organization was 7.5 years. Sixty percent of respondents were married and the average number of children under 21 was 1.6. Half the respondents' highest education level was high school diploma. Thirty-five percent had completed some college work or possessed an associate's degree. Fifty-five percent of respondents were women.

## Research Design and Measures

A mixed experimental design (Keppel, 1982) was used. The design is mixed in that the overall design incorporated both within-subjects and between-subjects components. As stated previously, the within-subjects design permits researchers to infer the relative importance of particular factors that are related to an individual's decision making. When the research question is focused on decision making, this design is known as policy capturing and has been widely used in the study of decision making processes within the organizational context (e.g., Klaas \& Wheeler, 1990; Sanchez \& Levine, 1989).

The six within-subjects factors (i.e., reasons for absence decisions) were identified in an elicitation study. Fifty clerical and unskilled employees from a Fortune 500 company were asked to participate in the elicitation study. Participants were asked (a) to generate a list of factors that have been relevant to their absence decisions, and (b) to describe each reason in detail. The senior author generated a list of factors and tested their predictive efficacy in a between subject design that linked absence decisions with absence occurrences (Martocchio, 1989b).

Each factor, with the exception of the illness factor, contained two levels (i.e., the factor was present or not). The illness factor contained three levels (i.e., illness was not a factor, minor illness, and major illness).

The six within-subjects independent variables were completely crossed which permits assessment of the independent effects of each factor on the decision to be absent. Crossing the factors resulted in 96 scenarios ( $2 \times 2 \times 2 \times 2 \times 2 \times 3$ ) which contained all possible combinations of the independent variables. The scenarios were presented in the survey in random order to randomize order effects. Each participant was asked to read each description as a set of factors that $s /$ he might encounter on a scheduled work day. An example of a scenario is provided.

It is Friday or Monday. You have a particularly busy time at work or a deadline you need to meet. You have a minor illness.

The dependent variable, decision to be absent, was measured by a question using a seven-point Likert scale. It was operationalized in the following manner: "Indicate the extent to which you would likely miss work if you were facing these particular circumstances." The response scale was anchored by 'highly unlikely' to 'highly likely.'

The between-subjects design permits assessment of interindividual differences based on individual attributes (e.g., disposition, job satisfaction, kinship responsibilities). The attribute variables were measured as follows.

Job satisfaction. Job satisfaction was assessed by the 24 item Job Descriptive Index Job-In-General scale (Ironson, Smith, Brannick, Gibson, \& Paul, 1989). The coefficient alpha for the scale was .93.

Subjective well-being. Subjective well-being was assessed by frequently used measures (see Diener, 1984): the Satisfaction with Life Scale (Diener, Emmons, Larsen, \& Griffin, 1985) and the Underwood and Froming (1980) scale. Items from these scales were summed to form an overall measure of subjective well-being. Coefficient alpha for the composite scale was .86.

Kinship responsibilities. Following Blegen, Mueller, and Price (1988), a measure of kinship responsibility was formed by asking respondents the number of children under 6 , number of children aged 6-17, number of children aged 18-21 they cared for. These items were summed to form a kinship scale.

Absence intentions. Intentions to be absent were assessed by asking the respondent to indicate the likelihood of their missing work due to reasons for being absent investigated by Nicholson and Payne (1987). Six of these factors corresponded to the factors used for the scenario development. Six additional reasons (e.g., fights with co-workers or supervisor, get some rest) were also included in accordance with Nicholson and Payne (1987). Responses were summed across all items to yield an overall intention to be absent. The reliability for this scale was . 85 .

Other characteristics. Education, age, sex, job classification, and percent income to total household income were assessed through specific questions on the employee survey.

## Analyses

Within-subjects analysis. Multiple regression analysis was used to assess the effects of the linear combination of the six independent factors related to one's absence decision as well as the individual effects. Orthogonal contrast coding was used (Cohen \& Cohen, 1983). One regression equation was calculated for each participant.

