

# **ASSENTMENTISM IN A MORE SOCIAL CONTEXT**

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Shaun Newsome**

**April 23, 1992**

**Submitted in partial fulfillment  
of the requirements for the degree of  
Master of Science**

**Saint Mary's University  
Halifax, Nova Scotia**



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**Abstract**

**Absenteeism in a More Social Context**

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Past research on absenteeism has relied heavily on assessing the roles of work attitudes as correlates of absence measures. This study examined the effects of variables identified as promising areas of research, yet have been investigated little; namely, absence culture, organizational permissiveness, extent of non-work activities and value of non-work time. Because little empirical work has been compiled on these variables, the study was largely exploratory. An attempt was made to develop instruments to assess these variables. Based on factor analytic results, measures of employee and group absence ethics, non-work responsibilities, and non-work social activities were derived. Psychometric properties are reported. These variables, along with measures of organizational commitment and work group cohesion, were assessed in terms of their ability to account for significant amounts of variance in three absence indices: self-reported absence frequency; absence frequency collected from personnel files; and total hours absent as recorded in

personnel files. Data collection was carried out in three small manufacturing plants. Participants included 44 female and 23 male blue collar workers. Work group cohesion was useful in predicting the frequency measure obtained from personnel files while employee absence ethic and non-work responsibilities were useful in predicting self-reported frequency. Results are discussed in terms of the utility of the measures in predicting different absence measures. Limitations of the study and recommendations for future research are also presented.

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### Absenteeism in the Social Context

The vast amount of literature on absenteeism may be evidence of its complexity, assigned status as a problem to industry or both. Although most studies begin with a statement about the cost of absenteeism to industry (Steers & Rhodes, 1978; Fitzgibbons & Moch, 1980; Cascio, 1987; Johns, 1987; Brooke and Price 1989; Hackett 1989; Farrell and Stamm, 1988), it is felt that the motivational force behind the study of absenteeism is the illusive nature of the relationships between the correlates of absenteeism. Despite a huge body of literature, applied psychologists can offer management little in the way of comprehensive models of absenteeism.

The study of absence has a long history and several major reviews of the literature exist (e.g., Brayfield & Crockett, 1955; Muchinsky, 1977; Steers & Rhodes, 1978, 1984). Despite efforts to integrate various findings, research continues in a piecemeal fashion with little reference to existing theoretical models (Hackett, Bycio & Guion, 1989). As stated by Mathieu and Kohler (1990), the lack of consistent results across studies has prompted many researchers to work independently of any acknowledged theoretical frameworks. Steers and Rhodes (1978) state that most absence research conducted prior to 1978 consists of bi-variate correlations. A possible reason for this, they state, is the lack of any comprehensive models of absenteeism. One result of the vast

amount of attention that absence has received in the literature is the development of an enormous array of variables that have been examined in relation to absenteeism. Steers and Rhodes (1984), in a review of the literature, identified 209 such variables.

Chadwick-Jones, Brown and Nicholson (1982) articulate a rather pessimistic view of absence research. They suggest studies of absence offer little in the form of explanatory frameworks and conclude that there is a lack of any theoretical or empirical frameworks shared by researchers. Studies of absence were found to have a variety of methods and approaches with no uniform operational definition of absence. Gaudet (1963), for instance, identified at least 41 different measures of absence. Continuing, Chadwick-Jones et al. state that few explanations of absence have gone any further than offering a passing reference to existing social psychological theory.

The purpose of the present study is to investigate absence in the context of social influences within and outside the organization. It has been frequently suggested that social influences may be promising avenues of research (Chadwick-Jones et al., 1982; Johns & Nicholson, 1982; Steers & Rhodes, 1984), yet little empirical work has been compiled on the effects of social influences on absence. Given the preponderance of studies investigating individual correlates of absence and the conflicting findings that have ensued, it

is felt it would be beneficial to place the study of absence in a different context, one which relies less heavily on individual determinants of absence and more on social factors such as group dynamics within an organization, and the interaction between work and non-work time. It is in no way being suggested that past absence research offers little in our understanding of absence behaviour, for it has. What is being suggested is that there is a need for closer investigation of absence within a social context. One more study of absence relying solely on individual determinants would add little to our understanding of absence behaviour.

The following discussion of past absence research begins with the presentation of the Steers and Rhodes' (1978) model of employee attendance. The rationale for using the model as an introduction to recent absence research stems from the fact the model was developed based on an extensive review of absence research prior to 1978. Brooke (1986) credits Steers and Rhodes for introducing order into absence literature and stimulating further interest and research.

### Literature Review

#### A Process Model of Employee Attendance

Of the models that have been developed to date, none have received as much attention as the Steers and Rhodes' process

model of employee attendance (1978). The model is based on a review of 104 absence studies. Although this is not the first model of absenteeism (See Gibson, 1966), it is the first that attempts to explain the existing literature and the relationships between the correlates of absenteeism.

Employee attendance state Steers and Rhodes, is a function of two important variables, motivation to attend and ability to attend, with motivation representing the primary influence on attendance. Motivation is hypothesized to be directly influenced by satisfaction with the job situation and pressure to attend.

The job situation consists of variables that characterize the nature of the job and the work environment. They include: job scope, job level, role stress, work group size, leader style, co-worker relations and opportunities for advancement. Although satisfaction with the job situation, as defined by these variables, directly influences attendance motivation, an employee's level of satisfaction is mediated by their work values and job expectations. Other variables influencing motivation are in a class titled Pressures to Attend, they include: (1) economic/market conditions; (2) incentive/reward systems; (3) work group rewards; (4) personal work ethic; and (5) organizational commitment.

The effect of employee motivation to attend is mediated through an employee's ability to attend. Variables proposed to influence ability to attend include; illness and accidents,

family responsibilities, and transportation problems. Personal characteristics such as education, tenure, age, sex and family size are a final class of variables that influence: (1) ability to attend; (2) employee values; and (3) job expectations.

The Steers and Rhodes model has received more than its fair share of criticism. Chadwick-Jones, Nicholson and Brown (1982) suggest the Steers and Rhodes approach is faulty because it overemphasizes intraindividual determinants of absence and fails to recognize the importance of work group norms and the possible development of absence cultures within these groups<sup>1</sup>. They have alternately proposed a social psychological theory of absence based on differing absence cultures within organizations and offer evidence to support this. Chadwick-Jones et al. also point out that Steers and Rhodes themselves state the relationship between job dissatisfaction and absenteeism has been consistently found to be weak, yet the attendance model relies heavily on employee's satisfaction with the job situation. Watson (1981) also criticizes the model and suggests the primary predictor of attendance in the model is job satisfaction. Brooke (1986) reiterates some of the criticism offered by Chadwick-Jones et al. and suggests that limitations of the model become apparent when attempts are made to operationalize the various constructs.

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<sup>1</sup>A point we will return to.

Steers and Rhodes (1984) reply to the above criticism and imply much has been unfair. They suggest their model did provide for work group norms and did not rely primarily on satisfaction as a predictor of absence. It appears that the arguments are based on the amount of emphasis Steers and Rhodes placed on certain components in their model and not the inclusion or exclusion of certain variables. Steers and Rhodes do acknowledge the difficulties in testing the model in its entirety.

Despite criticism, the Steers and Rhodes model has generated much interest and has placed the correlates of absence within a framework that enables researchers to test certain aspects of the model (Hammer, Landau & Stern, 1981; Terborg and others, 1980; Watson, 1981; Frechette, 1981; Brooke & Price, 1989).

Based on partial tests of their model and multivariate research that has been compiled since its formulation, Steers and Rhodes (1984) propose a revised model of employee attendance. The revised model still predicts the primary determinants of attendance to be: (1) perceived ability to attend (which in the previous model is ability to attend); and (2) attendance motivation. In sum, the model does not include any new variables but new importance is given to some existing ones and satisfaction has become one more variable in the category of work attitudes. Most important in relation to the present study is the elevation in importance of variables such

as absence culture and organizational permissiveness.

Steers and Rhodes (1984) present classes of variables that may influence attendance. Five classes of variables are thought to directly affect attendance motivation: (1) work related attitudes; (2) economic\market conditions; (3) organizational control systems; (4) personal factors; and (5) absence culture and work group norms. Attendance motivation is again hypothesized to exert a direct influence on perceived ability to attend, both variables are said to be the major determinants of attendance. This is unfortunate, for the constructs remain as illusive as ever. In both models, Steers and Rhodes offer little serious discussion over the construct attendance motivation, we are merely given a list of variables that may affect it. It is uncertain if Steers and Rhodes are suggesting the sum of the variables that affect attendance motivation will serve to define it, or if somehow the variables interact to form a distinctly new variable. They offer evidence that work related attitudes have a direct effect on absence levels but insist on placing attendance motivation as a mediating variable. A similar criticism can be made for other variables. No evidence is offered suggesting classes of variables such as work-related attitudes, economic/market conditions, etc, exert a direct influence on the construct attendance motivation.

Steers and Rhodes suggest that the revised model has been simplified in order to avoid criticism due to misunderstanding



(p. 260). Although the model is certainly simplified, it offers no specific information on the determinants of absenteeism or attendance. They themselves suggest the model merely highlights what they believe to be the major determinants of attendance. What the model does offer is a suitable framework for summarizing correlates of absence.

### Work Related Attitudes

The most frequently studied work related attitudes are overall job satisfaction, job involvement, organizational commitment, and several facets of job satisfaction (work itself, supervision, co-workers, pay and promotion) (Steers and Rhodes, 1984).

