

When Friends Leave: A Structural Analysis of the Relationship between Turnover and Stayers' Attitudes

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It is argued in this paper that macro and micro perspectives can each benefit from the other. To demonstrate this, a current research issue in micro organizational behavior is analyzed with the help of theories in psychology, social psychology, and sociology. The specific question is: What effect does turnover in an organization have on the attitudes of those who remain in the organization? A longitudinal investigation of three fast-food restaurants explored this relationship against the background of the social network structures in each site. Among the findings was that the closer the employee was to those who left, the more satisfied and committed he or she became. The results underscore the importance of the structural context in studying micro phenomena, while at the same time they demonstrate the richness of micro theory in understanding why these phenomena occur.\*

One of the fundamental dilemmas facing those studying organizational phenomena is that all such phenomena are simultaneously micro and macro. That is, individual actors behave in organizations in ways that are influenced by the larger context in which they find themselves. The dilemma stems from the difficulty of keeping the importance of both of these perspectives in focus. We have a tendency to focus on one arena or the other, perhaps because of our training (as psychologists or sociologists, for example).

This propensity to focus narrowly survives despite admonitions from many scholars in the field. Probably the most famous of these is Lewin's familiar dictum about behavior being a function of the person and the environment (Lewin, 1966: 166). He translated this axiom into a force-field theory of cognitions and behavior that became a cornerstone of social psychology. The study of the micro side of organizations has certainly benefited from the stream of research that has resulted (e.g., Salancik and Pfeffer, 1978; Staw, 1980b). But the original emphasis that Lewin placed on the larger social context has been missing in such work.

At the macro level, a few organizational sociologists have introduced some psychology into their models. Notable among these is Burt (1982), who incorporated the work of the psychologist Stevens (1962) into his theory of action. The contribution that psychology makes to his understanding of behavior, however, is minor: Burt restricts himself to rational and purposive action within the structure surrounding the actor.

Thus, on the one hand, organizational psychology and social psychology have explored individuals' values, beliefs, perceptions, and motives, which can lead to their observed behavior. On the other hand, organizational sociology has focused on the structural constraints to such behavior. The purpose of this paper is to demonstrate that the combination of both orientations can lead to new insights into organizational phenomena. This demonstration employs a distinctly macro, structural lens to look at a current micro organizational research question — the effect that turnover has on the attitudes of those who remain. The result confirms the power of structural constraints, but at the same time it retains the richness of the psychological explanations.

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## Turnover and the Psychology of Stayers: A Micro Perspective

The field of organizational behavior is witnessing a miniparadigmatic shift in the study of turnover (Dalton and Todor, 1979). Instead of looking for causes of turnover, as is traditionally done, a handful of researchers (e.g., Staw, 1980a; Steers and Mowday, 1981; Mobley 1982) maintain the question should be asked: "What effect does turnover have on people who stay in the organization?"

It has been suggested that this is not a simple question. Mowday, Porter, and Steers (1982) argued that there are both positive and negative consequences for stayers when a co-worker leaves. On the positive side, turnover creates internal promotion opportunities for those who remain (Dalton and Todor, 1979; Staw, 1980a). Another positive outcome stems from the potentially dissonant situation employees face when their coworkers leave. Mowday (1981) predicted that one way employees can resolve this dissonance is to increase their satisfaction with the job and organization to justify their own decision to stay. An additional benefit may arise if those who left were not carrying their weight in the workload (Dalton and Todor, 1979). One study found that many of the turnovers among bank tellers were those of poor performers (Dalton, Krackhardt, and Porter, 1981). Mowday, Porter, and Steers (1982) suggested that stayers in such situations will benefit and presumably be more satisfied with their jobs.

Conversely, the turnover could leave behind more discouraged, less satisfied coworkers. Each of the reasons for positive consequences mentioned above could be turned around to predict negative consequences. For example, Mowday, Porter, and Steers (1982) noted that the termination of a coworker could require more work of those who remain to make up for the work not being accomplished by the person who left. This would be particularly true if the person who left was a valued employee.

Clearly, one cannot easily predict universally the effects of turnover on the attitudes of stayers. At this stage of development, more empirical work is needed to stabilize any such predictions. One study, that of Mowday's (1981) work on government agencies, provides a starting point for building such a stable set of predictions. He questioned 540 employees in seven agencies of state and county governments in a midwestern state and found that those who were most committed and satisfied with their jobs were more likely to attribute the dominant cause of the coworkers' departures to reasons other than job dissatisfaction.