Between-subjects analysis. In order to estimate possible differences between individuals on the basis of the demographic and dispositional variables, an overall model was specified. Analysis of variance (ANOVA) was used as the method of analysis. The typical procedure of entering covariates (all non-categorical variables) first, and then adding the categorical variables (including within-subject factors) was followed. Because no interactions among the within-subject factors or between the within- and between-subjects factors were hypothesized, they were not included in the analysis. The covariates specified in the model were job satisfaction, subjective well-being, age, absence intentions, and percent income to household income. Between subjects variables that were categorical were sex, education (five levels), and job classification.

## Results

## Within-Subjects Analysis

Within-subjects regression analysis was conducted for each participant. This yielded 133 equations (5 participants were excluded due to missing data). The results will be summarized here (a table which contains the 133 individual within-subjects regression equations can be obtained from the authors). There was wide variation in the extent to which the linear combination of within-subjects factors predicted absence decisions for each participant ( $\underline{R}^{2}$ ranged from . 01 to . 80). Average $\underline{R}^{2}$ for the 133 participants was $.48(\underline{S D}=.23)$.

The percentage of coefficients that were statistically significant (i.e., $\mathrm{p}<.05, \mathrm{p}<.01$, or $\mathrm{p}<.001$ ) for each within-subjects factor was as follows: personal illness (100\%), kinship responsibilities (30\%), hobby/leisure ( $8 \%$ ), work demands (5\%), day of the week (5\%), and community/religious activities (3\%). The pattern of these findings fit with theoretically-based expectations about absence-taking (e.g., Johns \& Nicholson, 1982) as will be addressed in the Discussion section. These results provide empirical support for the salience of these expectations in a within-subjects design which focused on an employee's decision making processes. Furthermore, the alternative explanation of social desirability bias (i.e, in this case, to say you would be absent because of illness) is unlikely given the anonymity built into the data collection procedure as well as the indirectness of policy capturing (Arnold \& Feldman, 1981).

The personal illness coefficient was positive and significant in all cases. In other words, illness led to a significantly higher estimated absence frequency for all participants. For the kinship responsibilities variable, all the significant coefficients were positive in sign. In other words, these individuals indicated they would more likely be absent when kinship responsibilities were salient than when kinship responsibilities were not salient. For the hobby/leisure variable, about $80 \%$ of the significant cases were positive in sign, and the remaining $20 \%$ of the coefficients were negative in sign. For eight of the participants, hobby/leisure opportunities led to a significantly higher estimated absence frequency. For two of the participants, hobby/leisure opportunities led to a significantly lower estimated absence frequency. For the work demand variable, about $84 \%$ of the significant coefficients were positive in sign, and the remaining $16 \%$ of the significant coefficients were negative in sign. Pressing work demands led a significantly lower estimated absence frequency for six participants. One participant was significantly more likely to be absent when there were pressing work demands than when work demands were light. For the day-of-the-week variable, about $71 \%$ of the significant coefficients were positive. Five participants indicated they would be significantly more likely to be absent on Monday or Friday than during the week. About $29 \%$ of these significant coefficients were negative. Two of the participants indicated they would be significantly more likely to be absent in the middle of the week than on the day before or after the
weekend. All of the significant hobby/religious activities coefficients were positive. Four participants indicated they would be significantly more likely to be absent when they had some religious or community activity than when they did not have any such activities.

## Between-Subjects Analysis

Table 1 provides the ANOVA results on the decision to be absent for the pooled sample. As hypothesized, job satisfaction, subjective well-being, age, percent income to household income, sex, education, and absence intentions all explained a significant amount of the variance in absence decisions. Kinship responsibilities of the respondents did not influence their evaluation of absence scenarios. All influences, with the exception of education, were in the predicted direction. Education may have been positively associated with absence due to the greater employment alternatives associated with education (Judge \& Chandler, under review). Therefore, highly educated employees may have perceived that they had less to lose by being discharged for excessive absence. Maintenance workers were significantly more likely than clerical workers to indicate they would be absent. Thus, of the between-subjects hypotheses, only H4 and H10 were not supported.