One specific work related attitude, job satisfaction, has received much attention in the literature, perhaps more so than any other correlate of absence. Chadwick-Jones et al. (1982) suggest there is a widespread belief among social scientists and managers that a significant negative relationship exists between satisfaction and absenteeism. They suggest the reason for this is that it has an intuitive appeal and state "it 'makes sense' to assert that happy workers will be at work regularly and that dissatisfied people will seek opportunities to avoid going to work" (p. 91). After their review of 29 studies on the subject they conclude that "...it is not possible to establish more than a weak

link between measures of job satisfaction and absenteeism" (p. 99). Additional support has been found for the conclusion of Chadwick-Jones et al. Hackett (1989) summarized and compared the results of three recent meta-analysis of the relationship between work satisfaction and employee absenteeism (Hackett & Guion, 1985; Mcshane, 1984; Scott & Taylor, 1985). A refined analysis of all data found the correlation between frequency of absence and work satisfaction to be -0.21. A correlation of -0.23 was found between overall satisfaction and duration of absence. Hackett concludes by stating empirical literature supports a modest relationship between job satisfaction and absenteeism. Johns (1988) is cited for offering the following reasons for the lack of a stronger relationship between satisfaction and absenteeism: (1) some absence is simply unavoidable because of illness, weather conditions or other pressing matters; (2) opportunities for off the job satisfaction on a missed day vary, for instance, an employee may be extremely satisfied with his/her job but are much more satisfied when they are fishing; (3) some organizations have attendance policies that can influence absence more than satisfaction does; and (4) the influence of work group norms on acceptable absence behaviour may be much stronger than individual satisfaction levels. In sum, it appears that Johns is suggesting other variables may mediate the effect of job satisfaction on absence levels.

Hackett (1989) found evidence of moderator variables in

the satisfaction absence relationship. The magnitude of the relationship was higher when the sample contained a large proportion of women. He suggests that with working women in most families still constituting secondary wage earners (making them less financially dependent on their jobs), their 'threshold' at which dissatisfaction is manifested in absence may be lower on average than it is for men. Response rate was also found to be a moderator. The higher the response rate, the greater the magnitude of the relationship between absence and satisfaction.

In conclusion, it appears there is evidence of a modest relationship between satisfaction and absenteeism, but results and magnitude of the relationship must be interpreted with caution given the evidence of existing moderator variables.

The relationship between job involvement, organizational commitment and absence has also received much attention in the literature. Hendrix and Spencer (1989), in a test of a causal model of absenteeism, found that job involvement and commitment were major determinants of absence levels. In another test of a causal model, Brooke and Price (1989) also found work involvement to be a determinant of absence levels. Work involvement was also found to be a major determinant of job involvement. In fact, the highest of all path coefficients was for the effect of work involvement on job involvement (0.62). Job involvement also exerted a direct effect on commitment (0.31). The relationships between job

involvement, work involvement, commitment and absence are complex and further investigation is needed.

Mathieu and Kohler (1990) found that organizational commitment and job involvement exerted an interactive effect on absences for personal reasons but not for absences due to family responsibilities, illness, or transportation problems. Individuals who scored high on job involvement but low on organizational commitment tended to be absent more frequently for personal reasons. They offer two possible explanations for this. First, Blau and Boal (1987) are cited as referring to individuals who score high on job involvement but low on commitment as 'lone wolves'. They suggest that such individuals are more likely to take absences for career enhancing purposes. Blau and Boal also suggest lone wolves believe in maximizing their work opportunities. Mathieu and Kohler state that this may have been the case for some transit operators in their study who took personal absences and then worked an overtime shift to make up the time, thus earning more money for the same hours. Supporting evidence that it was the 'lone wolves' who were doing this was not offered.

The second explanation offered for the interactive effects is that employees who score high on job involvement are also very much involved in non-work activities. They suggest that these employees may take personal absences to participate in non-work activities. In another study investigating work related attitudes, Hammer, Landau and Stern

(1981) found organizational commitment accounted for more variance in absence levels than satisfaction or work involvement. Although Cheloha and Farr (1980) found both job satisfaction and job involvement to be related to absences, job involvement was more consistently related; however there are conflicting findings. For example, Miller (1982; cited in Steers and Rhodes, 1984) found no relationship between satisfaction, involvement and absence levels. Breugh (1981) found that job involvement was related to absence frequency but not the time lost index. Hammer et al. (1981) also found no relationship between job involvement and the time lost index.

Farrell and Stamm (1988) conducted a meta-analysis of 72 studies and concluded that job involvement was consistently related to absence across all studies. They also suggest that organization-wide variables (pay, absence policies), and work environment factors (task significance, variety, autonomy, identity and feedback) are better predictors of absence than are demographic (age, tenure, sex, absence history), and psychological factors (satisfaction, commitment, and stress). Job involvement was considered as a psychological variable, and as stated, it was the only variable consistently related to absence.

Farrells and Stamms' classification of variables illuminates a problem in absence research. Many researchers classify variables under different headings, thus the

integration of research findings is often a difficult and confusing task. This, added to inconsistent results, is the nature of absence research.

Steers and Rhodes (1984) state the majority of research supports the notion of a modest, inverse relationship between work related attitudes and absence. Although arguments over the magnitude of these relationships continue unabated, it does appear that work related attitudes exerts some effect on absence levels.

### Personal Factors

Personal factors are characteristics of individuals which have been found to be related to absence behaviour (Steers and Rhodes, 1984). Many personal factors and their relationship to absenteeism have been studied. The present review relies heavily on a review of absence research conducted by the Educational Research Service (1980).

In general, it appears that for sickness absence, older workers have higher rates of absence; but for total or uncertified absences, the younger the employee, the higher the absence rate. Females have higher rates of absence than males, but men seem to be absent for longer periods of time. Seven of the nine studies identified which examined the effect of race on absence, found absence to be higher in non-whites than whites. A consistent relationship has been found between

job level and absence rates. This conclusion should be viewed with caution though, for there are often different absence policies depending on job status. No conclusive results could be reported for the relationship between marital status, family size, education level and absence rates. Steers and Rhodes (1984) state that few conclusions can be made about personal correlates of absence. In general, they state absence has been found to be related to health problems, poor previous attendance, and age, particularly for males. In conflict with the comprehensive review provided by the Educational Research Service, they cite Muchinsky (1977) as offering evidence family size is positively related to absence rates. Steers and Rhodes (1978) suggest that absence rates for women decline as they get older because they have less responsibilities at home in terms of children. The existence of day-care facilities has been found to be inversely related to absenteeism (Milkovich and Gomez, 1977; cited in Steers and Rhodes, 1984).

A variable researched little, that falls under the class of personal factors, is non-work attachment. Johns and Nicholson (1982) suggest that some absence may be the result of how much value individuals place on non-work activities. Youngblood (1984) found that the value employees placed on leisure time was consistently related to absence hours. The study was designed to assess employees' degree of work attachment (satisfaction and job scope) along with non-work

attachment (value of non-work time) and their effects on absence levels. Youngblood also devised a unique method of calculating the value of an employee's non-work time. The procedure is based on the work of Dunn (1977, 1978, 1979; cited in Youngblood). Three methods were used: (1) Workers were asked how much they would pay for certain benefits and then how many hours a week extra they would work without pay to have that benefit. The equivalence between these two measures results in an estimate of the value the employee places on his/her non-work time; (2) Individuals were asked to indicate the number of hours per week they would ideally like to work; and (3) Employees were asked how much overtime at regular pay they would be willing to work.

Steers and Rhodes (1984) suggest that absence can not be studied without regard for the role of the individual. Although there is plenty of evidence to support this, the role of the individual must also be studied in a social context as opposed to only looking at individual correlates of absence. As Chadwick-Jones et al. state, the social reality of the situation must not be overlooked. Past research on individual correlates alone reveals few consistent results as Steers and Rhodes themselves report.

#### Organizational Control Systems

Steers and Rhodes discuss three types of organizational



control systems: (1) positive-reinforcement programs; (2) punishment and negative incentives; and (3) mixed consequences systems. In summarizing various studies investigating the effects of organizational control systems on absence levels, they suggest control systems aimed at reducing absence can be especially powerful in controlling such behaviour. They suggest this is particularly true when organizations use a positive-incentive framework or when potentially punitive sanctions are combined with a positive approach. Steers and Rhodes should be credited for their excellent summary of this literature, but given the vast number of different control policies found in organizations, it is felt that a more parsimonious variable such as organizational permissiveness would be a welcome alternative in terms of operationalization.

Organizational permissiveness is the degree to which absenteeism is accepted by an organization (Parsons, 1956; cited in Brooke, 1986). Brooke and Price (1989) found a direct effect for organizational permissiveness on absence rates. The more permissive the employees thought the organization to be, the higher the absence levels. Popp and Belohlav (1982) found evidence that supervisory attitude towards absence was negatively related to number of absences taken by employees.

Dalton and Mesch (1991) investigated the effects of absence policy provisions on absence measures. They found that absence policy accounted for a significant amount of

variance in avoidable absences (22.7%). Avoidable absence was defined as total absences minus the number of absences due to sickness. The authors presumed that employees have more discretionary power over these types of absence as opposed to sickness absences. Absence policy was treated as a dichotomous variable. Employees were allowed 18 sick days a year. If they accumulated 90 sick days, the absence policy changed. Employees with more than 90 accumulated sick days no longer had to be off for more than three days to get paid for their absence. Thus, the researchers were provided with two absence policies within the same organization. Avoidable absences were measured using an algorithm. They subtracted total absence from absence due to sickness and dividing the product by total absence, absence policy was not found to be related to total absence or absence due to sickness. It may be stated that the permissiveness of the organization towards absence abruptly changed when employees accumulated 90 days sick leave.

These results coincide with the conclusion of Steers and Rhodes (1984) in that control systems are very powerful in reducing absence, even if it is only a supervisor with a negative attitude towards absenteeism. When strict control procedures are in place, it can be assumed that the organization is not permissive in its attitude towards absenteeism, and thus, make it more difficult for employees to take avoidable absences. Although the variable organizational

permissiveness has received scant attention in the literature, it seems plausible that any study of absence must take into account the organizational attitude towards absenteeism.