As Mowday (1981) noted, it was difficult to isolate the cognitive process behind these attributions. For example, an explanation of these results could lie in the nature of the work setting each of the respondents faced. Those who were in work groups where the work was satisfying could be realistic in their perceptions that coworkers were leaving for reasons other than dissatisfaction; those who were in jobs that were less desirable may have equally realistically perceived coworkers leaving for reasons of dissatisfaction. Thus, the observed relationship between attitudes and perceived reasons for turnover could be spurious. To control for spurious-

ness it is necessary to observe several people's reactions to the identical turnover event.

Mowday's work also pulls together two of the most frequently studied psychological variables in turnover research: job satisfaction and organizational commitment. While based on distinct concepts, they are frequently correlated with each other and with turnover (Mowday, Porter, and Steers, 1982).

Perhaps the most important distinction between them can be inferred from their definitions. Job satisfaction focuses on the daily experience and nature of the workplace and work activities. The focus of commitment, on the other hand, is on the organization as a whole, on its goals and values (Angle and Perry, 1981). It is often reflected in the employee's desire to remain a member of the organization, in spite of any specific job to which he or she might be assigned (Porter et al., 1974; Mowday, Steers, and Porter, 1979).

Many of the processes described earlier can lead to changes in either job satisfaction or commitment, depending on the focus of the meaning that the observer gives to the turnover event. For example, if coworkers leave because they dislike the kind of work they are doing, this may remind the stayer of how dissatisfying his or her work is. On the other hand, if the stayer believes that organizational policies are responsible for the miserable lot that the leaver has just escaped, then the stayer's commitment to the organization may also suffer.

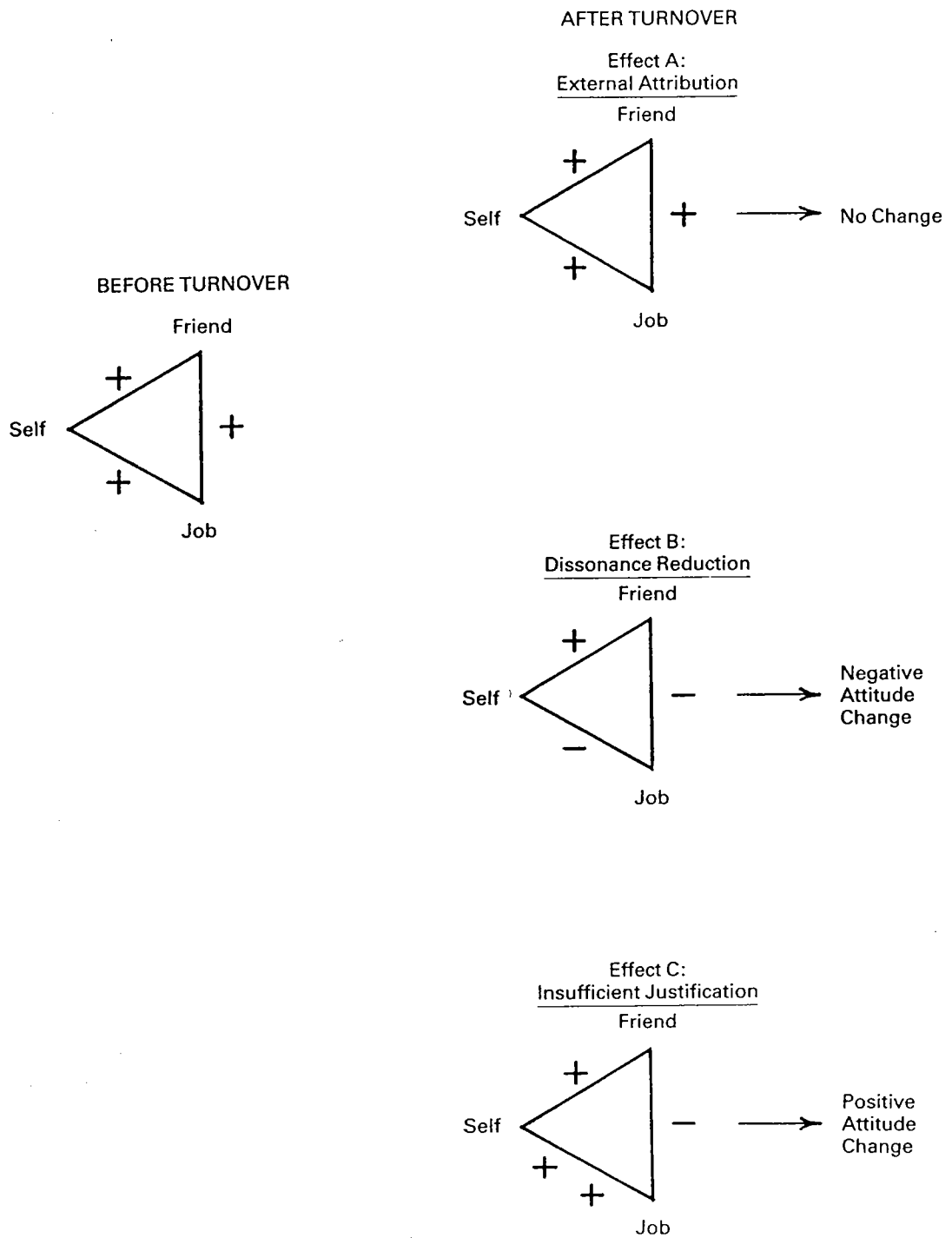
### Turnover in Friendship Dyads: A Social Psychological Perspective