Table 1 also shows the results of within-subject influences on absence for the pooled estimate. The within subject factors
that explained a significant amount of the variance in absence decisions were: illness, day of the week, kinship responsibilities, pressing work, and community activities. Hobby/leisure activities did not explain a significant amount of variance in absence. Inspection of the means revealed that overall the six within-subjects factors affected absence decisions in the predicted direction. Of the within-subjects hypotheses, only H1 (hobby/leisure activities) was not supported. Considering the large sample, H2 (community/religious activities) received only weak support. The adjusted $R^{2}$ for the pooled sample was . 44 .

Table 1 also shows omega squared coefficients, which indicate the relative strength of the effects (Keppel, 1982). While many of the omega-squared coefficients are small, several points should be kept in mind. First, omega-squared coefficients do not have a comparable interpretation to $r^{2}$, and in fact are always less than $r^{2}$ (Keppel, 1982). Further, since the distributions of omega-squared coefficients are unknown, it is impossible to make a conclusive judgment of how big or small each coefficient is. The interpretation of each coefficient is bound to the sample from which it was derived. Third, the omegasquared coefficients are not unlike those encountered in past research (Rynes \& Lawler, 1983). Finally, the omega-squared coefficients are best used to compare the relative strength of effects within a sample. To that end, it is clear that illness displays the strongest effect on absence.

In sum, because we assessed the pooled effects of the within-subjects factors after controlling for relevant betweensubjects factors, our research strategy lends further support to the idea that beyond controlling for individual differences, some employees engage in a systematic decision making process related to being absent from work. Thus, both individual differences and decision making factors are important: prior research has typically examined either individual differences or decision making, but not both.

## Discussion

The literature on employee absence has traditionally focused on predicting absence occurrences from individual differences (e.g., age, sex, job satisfaction). More recently, some researchers have studied absence occurrences based on the assumption that at least some of the variance in absence is attributable to decisions or other motivational processes (e.g., Fichman, 1988; Harrison \& Hulin, 1989). These researchers inferred the psychology of absence from sophisticated models of absence behavior (Fichman, 1988). Regardless of the substantive focus, absence research has been characterized by explaining variance in the occurrence of absence (e.g., frequency of absence or time lost due to absence) in between-subjects designs (Staw \& Oldham, 1978).

The focus of this study was on the substance of absence decisions to provide an assessment of the phenomenological field within which absence occurs (Johns \& Nicholson, 1982). We were interested in determining whether absence may be
phenomenologically unique (the psychological meaning of absence may be different for individuals). Thus, we used a mixed experimental design. Specifically, we conducted a withinsubjects assessment of each subject's decision to be absent, as well as a between-subjects assessment of the possible differences between individuals in their decisions to be absent.

The convention of using between-subjects designs in absence research does not permit assessment of the salience and relative importance of the factors that may relate to an individual's absence decision. Between-subjects designs assume, in effect, that the phenomenon under study has equivalent or at least similar meanings for all individuals. The use of a withinsubjects design, specifically, a policy capturing application, allowed us to examine whether particular reasons for absence (identified in the elicitation study) were salient as well as the relative importance of each factor for each individual.

Our within-subjects analyses revealed that the relative importance of the antecedents of absence decisions varied substantially. Some factors that resulted in significantly higher estimated absence for some led to significantly lower estimated absence for others (e.g., hobby/leisure activities, work demands, day of the week). In addition, the average $\underline{R}^{2}$ showed that the overall combination of these factors varied in importance for each individual. Based on these general findings, absence may be phenomenologically unique to individuals (Johns \& Nicholson, 1982). This conclusion is tentative: while our design permits a detailed within-subject assessment of the
antecedents of absence decisions, it falls short of idiographic research strategies that may be better suited for examining phenomenology (Burrell \& Morgan, 1979).

A detailed look at the within-subjects results indicates that personal illness was the most salient antecedent of absence decisions. This finding is consistent with prior research (based on between-subjects designs) which showed that personal illness was used most often as a reason stated by employees for their prior absence as well as a probable reason for future absences from work (Morgan \& Herman, 1976; Nicholson \& Payne, 1987). One explanation for this finding is that societal norms treat personal illness as an acceptable reason for absence from work (Johns \& Nicholson, 1982; Nicholson \& Johns, 1985; Nicholson \& Payne, 1987).