#### Absence Culture and Work Group Norms

Related to organizational permissiveness is absence culture or work group norms. Johns and Nicholson (1982) define absence culture as "the set of shared understandings about absence legitimacy ... and the established 'custom and practice' of employee absence behaviour and control" (p. 136). Absence cultures or work group norms have also received little attention in absence research. Evidence of this stems from the non-existence of any measure of absence culture. Although many researchers have suggested absence cultures or work group norms exist within organizations (Chadwick-Jones et al., 1982; Gibson, 1966; Johns and Nicholson, 1982; Nicholson, 1977; Steers and Rhodes; 1978, 1984), little investigation or actual measurement of such constructs has been conducted.

Chadwick-Jones et al. investigated absence in 21 organizations and found evidence of patterns of absence depending on the organization. They suggest this evidence is consistent with the exchange interpretation of absence and that based on job requirements and working conditions, there is a consensus and a collusion among employees and management about the appropriate levels of absence (p. 33).

When absence cultures are discussed, it is usually stated that the group will influence the individual. Although this is probably true, it is equally likely that the permissiveness of the organization will mediate the type of absence culture that develops (the collusion part of the relationship suggested by Chadwick-Jones et al.). This culture in turn will have an effect on number of absences taken by the individual. It seems plausible that the work group will look to the organization to see how much absence is "allowed" without serious consequences. The group will then informally reach a consensus as to how much absence is appropriate. It is likely that both organizational permissiveness and absence culture exert direct influences on absence. For example, it may be that the organization is fairly permissive in allowing employees to take unscheduled time off, but the absence culture within the organization may be such that employees frown upon co-workers taking advantage of the permissiveness of the organization, especially when frequent absences mean more work for the rest of the group. Johns and Nicholson (1982) suggest the salience of the culture will moderate the impact of the absence culture on absence levels. Johns and Nicholson hypothesize that determinants of the salience of the absence culture will include absence control systems, technology, and social ecology which, in general, is the physical distribution of workers in the work place. They also suggest repercussions from previous absences will have a

powerful effect. Intuitively, the existence of absence cultures is a promising area of research. It is unfortunate that researchers have failed to investigate the variable empirically.

#### Purpose of the Present Study

It is not the purpose of the present research to test all possible determinants of absence. The number of possible variables would necessitate not only an extremely large sample but also a longitudinal design. This is beyond the scope of the present study. It is the purpose of the present study to investigate several variables that have been cited as promising areas of research but have been investigated little; namely, absence culture, organizational permissiveness, extent of non-work activities and value of non-work time. Because little empirical work has been compiled on these variables, the study is largely exploratory. The variable organizational commitment is also included because of its fairly consistent link to absenteeism in the research.

#### Non-Work Activities

As stated by Kopelman, Greenhaus and Connolly (1983), an individual's work life cannot be studied in isolation of family and personal concerns. Morgan and Herman (1976)

suggest that if an employee's primary commitments are in the area of family, home, a hobby, or sports, he or she may experience less internal pressure to attend.

Individuals have varying amounts of responsibilities and with these come different roles that have to be fulfilled. Commitments have to be made to these roles and because of these commitments decisions have to be made concerning absence from work. Commitments vary with the individual. A commitment or role is not necessarily related to one's family, it could be to an organization, religious group, club, or friends. An individual who identifies strongly with a group of friends and the activities they take part in may choose to take a day off work to participate in these activities or to assist someone in the group. Does an individual identify more strongly with his/her role in the group and the activities of the group, or to work? It is possible that identification with the employee role may be less salient than identification with non-work activities. Gibson (1966) conceptualizes the absence taking process and places absence behaviour in the context of the "total behavioral field" of the individual, namely, organizational space, work space and individual life space.

#### Gibson's Conceptualization of Absence Behaviour

Gibson (1966) suggests that fundamental to an

individual's behaviour are the capacities and tendencies that are the basis for a number of interrelated needs. He suggests that all individuals have a need system and behaviour is directed towards the satisfaction of these needs. Individuals assume that certain behaviours will lead to the satisfaction of some need. These assumptions, about what behaviours lead to the satisfaction of specific needs constitutes an individual's belief system. Some needs, states Gibson, are given higher priorities. This system of predilections, priorities, or preferences concerning the needs to be satisfied and the process of satisfying these needs is termed the individual value system. The belief system and value system mutually affect one another and form an individual's belief-value system which in turn determines an individual's decision about his or her behaviour.

Gibson states that in the work situation there are a variety of objects of identification to which are attached valences. The combination of the valences, positive and negative, results in an individual's core identification. An absence event is assumed to be the result of an individual's belief-value system. The strength and direction of identification within the work space and the life space will either facilitate or impede the absence taking event.

Gibson suggests an organization also has a belief-value system that guides it toward the realization of its goals. This system is expressed through the organizational charter,

administrators, supervisors and employees. The belief-value system is expressed through the division of labour. The organization states what qualifications it demands of people to fulfil certain roles, and the rewards it will give people for fulfilling these roles. The latter is the organization's duties-rewards system. In sum, Gibson suggests the decision to be absent is based on an individual's belief-value system, the organizational belief-value system and the interaction between the two.

Although Gibson's conceptualization may be criticised for placing too much emphasis on the individual, it is felt that an extension of Gibson's conceptualization may be useful in understanding absence in a more social context, one that includes the social aspects of an individual's life space as they affect an individual's behaviour in the work space.

For instance, within the life space of the individual, we can place personal characteristics. Related to personal characteristics are the commitments an individual has to make to the various roles a person takes on within the individual life space. Kinship responsibility can act as an object of identification and its valence will affect decisions to come to work. Other objects of identification may also have high valences. A single man without any dependents may treat his peer group as an object of identification whose valence is equal to or greater than that of work, thus, he may decide to participate in group activities that result in non-attendance.



In sum, employees' objects of identification within the life space will compete with objects of identification in the organizational space. The valence of these objects of identification will to some extent determine absence rates. Any investigation of absenteeism should allow for commitments to non-work activities.

In the present study, non-work activities are defined as any form of non-work activity the individual participates in while not at work. The construct includes personal work an individual participates in, family responsibilities, and leisure interests. It is plausible that if an individual identifies strongly with non-work activities it will be reflected by their involvement in such; and as Morgan and Herman (1976) state, involvement in such activities may result in less pressure to attend work. It is hypothesized that an individual's level of involvement in non-work activities will account for a significant amount of variance in absence levels.

#### Value of Non-Work Time

Youngblood (1984) found evidence of a relationship between the value employees placed on non-work time and absence rates. This finding may be related to the idea of non-work activities. It seems likely that an individual who is involved in many non-work activities will also place high

value on non-work time. It is also feasible that individuals who are not overly active in non-work activities may also place high value on their non-work time. It is felt that an individual does not necessarily have to be active in non-work activities to place high value on non-work time. In other words, the variables may in fact be highly related but it is not necessary.

Based on the findings of Youngblood (1984) it is hypothesized that the value employees place on non-work time will be positively related to absence levels.

#### Organizational Permissiveness

Organizational permissiveness has previously been defined as the degree to which absenteeism is accepted by an organization (Parsons, 1956; cited in Brooke, 1986). As already stated, support has been found indicating the effect of this variable on absence rates. Steers and Rhodes also indicate there is much evidence linking strict absence control policies to reduction in absenteeism. It is hypothesized that employees' perception of organizational permissiveness will account for a significant amount of variance in absence rates.

#### Absence Culture

Absence culture has previously been defined as "the set

of shared understandings about absence legitimacy...and the established 'custom and practice' of employee absence behaviour and its control" (Johns and Nicholson, 1982, p. 136). As Johns and Nicholson state, there are many possible determinants of a salient absent culture. In fact, it is likely that the construct is a combination of many factors. First of all, the employees must be in an environment where the culture can be communicated. The more cohesive the work group, the more likely the salience of the culture. Second, it must be determined if the absence culture encourages or discourages absence.

It is hypothesized that a salient culture encouraging absence will have a positive effect on absence rates while a salient culture discouraging absence will have a negative effect. Agreement among employees on the nature of the culture will indicate the culture's pervasiveness. It is plausible that individuals will perceive the absence culture differently, or perhaps recognize the culture but refuse to be influenced by it.

It is also possible that the absence culture is not an organizational wide variable but is a group variable with small work groups forming their own perceptions about absence behaviour and its control. It is hypothesized that the measure of absence culture will account for a significant amount of variance in absence rates.

### Organizational Commitment

Organizational commitment is the degree to which an individual is loyal to the organization (Price & Mueller, 1981). There has been a fairly consistent link between organizational commitment and absenteeism. Discussed previously is the idea that employees may be faced with competing commitments, a commitment to non-work activities and a commitment to the work place. It is felt that a measure of organizational commitment should also be included in order to assess its relationship to non-work activities. Previous research appears to indicate that a strong commitment to an organization results in lower absence rates; therefore, it is hypothesized that organizational commitment will account for a significant amount of variation in absence levels.

### Absence

There are numerous operationalizations of absence and much discussion over the merits of the various measures. In a much cited comment, Muchinsky (1977, p. 317) states "the single most vexing problem associated with absenteeism as a meaningful concept involves the metric or measure of absenteeism". Chadwick-Jones, Brown, Nicholson and Sheppard (1971) examined the reliability and validity of seven different indices of absenteeism. They include the following:

(1) Absence frequency, defined as total number of times absent; (2) Attitudinal absence, which is frequency of one day absences; (3) Other reasons, includes number of days lost in a week for any other reason than holidays, rest days, and certified sickness; (4) Worst day, which is a difference score between number of individuals absent on a weeks best and worst days; (5) Time lost, defined as number of days lost in a week for any reason other than leave; (6) Lateness, number of instances of tardiness in any week; and (7) Blue Monday, which is the number of individuals absent on Monday minus the number absent on a Friday of any given week. Muchinsky (1977) reviewed the reliabilities of absence measures from six studies including the Chadwick-Jones et al. study and concluded the absence frequency measure demonstrated the highest reliability. This conclusion is also supported by Johns (1978).