Since it is so difficult to predict negative vs. positive consequences, Mowday, Porter, and Steers (1982) provided a set of moderating variables. One of these, the social relationship the stayer has to the leaver, they stated may be critical: When the person leaving is a close friend, the effect on the stayer "may be particularly traumatic" (p. 148).

But Mowday, Porter, and Steers (1982) did not offer specific predictions as to how the close friendship might affect the attitudes of stayers. However, the literature on friendships does provide some guidelines. Perhaps the most useful model to organize the possible outcomes is Heider's (1958) balance theory. In this model, a triangle of relationships is described between an observer (self), another person, and an object of common interest. In this case, the observer (stayer) is faced with a coworker (who is a friend) and the job (Figure 1). For the purpose of exposition, it is assumed that the link between each pair of vertices is positive prior to the departure of the coworker. That is, the triangle is balanced: The observer has positive affect for the job, the observer has positive affect for the coworker, and the coworker has positive affect toward the job.

How this triangle might change (or not change) as a result of the termination of the coworker is depicted in Figure 1 (Effects A, B, and C). In each of these predictions, it is assumed that positive attitudes held toward the friends remain, or at least do not become negative. This assumption is supported in friendship studies, where such links are generally stable over long periods of time (e.g., Newcomb et al., 1967).

Figure 1. Possible effects of turnover of friend on stayer.



The first prediction is that no change in attitude toward the job would occur. This could happen if the employee attributed exogenous reasons to the friend's departure (Effect A). In this way, an attribution of job satisfaction to the friend can be maintained in the face of the friend's leaving (e.g., "My friend liked the job, but she had to leave because of school"). Mowday (1981) proposed a similar argument to explain his results, referring to such external attributions as the "pull" forces of turnover.

## When Friends Leave

Effect B in Figure 1 depicts the possibility of a negative change in attitude resulting from a friend's leaving. In this scenario, the employee attributes dissatisfaction to the friend who left. This creates dissonance, which is resolved in the triangle by the stayer becoming more dissatisfied with his or her job.

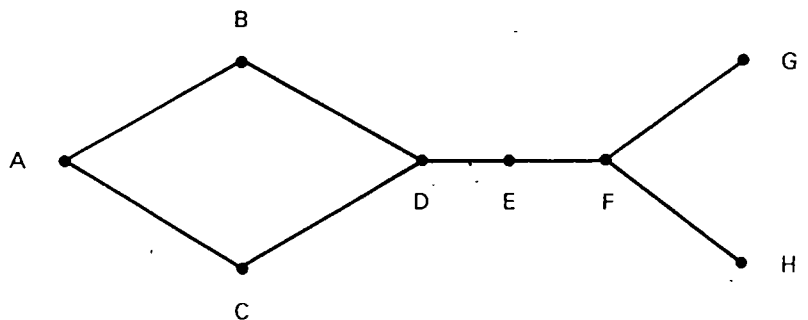
Effect C represents a possibility not predicted directly from balance theory but that has some support in dissonance studies. If the person observes a coworker leaving and attributes dissatisfaction to the leaver, then the person's decision to stay may require more justification (Staw, 1976; 1980b). One way this justification could occur is for the stayer to develop more and stronger positive attitudes toward the workplace.