An alternative explanation, based on expectancy theory, is that using personal illness as a reason for absence is instrumental to the attainment of motivating outcomes associated with not being in the workplace when scheduled (Morgan \& Herman, 1976). Specifically, the organization under study provides individuals with a number of paid absence days that are designated for personal illness. Proof of illness (e.g., a doctor's note establishing illness) is not required by the organization. These structural factors not only serve to legitimize absence, but also provide incentives for employees to advance personal illness as a reason when they decide to miss work when scheduled. Prior research provides indirect support
for these explanations (e.g., Dalton \& Perry, 1981; Winkler, 1980).

Given the perceived acceptability of personal illness as a reason for absence (Rushmore \& Youngblood, 1979), it is not unreasonable to expect individuals to advance personal illness as an important factor (Morgan \& Herman, 1976; Nicholson \& Payne, 1987). The anonymity of our subjects' responses and prior research findings, which show that policy capturing tends to minimize social desirability response bias (Arnold \& Feldman, 1981), make it reasonable to assume that the salience of personal illness was not a response artifact. Thus, the strong effect of illness on individuals' absence decisions within a policycapturing framework may suggest that illness in fact does cause the majority of absences, rather than merely being an attributional phenomenon. It would be useful for future research to compare absences by actual cause with worker attributions of past absence behavior.

A further look at the within-subjects results reveals that the other decision-related factors such as kinship responsibilities, hobby/leisure, work demands, day of the week, and community/religious activities were significant for a minority of the subjects. At first glance, one might conclude that these factors may be irrelevant to one's decision to be absent; however, more careful consideration would suggest otherwise. First, open elicitation interviews were used as a basis to identify reasons individuals consider when making a decision to be absent from work. Thus, we are confident that we
included relevant factors. Second, it is well documented that the occurrence of absence for most individuals (regardless of the antecedent) is a low-base rate phenomenon (e.g., Rhodes \& Steers, 1990). In other words, while most employees are absent very little or not at all, only relatively few are absent very often or for long periods of time. Thus, when considering absence decisions, which represent only one antecedent of the absence phenomenon, the relatively low importance of these factors for some is not surprising.

The findings regarding the between-subjects influences on absence are generally consistent with past absence research. Job satisfaction explained a significant amount of the variance in absence decisions. Because in the present study the measurement of absence across situations is likely to raise the base rate of the phenomenon, it may be, as Hulin (1991) suggests, that inconsistent results between absence and job satisfaction depend on the distribution of absence.

Subjective well-being also was significantly associated with absence decisions, although the effect was modest. Gerhart (1990) argued that there was no evidence to suggest that disposition had practical effects in organizations. Given the considerable cost of absenteeism to organizations (Rhodes \& Steers, 1990), the association between subjective well-being and absence decisions suggests that dispositional states may in fact present important implications for organizations.

Those who intend to be absent are more likely to evaluate a given scenario as leading to absence on their part. Absence
intentions in effect may control for many unmeasured differences between individuals that affect both their intention to be absent and their evaluation of a given absence-inducing scenario. The effects of age and kinship responsibilities on absence decisions are consistent with past research (Rhodes \& Steers, 1990). Finally, those that contribute the most to family income are less likely to consider themselves as being absent, perhaps suggesting that those who can least afford to be absent are absent less.

Although the results obtained in this study shed light on an employees' absence decisions, limitations should be mentioned. Consistent with other policy capturing research that is based on decision making in organizations (Klaas \& Wheeler, 1989), external validity is a salient issue. Potential problems with external validity were minimized in two ways. First, the antecedents of absence decisions were generated by a sample of employees that is similar to the group of subjects in this study. In addition to external validity issues, participants may experience fatigue during the experiment that may relate to the large number of descriptions they are often asked to consider. However, in the present study the within-subject $\underline{R}^{2}$ 's were sufficiently high for most of the respondents which indicates that subjects demonstrated systematic consistency in the factors they considered when indicating their decisions.