Chadwick-Jones, Brown and Nicholson (1982, p.56) suggest that short term absences are more likely to be valid indicators of chosen absences (voluntary) while long term absences are more likely to be due to illness (involuntary). Two of the most common measures of absences are the frequency index and total days absent (Breaugh, 1981; Garrison & Muchinsky, 1977; Hendrix and Spencer, 1989). The former is often used to indicate voluntary absence while the latter is associated with involuntary absence (Breaugh, 1981; Chadwick-Jones et al., 1982; Hendrix & Spencer, 1989; Johns, 1978).

Unfortunately, the choice of absence indices is not one the researcher can always make. Limitations stem from organizations using different methods of collecting absence data. As indicated, the data can take many forms. Absence indices to be used in the present study will be described in the methods section.

### Method

#### Site, Sample, Data Collection

Data collection was carried out in three small electronic manufacturing firms. Absence data, provided by management personnel in the three plants, indicated a possible sample size of 123 employees. Single and multiple item self-report measures were used to operationalize all variables. Employees were also asked to self-report the number of times they were absent in the past 12 months. Questionnaires, with an opening letter detailing the nature of the study, were distributed to the employees.

Out of the initial sample, 57 individuals chose to participate. Although the response rates differed across the three plants (53%, 89%, 39%), the resulting number of usable surveys was similar: 21, 26 and 20 respectively. The method of survey distribution differed over the three plants. In

Plant 1, employees were given a brief group presentation on the nature of the research. If individuals chose to participate, they were asked to complete the survey on their own time. In Plant 2, employees were given individual explanations about the research. If they chose to participate, they were asked to complete the questionnaire immediately and return it to the personnel office. There was no personal contact between the researcher and employees in Plant 3. The personnel manager took responsibility for distributing and collecting the questionnaires. In addition to the opening cover letter provided by the researcher, an additional letter was provided by the manager of the plant. The letter indicated that management had not asked for the research to be conducted, and although he hoped employees would choose to participate, they were under no obligation to do so.

Although all plants manufactured electronic equipment and were relatively similar in size, they were located in very different areas. Plant 1 was located in a rural setting. The majority of employees lived very close to the plant. Plant 2 was in an urban setting and Plant 3 was located just outside city limits.

Table 1 details the demographic statistics by plant and also the total sample. Statistics for age, tenure and sex of subjects are provided.

The absence policies differed over the three plants. In

plant 1, employees were allowed five paid sick days per year. They were also allowed a total of 10 paid extended illness days with medical certification. Plant 2 employees were allowed a total of two paid sick days a year and five paid extended illness days. Plants 1 and 2 also had a long term illness policy in place, employees were allowed 12 weeks at reduced pay.

In Plant 3, employees were allowed six paid sick days. A procedure was also in place for dealing with long term sickness. Plant 3 was the only unionized plant in the study. Number of allowable sick days and conditions of long term sick leave had been negotiated by the union.

**Table 1. Demographic Statistics by Plant**

Plant	Respondents	Females	Males	Av. Age	Tenure
1	21	19	2	34.0	6.0
2	26	16	10	37.3	8.6
3	20	9	11	38.1	7.1
Total	67	44	23	36.5	7.3



## Measures

### Absence

Although the focus of the present study is on voluntary absence, the frequency measure as well as the time lost index were utilized. All measures were for a 12 month period. Frequency of absence is defined as the number of occasions an employee fails to show up for scheduled work regardless of duration. For instance, if an employee is absent for two consecutive eight hour shifts it is coded as one absence event. It is also one absence event if the employee is absent from work for one hour. Time lost is the sum of the total hours an employee has missed in a one year period.

A self report measure of absence frequency was also used. Self-reported frequency was the sum of the number of times the employee reported being absent plus the number of times they reported being late. In the data collected from personnel records, it was not possible to differentiate between when an employee was one hour late from when an employee took an unscheduled hour off.

Absence statistics by plant can be found in Table 2. The largest difference in absence frequency was between Plants 1 and 2. In regards to the self-report measure of absence frequency, Plant 3 employees reported being absent the least.

These same employees also had the largest discrepancy between the absence frequency measure obtained from personnel files and the self-report measure of absence frequency.

Table 3 details absence statistics by plant or employees who chose not to participate. The largest discrepancy between those who chose to participate and those who did not was in the measure of total hours lost. Further analysis of this variable revealed the presence of five extreme values ranging from 162 to 381 hours lost. The mean frequency values at the plant levels are comparable, although slightly higher for those who chose not to participate. The exception to this is employees in Plant 2 in which the response rate was 89%.

Table 2. Absence Measures by Plant

Plant	Absence		Self-Report		Total Hours	
	Frequency	SD	Frequency	SD	Absent	SD
1	4.2	4.78	3.0	2.16	42.6	38.25
2	9.4	6.57	6.2	4.56	51.0	44.14
3	6.1	5.77	2.4	2.60	52.7	68.26
Total	6.8	6.15	4.4	3.79	48.9	50.41

Table 3. Absence Measures by Plant (Non-participants)

Plant	Av. Frequency	SD	Av. Total Hrs	SD
1	8.89	4.99	58.22	35.16
2	6.17	3.82	22.75	13.63
3	7.84	8.30	74.08	92.28
Total	7.80	7.27	64.49	79.21

#### Organizational Commitment

Very acceptable reliability and factor analytic results have been reported with the Organizational Commitment Questionnaire (Porters & Steers, 1979) (Appendix A). For six samples, coefficient alpha ranged from 0.82 to 0.93. The authors state that factor analysis with varimax rotation generally resulted in a single-factor solution. In the present study, factor analysis with varimax rotation revealed the possibility of a second factor, although the second factor barely met the criteria of eigenvalues  $> 1.00$ . As noted above, the organizational commitment questionnaire generally results in a single factor solution. Coefficient Alpha was calculated to be .90 for the present sample.

#### Value of Non-Work Time

The method of calculating the value employees place

on non-work time was based on the work of Youngblood (1984). Employees were asked to indicate how many extra hours per week they would be willing to work at no pay for each of 10 benefits. They were also asked to indicate how much money per week they would be willing to pay for the same benefits. The sum of the money they were willing to pay for the benefits divided by the number of hours they were willing to work for the benefits was used as an estimate of the value each employee placed on her non-work time. For example, if an employee was willing to work two extra hours per week at no pay for full dental coverage, yet would pay \$20.00 per week for the same benefit, the employee was assigned a value of \$10.00 for the value he placed on non-work time. Appendix B contains the list of benefits used.

#### Development of New Measures

The exploratory nature of the study dictated the development of several new measures: the Non-work Activities Index (NWA I)(Appendix C), Absence Culture Scale (ACS) (Appendix D), and the Organizational Permissiveness Scale (OPS) (Appendix E). Given the exploratory nature of the research along with the development of new scales, it was felt that items and scales to be included in the final analysis should demonstrate high reliabilities along with good convergent and discriminant validities.

All new scales were submitted to factor analytic procedures. Scree plots, and criteria of eigenvalues  $> 1.00$  were used to determine the number of underlying factors each instrument was measuring. Items with ambiguous factor loadings or loadings less than 0.5 were deleted at this stage. Factor structures were rotated using the varimax procedure. Scale reliabilities based on internal consistencies were also calculated. Scales with reliabilities less than 0.60 were omitted from the study. The following details the psychometric properties of the new scales.

#### Non-Work Activities Index

The NWA was developed to assess an individual's involvement in non-work activities. Individuals were asked to indicate on a seven point scale the extent to which they agree or disagree with each statement. Higher scores indicate more involvement in non-work activities. Initially, the scale consisted of 23 items. Factor analytic results initially revealed six possible factor solutions. Using the criteria outlined above, the final number of items was reduced to 15. Reliability analysis indicated only three of the factors contained satisfactory internal reliabilities. The rotated factor structure for the final scales is presented in Table 4. Factor loadings less than 0.5 have been omitted.

Table 4. Rotated Factor Pattern for Non-Work Activities Index

Item	Factor Loadings		
	FACTOR 1	FACTOR 2	FACTOR 3
NWA19	.81911		
NWA8	.81368		
NWA21	.77894		
NWA22	.74688		
% variance = 24.6			
NWA17		.75294	
NWA16		.66100	
NWA6		.66045	
NWA1		.64572	
NWA10		.64154	
NWA3		.52347	
% variance = 14.3			
NWA13			.77787
NWA5			.72572
NWA9			.71235
NWA15			.70892
NWA12			.60053
% variance = 8.2			

Cronbach's Alpha, commonly known as coefficient alpha, is a measure of internal consistency and used as an estimate of scale reliability. Reliabilities for the identified factors are presented in Table 5.

Table 5. Reliability Estimates for Sub-scales of NNAS.

Item	Item to Total r
19. Because of non-work activities I sometimes have to take a sick day.	.66
8. Non-work activities sometimes take priority over work activities.	.68
21. I have certain obligations that make it difficult for me to come to work everyday.	.77
22. It is hard to make it to work everyday when you have a house to run.	.71

Coefficient Alpha= 0.84

17. My friends and I always have something planned for when we have time off work.	.54
16. My time off work is filled with activity.	.53
6. I like to play an active role in my children's extra-curricular activities.	.54

(Table 5 continues)

Table 5 (con't). Reliability Estimates for NWAS

<u>Item</u>	<u>Item to Total r</u>
1. Outside of work people are always asking me to do something for them.	.50
10. Many people outside of work depend on me.	.56
3. I participate in community activities (i.e., clubs, groups, etc.).	.34
<u>Coefficient Alpha= 0.77</u>	
13. I wish I could rearrange my work hours.	.61
5. Work interferes with things I like to do.	.72
9. Work sometimes gets in the way of doing things I really enjoy.	.74
15. Work interferes with things I have to do.	.69
12. The time I have off work is never long enough to do the things I want to do.	.57
<u>Coefficient Alpha= 0.85</u>	



The identification of three sub-scales made it necessary to examine the correlations among the sub-scales. Presented in Table 6 is the correlation matrix showing these relationships. Reliabilities for the various scales are on the diagonals.