## Turnover Embedded in Network Structures

These scenarios represent the possibilities at the micro level between two people and their job. However, the workplace is seldom restricted to two people in their organization. Instead, each of  $N$  employees must balance  $N-1$  such triangles in his or her head. Few probably actually do so, but it is likely that such forces on a person's psychology are to some extent additive, at least figuratively. That is, if many of a person's friends leave, then the effects described in Figure 1 are likely to be stronger than if only one friend leaves. Moreover, the closer the friends are to the person, the stronger the effect is likely to be. Viewed from a more macro perspective, this phenomenon dictates that effects of turnover on stayers will not be uniformly nor randomly distributed among the stayers in the organization. Rather, these effects will be localized and focused on those stayers who are closest to those who left. The social network, then, describes the topology of forces that reverberate throughout an organization when someone leaves (Lewin, 1966; Burt, 1977).

The friendship network in Figure 2 illustrates this proposed effect. Each letter represents an employee; a line connecting two employees indicates that the two employees are friends. Thus, A is a friend of B and C but not a friend of the remaining employees (D through H). If A were to leave, it is proposed that B and C would be most strongly affected.

Figure 2. Hypothetical friendship network.



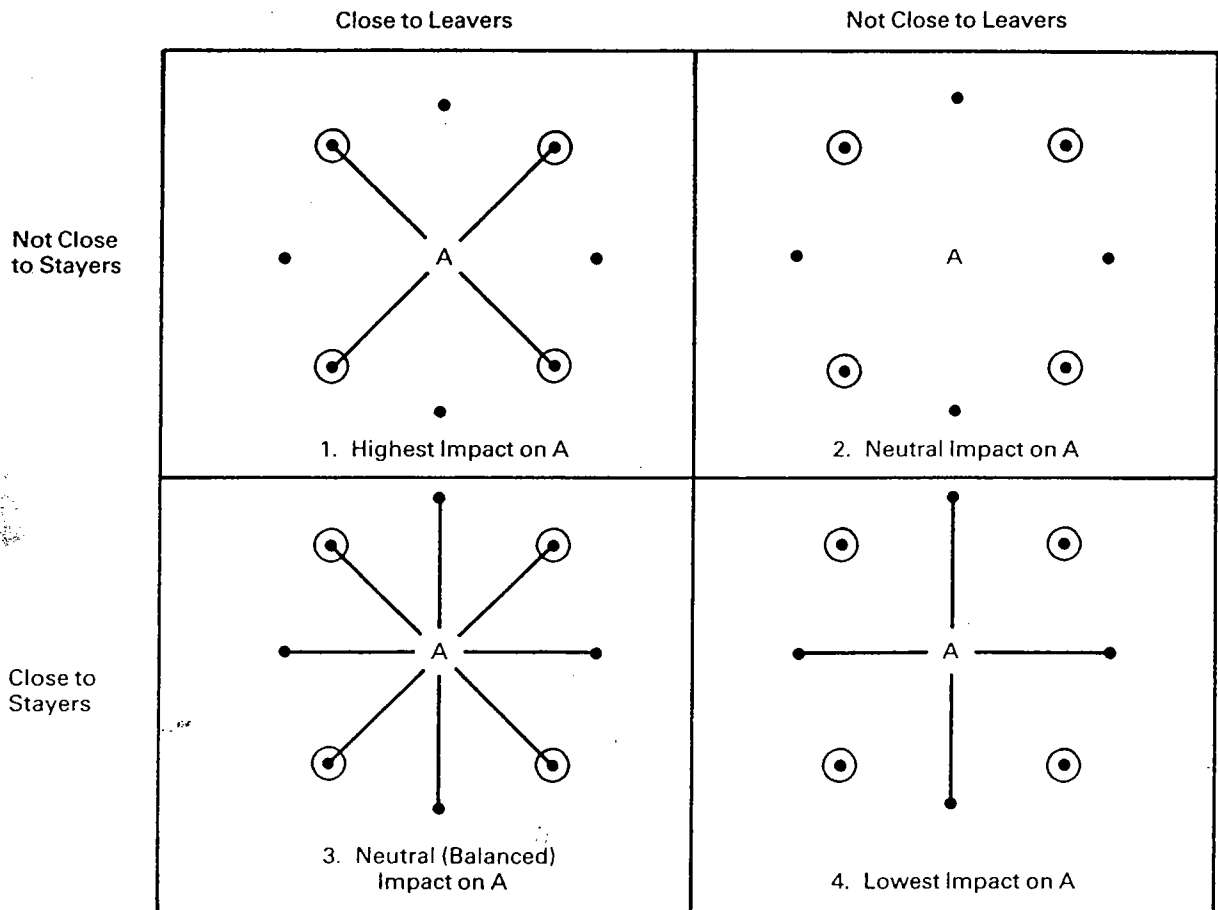
A person who is not a friend but is seen as a friend of a friend is more apt to have more influence than someone who is not seen as a friend of a friend. By extension, one is more affected by a friend of a friend of a friend than by someone further out in the friendship chain. Thus, it is proposed that A's termination

would affect D more than E and that H and G would be least affected.