Further, fatigue might be indicated by lower $R^{2}$ 's for the later scenarios compared to the earlier scenarios. In such a case, respondents would be less likely to read each scenario carefully, making invariance in the dependent variable more
likely and systematic variance explained in the dependent variable less likely. However, this was not the case. In fact, variance in the dependent variable explained by the independent variables was somewhat higher in later scenarios. Thus, fatigue does not appear to limit generalizability of the results.

Finally, one might criticize these findings on the grounds that subjects were asked to make absence decisions in a contrived setting rather than in the context in which absence decisions are made -- the field (Cook \& Campbell, 1979). In particular, there was very little resemblance between the context in which we conducted our study and the context in which an individual makes an absence decision (i.e., our subjects were taking time from their jobs to respond to our survey which contained hypothetical, but realistic scenarios versus anticipating being absent from work). While it is true that subjects were asked to make these decisions in a contrived setting, our theory-based hypotheses were strongly supported. Furthermore, the effects of the relatively stable dispositional factors whose assessment should be unaffected by the study's context, were consistent with the theory-based hypotheses. Therefore, the lack of resemblance between the study's context and the context in which absence decisions are typically made makes generalizations to the "reallife" setting stronger (Mook, 1983). CONCLUSION

In conclusion, the present study identified both within- and between-subject factors that contribute to absence using a study design intended to study the decisions to be absent. While
illness exerted the strongest influence on absence decisions, several other within- and between-subject influences were found to contribute to the decision to be absent. Further, wide variance between individuals in the importance of the factors in absence decisions suggests that absence may be phenomenologically unique, as suggested by Johns and Nicholson (1982). Future research should examine whether a link exists between absence decisions, as assessed in a policy capturing design, and absence occurrences.

## Author Notes

Both authors contributed equally to the manuscript. The authors would like to thank Shinichiro Watanabe for assistance with data preparation as well as Mark Fichman and Gary Johns for their insightful comments on an earlier draft of this article. Correspondence regarding this article may be addressed to Joe Martocchio, Institute of Labor and Industrial Relations, University of Illinois, 504 East Armory Avenue, Champaign, Illinois 61820.

## References

Ajzen, I., \& Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ:

Prentice-Hall.
Arnold, H.J., \& Feldman, D.C. (1981). Social desirability response bias in self-report choice situations. Academy of Management Journal, 24, 377-385.

Blegen, M.A., Mueller, C.W., \& Price, J.L. (1988). Measurement of kinship responsibility for organizational research. Journal of Applied Psychology, 73, 402-409.

Bowers, K.S. (1973). Situationism in psychology: An analysis and critique. Psychological Bulletin, 80, 307-336.

Burrell, G., \& Morgan, G. (1979). Sociological paradigms and organizational analysis. London: Heinemann Educational Books.

Clegg, C.W. (1983). Psychology of employee lateness, absence, and turnover: A methodological critique and an empirical study. Journal of Applied Psychology, 68, 88-101.

Cohen, J. (1977). Statistical power analysis for the behavioral sciences (Rev. ed.). New York: Academic Press. Cohen, J., \& Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences. Hillsdale, NJ: Erlbaum.

Cook, T.D., \& Campbell, D.T. (1979). Quasi-experimentation: Design and analysis issues for field settings. Boston: Houghton Mifflin Company.

Dalton, D.R., \& Perry, J.L. (1981). Absenteeism and the collective bargaining agreement: An empirical test. Academy of Management Journal, 24, 425-431.

Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95, 542-575.

Diener, E., Emmons, R.A., Larsen, R.J., \& Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71-75.

Farrell, D., \& Stamm, C.L. (1988). Meta-analysis of the correlates of employee absence. Human Relations, 41, 211227.

Fichman, M. (1988). Motivational consequences of absence and attendance: Proportional hazard estimation of a dynamic motivation model. Journal of Applied Psychology, 73, 119134.

Fichman, M. (1991). Absence explanation is not explaining absence variance. Unpublished manuscript, Graduate School of Industrial Administration, Carnegie-Mellon University.

George, J.M. (1989). Mood and absence. Journal of Applied Psychology, 74, 317-324.

Gerhart, B. (1990). The doubtful practical relevance of dispositional effects on job satisfaction. Working paper, Center for Advanced Human Resource Studies, Cornell University.