Table 6. Inter-correlations Between Sub-scales of the NWAS

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	NWAS1	NWAS2	NWAS3
NWAS1	(.84)		
NWAS2	.08	(.76)	
NWAS3	.57**	.24*	(.85)

---

\* Sig  $P < .05$

\*\* Sig  $P < .01$

Given the high correlation between sub-scales one and three and their low correlations with two, it was decided that sub-scales one and three would be combined. The reliability estimate for the combined sub-scale was acceptable (.88). Its correlation with NWAS2 was not significant (.18). Inspection of the items on the combined scale reveals that it was measuring a combination of employees non-work obligations and the ensuing scheduling problems that occur because of this. To avoid any confusion, the combined scale will be referred to as the Non-Work Responsibilities Scale (NWRS). Item to total

statistics are presented in Table 7.

**Table 7. Reliability Estimates for NWRS.**

Item	Item to Total r
19. Because of non-work activities I sometimes have to take a sick day.	.59
8. Non-work activities sometimes take priority over work activities.	.65
21. I have certain obligations that make it difficult for me to come to work everyday.	.66
22. It is hard to make it to work everyday when you have a house to run.	.69
13. I wish I could rearrange my work hours.	.48
5. Work interferes with things I like to do.	.73

(Table 7 continues)

Table 7 (con't). Reliability Estimates for NWRS.

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Item	Item to Total r
<hr/>	
9. Work sometimes gets in the way of doing things I really enjoy.	.73
15. Work interferes with things I have to do.	.67
12. The time I have off work is never long enough to do the things I want to do.	.51

---

As previously mentioned, the items on the third sub-scale appear to be assessing the degree to which employees are involved in more social activities. This scale will be referred to as the Non-Work Social Involvement Scale (NWSIS).

#### Organizational Permissiveness

A five item measure was developed to assess employees' perception of the permissiveness of the organization towards absence. The rotated factor pattern revealed two factors. Analysis of the items revealed an ambiguous factor solution, and reliability estimates were not satisfactory (Alpha=.42 & .46). The scale was omitted from further analysis.

### Absence Culture

A 15 item measure of absence culture was developed. Five of the ten items came from the Work Group Cohesion Scale (WCS) (Appendix F) which originated from the work of Price and Mueller on absenteeism and turnover (1986). It was felt that this scale would be helpful in establishing the salience of the absence culture. For as Johns and Nicholson state, the more cohesive the work group, the more likely the salience of the culture. The Work Group Cohesion Scale is a measure of how friendly employees feel their immediate work group is. Items assess the degree to which employees feel people in their immediate work group are friendly, helpful, trustful, etc. It was hoped that the combined scales could be used to investigate employee's perception of the work group's attitude towards absenteeism. Initial inspection of the rotated factor pattern revealed the work group cohesion scale to be a distinct construct. All five items loaded highly on Factor 1, and it was decided to treat the construct separately. Price and Mueller also report single factor solutions for this scale. Coefficient alphas in the range of 0.88 and 0.89 have been reported. The calculated coefficient alpha for the scale in the present study was .85.

Factor analysis of the remaining 10 items on the absence culture scale initially revealed a four factor solution. Further investigation indicated two reliable factors

containing a total of six items. Table 8 contains the factor loadings of items on the two factors.

Table 8. Rotated Factor Pattern for the Absence Culture Scale

Item	Factor Loadings	
	FACTOR 1	FACTOR 2
AC2	.82826	
AC10	.81318	
AC5	.67441	
AC9	.50963	
% variance = 23.3		
AC7		.82580
AC6		.81557
% variance = 16.8		

Examination of the items loading on the first factor reveal the items are similar in that they are assessing employees' ethics towards taking time off, while items loading on Factor two appear to assess this same ethic from the stand point of the group. Table 9 lists the reliabilities associated with the 2 factor solution.

Based on the low correlation between ACS1 and ACS2 (Table 10), it was decided to treat the sub-scales separately in the analysis. The extent to which these two sub-scales measure an organization's absence culture remains open to debate.

Interpretation of factors remains, as always, subjective.

Table 9. Reliability Estimates for Sub-scales of ACS

<u>Item</u>	<u>Item to total r</u>
2. Sick days should only be used when you are very sick.	.58
10. People should not take off sick days when they are not sick.	.59
5. It is very important to me to try and never miss a day at work.	.44
9. It should not matter if you lose sick days if you do not use them.	.39
<u>Coefficient Alpha= .70</u>	
7. There is pressure here to make it to work everyday.	.50
6. There is a general feeling here that people should not miss work.	.50
<u>Coefficient Alpha= .67</u>	

It is felt that factor 1 reflects a more individual attitude towards absence rather than a group attitude. A number of the items that had to be deleted from the scale were designed to assess the individual's perception of the work

group's attitude towards absence. It was quite possible that there was little agreement on these items among the employees, thus the low reliability of the omitted factors. It was felt that it would be misleading to refer to ACS1 as a sub-scale of the absence culture scale when items appear to reflect an individual's absence ethic. For interpretive purposes, ACS1 will be referred to as employee absence ethic (EAE) and ACS2 as a measure of an employee's perception of the group absence ethic (GAE). Table 10 contains the correlation matrix for the two sub-scales. The diagonals contain the reliability estimates.

Table 10. Inter-correlations Among ACS Sub-scales

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	ACS1	ACS2
ACS1	(.70)	
ACS2	.18	(.68)

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### Results

Analysis was directed towards assessing the utility of the newly developed measures to account for frequency of absence, total hours lost, and self report of absence frequency. To test the usefulness of the variables in

accounting for variance in absence measures, standard multiple regression procedures were employed. In standard regression, all variables are entered into the model simultaneously. Each variable is then assessed as if it had entered the model after all other independent variables had been entered. In sum, variables are assessed in terms of what they add to the prediction of the dependent variable. Table 11 contains the descriptive statistics and reliabilities for all measures included in the regression analysis.

**Table 11. Descriptive Statistics and Reliabilities**

Variable	Mean	Standard Deviation	Reliability Coefficient <sup>2</sup>
Frequency	6.76	6.15	—
Total hrs	48.89	50.41	—
Self-report absence	4.19	4.78	—
Organizational commitment	4.79	1.30	0.90
Work group cohesion	2.35	0.80	0.86
Non-work responsibilities	3.44	1.42	0.88
Non-work social involvem't	4.82	1.14	0.77
Employee absence ethic	4.70	1.47	0.70
Group absence ethic	5.70	1.36	0.68
Value of non-work time	20.00	26.88	—

<sup>2</sup>Unstandardized



Before any multivariate analyses could be performed, the data had to satisfy several multivariate assumptions. The following section details the evaluation of the assumptions associated with multivariate analyses.

### Assessment of Multivariate Assumptions

#### Ratio of Cases to Independent Variables

In any multivariate procedure, the ratio of cases to the independent variables should be substantial. There is considerable debate over the exact number. Tabachnick and Fidell (1989) suggest a bare minimum requirement of at least five times more cases than independent variables. In the present study,  $n=67$ . This is a small sample, yet with six independent variables<sup>3</sup>, the ratio of independent variables to dependent variable is above the minimum requirement.

#### Outliers

Extreme cases have a significant impact on all statistical procedures including regression. Outliers should be detected and dealt with in an appropriate manner. In the present study, graphical methods and statistical methods were both employed to detect outliers. Residuals were used to

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<sup>3</sup>The variable value of non-work time was omitted from the analysis. See p. 58.

identify cases where a poor fit existed between the obtained and predicted dependent variable score. A multivariate outlier will show up outside of the distribution of residuals. In the present sample, several cases appeared to be outliers and further inspection was warranted. Statistical methods for detecting multivariate outliers include Mahalanobis distance. This is distributed as a chi square variable. The degrees of freedom is equal to the number of independent variables. To determine if specific cases are outliers, one looks up the critical chi square at the desired alpha level, and if Mahalanobis distance is greater than the critical value, it is a multivariate outlier and should be dealt with. The Mahalanobis statistic was applied to the 10 cases with the largest distance, using  $\alpha = .001$  for 7 df; no significant outliers were detected.

Normality, Linearity, Homoscedasticity, and Independence of Residuals.

The assumption of normality was assessed through the use of histograms, skewness and kurtosis values. This analysis indicated that several variables violated the assumption of normality. All absence measures were significantly skewed. This was to be expected given the nature of absence data. There are usually many employees with low levels of absence and few with high levels, thus frequency

distributions are positively skewed.

Figure 1 represents the distribution of absence frequencies. The plot in Figure 1 indicates the data is positively skewed. In such situations, it is recommended that data transformation techniques or alternate statistical procedures be used (Hammer & Landau, 1981; Watson, Driver & Watson, 1985).

Figure 1. Absence Frequency

---

Frequency	Interval Center	
<hr/>		
49.00	5	*****
14.00	15	*****
4.00	25	***

---

Interval width = 10.00

Skewness= 1.06

Kurtosis=0.20

In the present study, a square root transformation was performed. The results of the transformation are presented in Figure 2. The skewness of the distribution was reduced considerably. The transformed measure was used in all further analyses.

Figure 2. Transformed Absence Frequency

Frequency	Interval Center	
7.00	.50	*****
15.00	1.50	*****
26.00	2.50	*****
10.00	3.50	*****
9.00	4.50	*****

Interval width = 1.00

Skewness= 0.02

Kurtosis=-0.55

Skewness was also present in the time lost data. Figures 3 and 4 present the original data and the transformed data respectively.