Another contextual effect must be considered when moving from simple dyads to the entire network. An individual is influenced by those who stay as well as by those who leave. That is, in Figure 1, if the person's friend does not leave, then the triangle in "Before Turnover" is reinforced. If many of the coworkers who remain are friends and only one friend leaves, then the impact that this termination will have on the individual will be attenuated.

This balancing effect of leavers vs. stayers is depicted in Figure 3. Four extreme scenarios are represented. In each case, person A has eight coworkers, four of whom leave. Scenario 1 (in the upper left corner of Figure 3) predicts the maximum impact on person A of the four turnovers. That is, since A is close to all four leavers and not close to any of the four stayers, then whatever impact the turnover will have would be relatively large. At the other extreme (scenario 4), when A is close to the stayers and not close to the leavers, then the impact of the turnovers would be least. Scenarios 2 and 3 represent two

**Figure 3. Four extreme scenarios depicting various degrees of impact from leavers.**



Circled dots represent Leavers.  
 Uncircled dots represent Stayers.  
 A line connecting a dot (coworker) to A indicates that A perceives the coworker to be a close friend.

more moderate effects; however, they represent moderate positions for different reasons. In scenario 2, the impact is neutral because each of the actors is not connected (either directly or indirectly) to A; thus, there is little impact from either stayers or leavers. In scenario 3, the relatively strong impact of those who left is balanced by the impact of an equal number of coworkers who stayed.

To be consistent with the psychological foundation of the thesis of this paper, however, we must make one final modification to the above structural arguments. This modification is based on W. I. Thomas' maxim, "If men define situations as real they are real in their consequences" (in Volkart, 1951: 81). Person A's leaving will affect person B, assuming that person B *perceives* that person A is a friend. The effect is attenuated if person B perceives that person A is only a friend of a friend, and so on. For example, in Figure 2, if person D does not perceive person A to be a friend of B or C, and thus person C sees no connection at all between self and A, then the effect of A leaving will not be felt by D, even though in "reality" A is connected indirectly to D.

Burt (1982) recognized the importance of actors' perceptions of networks as the true constraints to their behaviors. The problem arises when one tries to measure such perceptions. Burt's solution was an interesting one. He borrowed from Steven's (1971) law of psychophysics that an individual's perception of stimuli is a direct power function of the actual "objective" stimuli. In Burt's (1982: 174–175) model, the exponent of the power function becomes a parameter to be estimated from the data. To our knowledge, his is the only attempt to deal with this problem in a social network context. The psychologist's first criticism of this approach would be that the assumptions underlying the power function are tenuous at best. Such perceptions, the psychologist would continue, should be measured directly, if at all possible. However the measurement issue is resolved, we argue that the predictions outlined for Figure 1 will be heavily moderated by the perceived social structure of the actors. Specifically, the effect of turnover on coworkers will depend, it is hypothesized, on how close in the friendship network the leaver was to the stayer as *perceived by the stayer*.

The purpose of this study was to explore the issues proposed by these models. A structural perspective dictates that before making individual predictions about the effects of turnover, we consider the entire context as defined by the perceived social network. To explore this contextual effect, we examined the relationship between turnover and subsequent organizational attitudes of those who remain and, in particular, how this relationship is moderated by the perceived position of leavers in the friendship network.

## METHODS

### Sample

The sites for this study were three fast-food restaurants located in three different suburban areas. Fast-food restaurants were selected because of their history of high turnover (typically 200–400 percent annually). Three-fourths of the employees in the sample were under the age of 18, with tenure averaging

less than seven months in each site. No significant differences existed among employees at the three sites in tenure, age, or sex. Sites did vary somewhat in size: 16 employees in Site A, 27 in Site B, and 20 in Site C.

Most of the employees were high school students working part time (at least 20 hours per week). Social relationships were important to these people. Frequently, during the course of this study, we saw employees return to the restaurant during their off-hours to socialize with both on-duty and off-duty coworkers. Few of them depended on this income for a living, and thus they were not trapped financially into keeping the job.