Hackett, R.D., \& Guion, R.M. (1985). A reevaluation of the absenteeism-job satisfaction relationship. organizational Behavior and Human Decision Processes, 35, 340-381.

Hackett, R.D., Bycio, P., \& Guion, R.M. (1989). Absenteeism among hospital nurses: An idiographic-longitudinal analysis. Academy of Management Journal, 32, 424-453.

Hall, R.E. (1982). The importance of lifetime jobs in the U.S. economy. American Economic Review, 62, 716-724.

Harrison, D.A. (1988). Work attendance as planned behavior. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Harrison, D.A., \& Hulin, C.L. (1989). Investigations of absenteeism: Using event history models to study the absence-taking process. Journal of Applied Psychology, 74, 300-306.

Herman, J.B. (1973). Are situational contingencies limiting job attitude-job performance relationships? Organizational Behavior and Human Performance, 10, 208-224.

Holahan, C.J., \& Moos, R.H. (1987). Personal and contextual determinants of coping strategies. Journal of Personality and Social Psychology, 52, 946-955.

Hulin, C.L. (1991). Adaptation, persistence, and commitment in organizations. In M.D. Dunnette and L.M. Hough (Eds.), Handbook of industrial and organizational psychology (2nd ed.). Palo Alto, CA: Consulting Psychologist Press.

Hunter, J.E., Schmidt, F. L., \& Jackson, G. (1982). Metaanalysis: Cumulating research findings across studies. Beverly Hills, CA: Sage.

Ilgen, D.R., \& Hollenback, J.H. (1977). The role of job satisfaction in absence behavior. Orqanizational Behavior and Human Performance, 19, 148-161.

Ironson, G.H., Smith, P.C., Brannick, M.T., Gibson, W.M., \& Paul, K.B. (1989). Construction of $a$ job in general scale: $A$ comparison of global, composite, and specific measures. Journal of Applied Psychology, 74, 193-200.

Johns, G., \& Nicholson, N. (1982). The meanings of absence: New strategies for theory and research. In B. M. Staw and L. L. Cummings (Eds.), Research in Orqanizational Behavior, (Vol 4). Greenwich, CT: JAI Press.

Judge, T.A. (1990). Mood, subjective well-being, and job satisfaction as predictors of absence. Working Paper, Center for Advanced Human Resource Studies, Cornell University.

Judge, T.A., \& Chandler, T.D. (under review). Individual-level determinants of shirking. Industrial Relations. Keppel, G. (1982). Desiqn and analysis: A researcher's handbook (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall. Klaas, B.S., \& Wheeler, H.N. (1990). Managerial decision making about employee discipline: A policy-capturing study. Personnel Psychology, 43, 117-133.

Martocchio, J.J. (1989a). Age-related differences in employee absenteeism: A meta-analytic review. Psychology and Aging, 4, 409-414.

Martocchio, J.J. (1989b). Voluntary absenteeism as reasoned action: A partial test of the Ajzen and Fishbein theory of behavioral intentions. Unpublished doctoral dissertation, Michigan State University.

Mook, D.G. (1983). In defense of external validity. American Psychologist, 38, 379-387.

Morgan, L.G., \& Herman, J.B. (1976). Perceived consequences of absenteeism. Journal of Applied Psychology, 62, 237-240.

Nicholson, N. (1977). Absence behavior and attendance motivation: A conceptual synthesis. Journal of Management Studies, 14, 231-252.

Nicholson, N., \& Johns, G. (1985). The absence culture and the psychological contract - Who's in control of absence? Academy of Management Review, 10, 397-407.

Nicholson, N., \& Payne, R. (1987). Absence from work: Explanations and attributions. Applied Psychology: An International Review, 36, 121-132.

Pelicier, Y. (1987). Success and failure of treatment for depressive states. Psicopatologia, 7, 405-410.