Figure 3. Time Lost Index

Frequency	Interval Center	
55.00	50.0	*****
11.00	150.0	*****
1.00	Extremes	*

Interval width = 100.00

Skewness= 1.66

Kurtosis= 2.88

Figure 4. Transformed Time Lost Index

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Frequency	Interval Center	
<hr/>		
55.00	5.00	*****
12.00	15.00	*****

---

Interval width = 10.00

Skewness= 0.47

Kurtosis= -0.11

The time lost index was a measure of the total hours employees were absent in a 12 month period. Although visually the data appears to have changed little in regards to kurtosis and skewness, there was substantial reduction, as can be seen in the values of these two measures. The transformed time lost measure was used in all further analyses.

The self-report measure of absence frequency was also positively skewed. A simple square root transformation was applied to the data. The original and transformed distributions are presented in Figures 5 and 6.

Figure 5. Self-Report Absence Frequency

---

Frequency	Interval Center	
<hr/>		
60.00	5.00	*****
7.00	15.00	*****
<hr/>		
Interval width = 10.00		
Skewness= 1.11		Kurtosis= 0.81

Figure 6. Transformed Self-Report Absence Frequency

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Frequency	Interval Center	
<hr/>		
12.00	.50	*****
23.00	1.50	*****
25.00	2.50	*****
7.00	3.50	*****
<hr/>		
Interval width = 1.00		
Skewness= -0.09		Kurtosis= -0.70

Distribution of the variable value of non-work time indicated considerable skewness and kurtosis. A square root transformation failed to bring the values within acceptable ranges. A loglinear transformation was attempted but because

of a significant number of zero values in the distribution it was not successful. The variable was omitted from further analysis. Examination of all other variables revealed their distributions to be acceptable.

In regard to the assumptions of linearity, homoscedasticity, and independence of residuals, an examination of residual plots revealed no noticeable violations of these assumptions.

#### Multicollinearity and Singularity

Variances of the estimators increase when independent variables are correlated, this in turn increases  $R^2$  although no unique variance is accounted for. If an independent variable is a perfect linear combination of other independent variables, it acts like a dependent variable and the correlation matrix is said to be singular. Multiple regression cannot be performed on a singular correlation matrix although it can be performed on a near singular correlation matrix, that is when variables are almost linear combinations of other variables or multicollinearity exists. Large correlation coefficients among independent variables in the correlation matrix suggest multicollinearity.

Most statistical programs control for multicollinearity when employing regression procedures by computing squared multiple correlations for the variables. Some programs

transform SMC's to tolerances ( $1 - \text{SMC}$ ) and examine each variable as if it were a dependent variable. Warnings are issued if the correlation between two variables is above the tolerance level. No warnings were issued in the present study, and examination of the correlation matrix also indicated multicollinearity was not a concern.

The correlation matrix for all criterion, predictor and demographic variables included in the study are presented in Table 12.

Table 12. Intercorrelations Among Variables

	1	2	3	4	5
<b>Criterion</b>					
1. Frequency	-				
2. Total hrs	.63 <sup>**</sup>	-			
3. Self-Report	.46 <sup>**</sup>	.25 <sup>*</sup>	-		
<b>Predictor</b>					
4. OCQ	.21	-.22	-.00	(.90)	
5. WCS	.30 <sup>*</sup>	.21	.02	-.50 <sup>**</sup>	(.85)
6. NWRS	.33 <sup>**</sup>	.11	.45 <sup>**</sup>	-.18	.04
7. NWSIS	.09	.08	.08	.16	-.04
8. EAE	-.33 <sup>**</sup>	-.03	-.46 <sup>**</sup>	.28 <sup>*</sup>	-.16
9. GAE	-.05	.02	.07	-.05	-.03

(Table 12 continues)



Table 12 (con't). Intercorrelations Among Variables

	1	2	3	4	5
<b>Demographics</b>					
10. Plant	.12	.08	-.06	-.19	.06
11. Age	-.07	-.14	-.29 <sup>*</sup>	.11	-.02
12. Sex <sup>4</sup>	-.09	-.19	-.20	-.04	.05
13. Tenure	-.01	-.01	-.13	-.16	.12

Variable	6	7	8	9	10	11	12	13
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**Predictors**

6. NWRS	(.88)							
7. NWSIS	.18	(.76)						
8. EAE	-.44**	.23	(.70)					
9. GAE	.06	.26*	.18	(.67)				

**Demographics**

10. Plant	.12	-.05	-.05	-.24	-			
11. Age	-.06	-.03	.22	-.06	.12	-		
12. Sex	-.02	.12	.12	-.02	.38	.22	-	
13. Tenure	.05	.04	.02	.14	.05	.61**	.16	-

\*p&lt;.05 \*\*p&lt;.01

<sup>4</sup>1=Female; 2=Male

Significant correlations existed between all absence measures with the highest between frequency and total hours, the lowest between total hours and self-reported absence frequency. Although not in Table 12, correlations were also calculated between self-report absence frequency and frequency of absence as obtained from personnel files for all three plants in the study. The highest of these correlations was for Plant 3 (0.63). Correlations for Plants 1 and 2 were not significant, 0.29 and 0.32 respectively.

For all demographic variables, age was the only variable significantly correlated with any of the absence measures; younger employees self-reported more absence events.

In regards to relationships between independent and dependent variables, the frequency measure was significantly correlated with work group cohesion (WCS), non-work responsibilities (NWRS) and employee absence ethic (EAE). As employees score higher on WCS (indicating they feel their immediate work group is less friendly), they are also recorded as being absent more often. The more non-work responsibilities and scheduling problems employees feel they have, the more they report being absent. As employees score lower on the employee absence ethic scale (indicating less of a commitment to make it to work everyday), they are also recorded as being absent more often. The non-work responsibilities and employee absence ethic scales were also significantly correlated with the self-reported measure of

absence frequency. No independent variables were significantly correlated with total hours lost.

A number of significant correlations also existed between the independent measures. As the table indicates there is a significant correlation between perception of work group cohesion and organizational commitment. Employees who are more committed to the organization feel their immediate work group is more friendly. It is possible that the direction of the relationship is reversed; employees who perceive their work group as more cohesive are more committed to the organization. It is not possible to establish any conclusions about causation.

Table 12 also indicates a positive relationship between organizational commitment and employee absence ethic. The relation indicates that as employees report more of a commitment to make it to work everyday, they also report more commitment to the organization.

The non-work responsibilities and employee absence ethic measures were also significantly correlated. Those employees who feel they have more non-work obligations and resulting scheduling problems score lower on the employee absence ethic scale. Employees who score high on this scale are more likely to feel the only legitimate reason for missing work is sickness.

A significant correlation also exists between the measures of group absence ethic and non-work social

involvement. Employees who are more involved in social activities also report that the group encourages strict attendance. Perhaps employees who are more involved in social events, community activities, children's extracurricular activities, etc., are more susceptible to answering in a socially desirable way about the group.

### Results of Regression Analysis

Multiple regression procedures were used to assess the degree to which the independent variables could account for variation in any of the three absence indices (frequency, total time & self-report frequency). Three separate regression models using the same predictors were tested.

Of the three models, only two passed the overall inferential F-test. The overall inferential test in multiple regression is used to see if the sample of scores is drawn from a population in which multiple R is zero. Basically, this means that all correlations between the dependent variables and independent variables and regression coefficients are zero.

Table 13 displays the results of the regression analysis when using the Total Hours Lost absence measure. The overall F-test was not significant ( $F_{8,60}=0.75$ ;  $p>.05$ ).

Table 13. Regression Results:

Dependent Variable = Total Hours (Transformed)

Variable	B	SE B	Beta	T	Sig
GAE	-.013265	.338029	-.005162	-.039	.9688
WCS	.859776	.631509	.197279	1.361	.1785
NWRS	.244293	.365632	.099535	.668	.5066
NWSIS	.066632	.428175	.021826	.156	.8769
OCS	-.216061	.403633	-.081286	-.535	.5944
EAE	.100216	.365690	.042126	.274	.7850
(Constant)	3.521580	4.078405		.863	.3913
<hr/>					
Multiple R	.26486				
R Square	.07015				
Adjusted R Square	-.02284				
Standard Error	3.53459				

The overall F-test for the model using the Frequency measure was significant ( $F_{6,50}=2.50$ ;  $P<.05$ ). The T-values indicate that work group cohesion accounted for a significant amount of variance in absence frequency. In total, all variables together accounted for 20% ( $\Delta R^2=12\%$ ) of the variance in the transformed measure of absence frequency. The unique variance accounted for by work group cohesion was calculated

based on semi-partial correlations and found to be .14 (14%). A 95% confidence interval for the work group cohesion standardized regression coefficient was calculated. The confidence interval did not contain zero which adds further support of its significance in the regression equation. Table 14 contains the results for the analysis.

**Table 14. Regression Results:**

**Dependent Variable = Frequency (Transformed)**

Variable	B	SE B	Beta	T	Sig T
GAE	-.061318	.114960	-.065063	-.533	.5957
WCS	.464242	.214768	.290455	2.162	.0346
NWRS	.142957	.124347	.158821	1.150	.2548
NWSIS	.152124	.145617	.135869	1.045	.3004
OCS	.054513	.137270	.055922	.397	.6927
EAE	-.182033	.124366	-.208642	-1.464	.1485
(Constant)	.891455	1.387015		.643	.5229
Multiple R	.44766				
R Square	.20040				
Adjusted R Square	.12044				
Standard Error	1.20207				

Table 15 contains the results of the regression analysis when using the transformed self-report measure of absence frequency. The overall model accounted for 30% (23%  $AR^2$ ) of the variance in transformed self-report of absence frequency. For the two regression coefficients that differed from zero, employee absence ethic and non-work responsibilities, 95% confidence intervals for their standardized regression coefficients were calculated. The confidence intervals did not contain zero which adds further support for their significance in the regression equation.

**Table 15. Regression Results:**

**Dependent Variable = Self-Report (Transformed)**

Variable	B	SE B	Beta	T	Sig T
ACS2	.088762	.090646	.112043	.979	.3314
WCS	-.027338	.169345	-.020347	-.161	.8723
NWAS13	.221824	.098048	.293174	2.262	.0273
NWAS2	.104173	.114819	.110686	.907	.3679
OCS	.078113	.108238	.095327	.722	.4733
ACS1	-.256572	.098063	-.349843	-2.616	.0112
(Constant)	.826448	1.093664		.756	.4528

(Table 15 continues)

Table 15 (con't). Regression Results:

Dependent Variable = Self-Report (Transformed)

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Multiple R	.54445
R Square	.29643
Adjusted R Square	.22607
Standard Error	.94783

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The amount of  $R^2$  attributable to employee absence ethic and non-work responsibilities alone (unique variance) was calculated based on semi-partial correlations. In total, the two variables account for 14% of the variance in absence scores (EAE=6% , NWRS=8%). This indicates that all the variables jointly contribute 16% to  $R^2$ .

### Discussion

In general, the results support the view that absence behaviour cannot be studied solely in the context of the organization and work related attitudes. Researchers must make allowances for the influences of non-work domains, employee attitudes towards taking sick time, and employees perception of the cohesiveness of their immediate work group.

Although the study was largely exploratory, several



initial hypotheses were formulated. The following section examines the results of the study in the context of these hypotheses.

#### Value of Non-Work Time

It was hypothesized that the value employees placed on non-work time would be positively related to the absence measures. The hypothesis was based on the work of Youngblood (1984) who successfully used this measure to account for a significant amount of variance in absence duration. In the present study, a derivation of Youngblood's measure was used to account for variance in absence measures. Examination of the distribution of values resulting from this measure indicated a severe violation of the normality assumption and many zero values. Several data transformation techniques were applied to the data to force the distribution to approximate normality. The transformation techniques were unsuccessful and the variable had to be omitted from further analysis. It was felt that the failure of the transformation techniques was compounded by the large number of zero values in the distribution. The zero values were a result of the method of calculating this variable. Attempts to measure the value employees place on their non-work time using this method should only proceed after discussion with employees concerning desired benefits. In the present study, a significant number

of employees indicated they would not be willing to work extra hours or pay any money for the listed benefits.

### Organizational Permissiveness

Brooke and Price (1989) found a direct effect for organizational permissiveness on absence rates. Popp and Belohlav (1982) found evidence that supervisory attitude towards absence was negatively related to number of absences taken by employees. Although a positive relationship between absence levels and organizational permissiveness is intuitively appealing, it was not possible to test this hypothesis in the present study because of the unreliability and ambiguity of the identified factors.

### Organizational Commitment

Previous research indicated that a strong commitment to an organization results in lower absence rates (Hammer, Landau & Stern, 1981; Hendrix & Spencer, 1989; Mathieu & Kohler, 1990). Based on these results, it was hypothesized that organizational commitment would account for a significant amount of variation in absence levels. Organizational commitment was also included in the study to assess its relationship with non-work activities. It was felt that individuals would have competing commitments; commitments to

non-work activities, and commitments to the organization. Although no formal hypotheses were formulated about the relationship between organizational commitment and non-work activities, it was thought plausible that as the amount of non-work activities increased commitment to the organization would decrease.

Contrary to previous findings, organizational commitment was not significant in any of the regression models. The attempt at creating a global measure to assess employee's involvement in non-work activities failed, thus the relationship between these two variable could not be assessed<sup>5</sup>.

#### Work Group Cohesion

The variable work group cohesion was initially included as part of the absence culture scale. It was felt that the cohesiveness of the work group would be an important factor in developing a measure of absence culture. Factor analysis revealed very high loadings of all items on a single factor. Based on this it was decided to treat the variable separately.

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<sup>5</sup>The relationship between commitment and the scales derived from the original non-work activities index will be discussed at a later point.

### Absence Culture

Previous researchers have suggested and offered evidence that group norms may influence individual absence rates (Chadwick-Jones et al, 1982; Johns & Nicholson 1982; Steers & Rhodes, 1984). Based on past research an attempt was made to develop a measure that could be used in assessing the influence of an absence culture on absenteeism levels. It was hypothesized that this measure would account for a significant amount of variance in absence measures. As already indicated, 10 items developed by the author were combined with the work cohesion scale in the hope of developing a measure of absence culture. Factor analysis revealed that the work group cohesion scale was a separate construct, two other factors were also identified. The first appeared to be a measure of individual employee's attitude towards taking sick time and the second, a measure of employee's perception of the group's attitude towards taking sick time. The correlation between these two measures was not significant, although it was in the expected direction. Work group cohesion was not significantly correlated with employee absence ethic ( $-.16$ ) or group absence ethic ( $-.03$ ). Although the magnitude of the correlation between employee absence ethic and work group cohesion was not statistically significant, the direction of the relationship indicates that employees who demonstrate less of a commitment to attend work every day also perceive their work group as

less cohesive. The correlation between group absence ethic and work group cohesion is so close to zero that inferences concerning the direction of the relationship are not possible.

The hypothesis that a global measure of absence culture would account for a significant amount of variance in absence measures was not adequately tested.

#### Non-Work Activities

It was also hypothesized that an individual's involvement in non-work activities would account for a significant amount of variance in absence levels. Again, because of factor analytic results, this hypothesis could not be fully tested. A global assessment of employee's involvement in non-work activities was not possible. Factor analysis of the original scale indicated a two factor solution. The first was thought to be a measure of non-work responsibilities and ensuing scheduling problems, the second a measure of employees involvement in social types of activities.

#### Discussion of Regression Results

##### Work Group Cohesion

Work group cohesion accounted for a significant amount of variance in the absence frequency measure. It was

the only variable significant in the regression models containing absence measures collected from personnel files. The more cohesive an employee felt his or her immediate work group to be, the lower the absence rate for the employee. The unique variance in absence frequency accounted for by work group cohesion was .14 (14%). Although the effect of work group cohesion was not hypothesized, it is not in conflict with the findings of Lawler (1971), who summarized several uncontrolled field experiments investigating job attractiveness and motivation. He found that members of highly cohesive work groups view coming to work to help one's co-workers as highly desirable. He concluded that the creation of 'autonomous work groups' consistently led to increased work group cohesiveness and reduced absenteeism. Steers and Rhodes (1978, 1984) discuss work group cohesion in terms of work group norms which is the predecessor of the broader concept of 'Absence Culture' (Johns & Nicholson, 1982).

The variable most closely related to work group norms and absence culture in the present study was group absence ethic. This variable did not account for a significant amount of variance in any of the absence measures. It was expected that group absence ethic would be related to individual absence ethic yet there was no significant correlation between these variables.

The failure to find a significant effect for group

absence ethic may not diminish the possible influences of group norms on absence rates. The limitations of acknowledging the group absence ethic scale as a valid measure of group norms or absence culture are recognized. Although the scale had an acceptable level of reliability, it only contained two items. The significant effect for work group cohesion implies that social dynamics may play a role in influencing absence rates.

#### Non-Work Responsibilities and Employee Absence Ethic

Non-work responsibilities (NWRS), and employee absence ethic (EAE) accounted for a significant amount of variance in self-reported absence frequency. The amount of variance accounted for by the 2 variables compares favourably to other research. Fitzgibbons & Moch (1980) used social factors (sex, family size, number of dependents), organizational factors (tenure, shift), and individual factors (role support, role overload, probability of layoff, probability of turnover, satisfaction) to predict excused, sickness and unexcused absences. The maximum  $R^2$  for any combination of variables on any of the absence measures was .20 (unadjusted). When using one set of predictors the maximum  $R^2$  was .16. Fitzgibbons and Moch suggest that  $R^2$ 's in this range are quite respectable in absence research. Brooke

& Price (1989) accounted for 21.6% (.22 unadjusted  $R^2$ ) when using the variables: role ambiguity, job satisfaction, pay, centralization, kinship responsibility, organizational permissiveness and alcohol involvement. In the present study, all variables together accounted for a total of 30% of the variance in self-reported absence frequency with nearly half being attributed to employee absence ethic and non-work responsibilities.

A question that remains unanswered is why employee absence ethic and non-work responsibilities are only useful in predicting self-reported absence frequency, while work group cohesion is significant in the model using absence frequencies collected from personnel files.

In attempting to explain these findings, it is necessary to point out that there appears to have been a discrepancy between employee's self-reported level of absence and levels extracted from personnel files. The mean level of self-reported absence was consistently less than the absence level recorded from personnel records. Although one might question the validity of the self-reported absence records or measures taken from personnel files, it is felt that this is not a concern for a significant correlation existed between self-reported absence and employee's recorded level ( $r=0.46$ ,  $p<.01$ ). The correlation between the two measures signifies that employees are fairly consistent in under reporting their absence level.



It is possible that employees are legitimately reporting their absence level based on what they feel constitutes an absent event. It may be unfair to assume employees are under reporting their absence. In fact, many employees might be surprised to see their actual absence level as it is recorded in their personnel file. Employees may not believe that taking a couple of hours off for an appointment is a legitimate absence and therefore they failed to report these.

It is also possible that employees are only able to recall some of their actual absences. Absence records were extracted for a 12 month period. An employee may not remember the time he or she took an hour off to go to the bank six months ago, yet this was recorded as an absence event. If this is the case, which absences are employees recalling? Perhaps employees are remembering the more salient events which caused them to miss work, events which caused considerable interruption in their lives. Analysis of the items on the non-work responsibilities scale suggests that the scale may be biased in terms of assessing the more salient events that force employees to take time of work. If this is the case, then the non-work responsibilities and employee absence ethic scales are useful in predicting only the more salient absence events recalled by employees.