Rhodes, S.R., \& Steers, R.M. (1990). Managing employee absenteeism. Reading, MA: Addison-Wesley. Rosse, J.G., \& Miller, H.E. (1984). Relationship between absenteeism and other employee behaviors. In P.S. Goodman \& R.S. Atkin (Eds.), Absenteeism: New approaches to understandinge measuring, and managing employee absence, (pp. 194-228). San Francisco: Jossey-Bass.

Rushmore, C.H., \& Youngblood, S.A. (1979). Medically-related absenteeism: Random or motivated behavior? Journal of Occupational Medicine, 21, 245-250.

Rynes, S.L., \& Lawler, J. (1983). A policy-capturing investigation of the role of expectancies in decisions to pursue job alternatives. Journal of Applied Psychology, 68, 620-631.

Sanchez, J.I., \& Levine, E.L. (1989). Determining important tasks within jobs: A policy-capturing approach. Journal of Applied Psychology, 74, 336-342.

Schneider, B. (1983). Interactional psychology and organizational behavior. In L.L. Cummings \& B.M. Staw (Eds.), Research in Organizational Behavior, (Vol. 5). Greenwich, CT: JAI Press.

Schwab, D.P. (1980). Construct validity in organizational behavior. In B.M. Staw, \& L.L. Cummings (Eds.), Research in Organizational Behavior, (Vol. 2). Greenwich, CT: JAI Press.

Smith, F.J. (1977). Work attitudes as predictors of specific day attendance. Journal of Applied Psychology, 62, 16-19.

Staw, B.M., \& Oldham, G.R. (1978). Reconsidering our dependent variables: A critique and empirical study. Academy of Management Journal, 21, 439-559.

Staw, B.M., \& Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. Journal of Applied Psychology, 70, 469-480.

Underwood, B., \& Froming, W.J. (1980). The mood survey: A personality measure of happy and sad moods. Journal of Personality Assessment, 44, 404-414.

Winkler, D.R. (1980). The effects of sick-leave policy on teacher absenteeism. Industrial and Labor Relations Review, 33, 232-240.

Youngblood, S.A. (1984). Work, nonwork, and withdrawal. Journal of Applied Psychology, 69, 106-117.

Zedeck, S. (1977). An information processing model and approach to the study of motivation. Organizational Behavior and Human Performance, 18, 47-77.

| Absence Decisions |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 38 |
| Table 1 |  |  |  |  |
| Analysis of Variance Results |  |  |  |  |
| Source | Sum of Squares | DF | F | Omega Squared ${ }^{\text {a }}$ |
| Between Subject Factors |  |  |  |  |
| Percent Income to Household | 302.74 | 1 | 124.56** | . 0054 |
| Age | 109.84 | 1 | 45.19** | . 0019 |
| Subjective Well-being | 24.66 | 1 | 10.15** | . 0004 |
| Job Satisfaction | 179.89 | 1 | 74.02** | . 0032 |
| Intent to Be Absent | 3083.46 | 1 | 1268.66** | . 0545 |
| Kinship Responsibilities | 3.27 | 1 | 1.35 | . 0001 |
| Service/Maintenance | 14.86 | 1 | 6.12* | . 0002 |
| Education | 444.95 | 4 | 45.77** | . 0077 |
| Sex | 297.24 | 1 | 122.30** | . 0052 |
| Within Subject Factors |  |  |  |  |
| Community Activities | 10.15 | 1 | $4.18{ }^{+}$ | . 0002 |
| Kinship Responsibilities | 1080.00 | 1 | 443.53** | . 0190 |
| Personal Illness | 18493.41 | 2 | 3804.48** | . 3270 |
| Hobbies/Leisure Activities | 2.23 | 1 | 0.92 | . 0000 |
| Work Demands | 43.96 | 1 | 18.09** | . 0007 |
| Day of the Week | 26.83 | 1 | 11.04** | . 0004 |
| Explained | 24709.99 | 19 | 535.09** | . 4363 |
| Residual | 31822.28 | 13093 |  |  |
| Total | 56532.27 | 13112 |  |  |
|  |  |  |  |  |
| a Variance explained by continuous variables (covariates) was calculated according to Keppel (1982) |  |  |  |  |


[^0]:    explanation may not hold in all cases in which the job satisfactionabsenteeism correlation was observed.