A significant positive correlation existed between employee absence ethic and non-work responsibilities. Although we cannot establish causation, it seems logical that

employees who feel they have more non-work responsibilities and scheduling problems also feel that sick days have to be used at times for reasons other than being sick. This interpretation explains the findings for both variables in terms of predicting self-reported absence.

The absence measures taken from personnel records go beyond the more salient absences and include all types of absence events. The non-work responsibilities scale and employee absence ethic scale fail in accounting for a significant amount of the variance in these measures.

Chadwick-Jones, Brown & Nicholson (1973) suggest absence events can be placed on a continuum called the A-B continuum. Unavoidable absences would be placed nearer the A pole of the continuum, while avoidable absences would be placed at the B-pole. The self-report measure may be a measure of extreme A-pole absences, or unavoidable absences. It is plausible that extreme A-pole absences are much more salient than ones falling in the middle of the continuum. It could be argued that absence events at the extreme B-pole (avoidable) would also be very salient. In regards to self-reported absence level though, it is thought that employees would be much more willing to report absences that were unavoidable rather than those which were completely avoidable.

In terms of the finding for work group cohesion, it is not felt that the cohesiveness of the work group would have an effect on unavoidable absences. If the frequency measure

obtained from personnel files incorporates unavoidable and avoidable absences then the finding for work group cohesion makes intuitive sense. In situations where an avoidable absent event arises, employees may be more likely to choose to go to work if they feel they have good friends in their immediate work group.

#### Limitations of the Study

Methodological problems are inherent in applied research and this is especially true when conducting research in organizational settings. As stated, the present study was exploratory and speculation based on the results should proceed with caution. Even with this precautionary note several further limitations of the study must be recognized.

First, psychometric investigation of the instruments and data collection were carried out on the same sample. Validity and reliability of instruments cannot be adequately established on a single sample, they are established over time using different samples. Replication of the present results, using a larger and different sample is highly recommended. It is also possible that designing the instruments to test the original hypotheses served as a self-fulfilling prophecy.

Another limitation, not unique to the present study but still applicable, is the collection and classification of absence data.

It is now apparent that the global nature of the absence indices used in the present study were inappropriate. The results of the present study indicate that certain measures may be useful in accounting for variance in only certain types of absences. It has been well documented that different absence measures are a source of inconsistency regarding relationships among the determinants of absence (Muchinsky, 1977; Steers & Rhodes, 1978; Scott & Taylor, 1985). The data in the present study support this.

Atkin & Goodman (1984) discuss the problem of recording absence levels and conclude that the study of absenteeism has been characterized more by convenience than by scientific merit. Although this is perhaps true, the authors take a theoretical perspective on a very practical issue. They suggest that absences should be recorded in categories, i.e., uncertified, certified, AWOL, late, bereavement, etc.. Although such classifications would certainly be better than global assessments of absence such as total hours lost, the nature of absence records can severely limit classification of absences.

Absence can be a low base rate event even in its most global measurement; the implication of using many classifications in some circumstances is to apply a set of predictors to many zero values.

### Future Studies

The most immediate need, in terms of the present findings, is to assess the psychometric properties of the newly designed instruments on a new sample. If this proves satisfactory, then an attempt at replication of the present results on a different sample is recommended. It is also felt that further investigation of non-work activities and their effect on work behaviour is needed. The attempt at assessing employees non-work activities in the present study failed to do justice to this complex area. More investigation into the areas of employee absence ethics and work group cohesion is needed. The data indicate that attitudes towards absence and social dynamics of immediate work groups have an effect on absence rates. Given these findings, the concept of absence culture still appears to be a promising avenue of research. Although no effect for group absence ethic was found, it is felt that this is evidence of the complex nature of group dynamics as opposed to the failure of a measure of absence culture in accounting for variance in absence measures. Past absence research has focused mainly on work attitudes with very little work being compiled on the effects of social influences. More work is needed.

In regards to recommendations of a more global nature, the dependent variable problem needs to be rectified. As stated in the introduction, several researchers have commented

on the state of absence research to-date. Chadwick-Jones, Brown and Nicholson (1982) also suggest studies or absence offer little in the form of explanatory frameworks and conclude that there is a lack of any theoretical or empirical frameworks shared by researchers. They continue and state that studies of absence were found to have a variety of methods and approaches with no uniform operational definition of absence. If researchers are to remedy the situation, we must once again begin with the basics, namely the dependent variable. It is obviously very poorly understood and until this problem is rectified no battery of independent variables will further our present understanding of absenteeism.

One final point needs to be addressed. The present study allowed for a comparison between a self-report measure of absence frequency, and absence frequency as recorded in personnel files. It was pointed out that the self-report measure resulted in an underestimate of actual absence frequency. Although self-reported absence was lower than actual absence rates, there was a significant correlation between the two measures (0.46,  $p < .01$ ). Other researchers have also found a significant correlation between self-report measures of absence and available absence records (Mueller, Wakefield, Price, Curry & McCloskey, 1987; Gupta & Beehr, 1977). Given the evidence of the validity of the self-report measure, along with the findings in the present study, it is felt that models containing a self-report measure may be

useful. Researchers are encouraged to include a self-report measure of absence even when records are available.

### Conclusion

The study was largely exploratory in nature and given this, interpretation of the results should proceed with caution. Speculation based on the results may be thought of as additional hypotheses to be tested on a different sample.

The results indicate social influences may be a very promising area for future absence researchers. Allowances must be made for the effects of non-work responsibilities, employee attitudes towards absenteeism and the social interactions among members of work groups.

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Appendix A<sup>6</sup>

Organizational Commitment

- (1) I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
- (2) I talk up this organization to my friends as a great organization to work for.
- (3) I would accept almost any type of job assignment in order to keep working for this organization.
- (4) I find that my values and the organization's values are very similar.
- (5) I am proud to tell others that I am part of this organization.
- (6) This organization really inspires the best in me in the way of job performance.
- (7) I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.
- (8) I really care about the fate of this organization.
- (9) For me this is the best of all possible organizations for which to work.

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<sup>6</sup>All responses unless stated otherwise were recorded on a 7 point Likert Scale ranging from Strongly Disagree (1) to Strongly Agree (7)

Appendix B

Value of Non-Work Time

1. Full dental coverage
2. Full medical
3. Pension plan
4. Daycare on the premises
5. Work uniforms and footwear that the company provides and maintains.
6. Life insurance
7. Sickness insurance
8. A fitness facility on the premises
9. Travel allowance
10. Extra day off to be taken anytime

Appendix C

Non-Work Activities

- (1) Outside of work people are always asking me to do something for them.
- (2) My non-work activities sometimes make it very hard to come to work every day.
- (3) I participate in community activities (clubs, groups, etc).
- (4) I am involved in many activities outside of work.
- (5) Work interferes with things I like to do.
- (6) I like to play an active role in my children's extra-curricular activities.
- (7) I have many friends.
- (8) Non-work activities sometimes take priority over work activities.
- (9) Work sometimes gets in the way of doing things I really enjoy.
- (10) Many people outside of work depend on me.
- (11) My children belong to many groups (sports, clubs, etc).
- (12) The time I have off work is never long enough to do the things I want to do.
- (13) I wish I could rearrange my work hours.
- (14) I do not enjoy having nothing to do when I am off work.

(Appendix C continues)

Appendix C (con't)

- (15) Work interferes with things I have to do.
- (16) My time off work is filled with activity.
- (17) My friends and I always have something planned for when we have time off work.
- (18) There are more important things in life than work.
- (19) Because of non-work activities I sometimes have to take a sick day.
- (20) I like to keep very busy even when I am not at work.
- (21) I have certain obligations that make it difficult for me to come to work every day.
- (22) It is hard to make it to work every day when you have a house to run.
- (23) Sometimes things happen and I would really like to take a day off to look after them.

Appendix D

Absence Culture

- (1) When I take a day off work co-workers hassle me when I return.
- (2) Sick days should only be used when you are very sick.
- (3) When I take a sick day I feel guilty.
- (4) When people call in sick it effects everybody's workload.
- (5) It is very important to me to try and never miss a day at work.
- (6) There is a general feeling here that people should not miss work.
- (7) There is pressure here to make it to work everyday.
- (8) Everyone here knows that sick time is a benefit and not a right.
- (9) It should not matter if you lose your sick days if you don't take them.
- (10) People should not take days off if they are not sick.

Appendix E

Organizational Permissiveness

- (1) I feel uncomfortable when I have to call in sick.
- (2) It is a hassle to have to get permission to take a day off.
- (3) The company keeps very good records of how much time employees take off.
- (4) It is very clear to employees that this organization frowns on people taking unscheduled time off.
- (5) There is a set procedure that has to be followed if you are going to take a day off.

## Appendix F

Work Group Cohesion

- (1) To what extent are the people in your immediate work group friendly?

Very	Quite	Somewhat	Very	Not friendly
Friendly			Little	At all
1	2	3	4	5

- (2) To what extent are the people in your immediate work group helpful to you in getting your job done?

Very	Quite	Somewhat	Very	Not helpful
Helpful			Little	At all
1	2	3	4	5

- (3) To what extent do the people in your immediate work group take a personal interest in you?

Very	Quite	Somewhat	Very	Not Interested
Interested			Interested	At all
1	2	3	4	5

Appendix F (con't)

- (4) To what extent do you trust the immediate members of your work group?

Great deal	Quite	Some	Very	No trust
Of trust	A lot		Little	At all
1	2	3	4	5

- (5) To what extent do you look forward to being with your immediate work group each day?

Very	Quite	Some	Very	Not
Much	A lot		Little	At all
1	2	3	4	5