### Overall Design

A pre-post natural quasi-experimental design was used to study this phenomenon. At Time 1, a questionnaire was administered that included network questions and attitude items. One month later, at Time 2, a second questionnaire with the attitude items was administered. The major treatment variable, turnover, was recorded during the interval between Time 1 and Time 2 at each of the sites. Using this design, we could determine the relationship each respondent had to each of the coworkers who left, and we could assess the degree of change in stayers' attitudes subsequent to the turnover of their coworkers.

The questionnaires were administered individually by the researchers to each employee. He or she was asked to complete it at home, seal it in the envelope provided, and bring it to work the next day, when the researchers would collect them. Since network questionnaires of this type cannot be anonymous, care was taken to assure the respondent that his or her participation was voluntary and that all responses would be kept in strict confidence.

### Measures

Network data require nonstandard analytical methods (Alba, 1982). Even among scholars who use network analysis, there is disagreement as to what techniques or transformations are appropriate (Knoke and Kuklinski, 1982). While attempting to resolve these controversies is beyond the scope of most empirical papers, it is important that researchers be clear about how they analyzed their data. Therefore, care was taken below to describe precisely the operationalizations and transformations undertaken in the analysis presented here.

### Operationalization of the Independent Variable

As mentioned previously, a strong argument can be made that it is the *perception* of the network that influences an individual's behavior and attitudes, not the actual set of network links (Burt, 1982). To date, no study of organizational networks has directly measured such perceived structures. The reason for this is simple: it is a formidable task, since the length of the questionnaire would increase linearly with the square of the size of the organization. The task is manageable, however, with organizations the size of the restaurants used in this study. Given the important role that perceptions play in the proposed model, we devised the following method for

assessing directly each employee's perceived network in the restaurant.

In the first questionnaire, each person in the workgroup was asked to record who they perceived to be a friend of whom. While simple on the surface, this substantial task required that employees consider all possible pairs of friends in the restaurant. To accomplish this, the respondent was told to check the names of all those listed whom he or she thought would be considered a friend by employee #1 (for example, "Henry"). Then, the same list was repeated on the next page, and the respondent was asked to check all names of those whom he or she thought would be considered a friend of employee #2 ("Rita"). This process was repeated a total of  $N$  times (for  $N$  employees). In this way, we could assess each person's perception of everyone's friends, their own as well as their coworkers'. These data allowed us to construct, for example, Henry's perception of the entire network in the group, Rita's perception of this network, and so on.

These friendship links were combined with subsequent turnover data to create the independent variable in this study, hereafter referred to as the IMPACT index. The assumption behind this index is that those who leave differentially affect those who stay. This variable is a summary indication of how much potential influence there is on an individual stayer from friends who terminated, relative to those friends who stayed (see Figures 2 and 3).

The first step in calculating this index was to determine perceived distance between pairs of coworkers. Let  $k$  represent the respondent who filled out the questionnaire, and  $i$  and  $j$  represent any pair of coworkers not including  $k$ . Let  $F_k(i, j) = 1$  if  $k$  perceived that  $i$  and  $j$  are friends and  $F_k(i, k) = 0$  otherwise. Each  $F_k(i, j)$  matrix is transformed into a distance matrix ( $FD_k[i, j]$ ), representing  $k$ 's perception of how distant in the friendship chain  $i$  was to  $j$ . Finally, each element of the matrix was then inverted. Thus, for example, a score of 1 indicated that  $k$  perceived  $i$  and  $j$  to be friends; a score of  $1/2$  indicated that  $k$  perceived  $i$  and  $j$  to be a distance of two from one another (such as A and D are in Figure 2), and so on.

From this matrix, only one vector is of immediate interest in calculating IMPACT: the vector where  $i = k$ . That is, the question is how close in the perceived friendship network does the respondent perceive him or herself to be to each other coworker. This vector (denoted  $FD_k[j]$ ) is multiplied by the transpose of the turnover vector ( $T[j]$ , where  $T[j] = 1$  if coworker  $j$  left and  $= -1$  otherwise). The resultant scaler is what is termed IMPACT for individual  $k$ :

$$\text{IMPACT}_k = \sum_{j=1}^N [FD_k^{-1}(j) \times T(j)], \quad (1)$$

for all  $j$  not =  $k$ ; where

$\text{IMPACT}_k$  = the potential influence of the leavers relative to the stayers

$FD_k^{-1}(j)$  = person  $k$ 's perceived friendship closeness to coworker  $j$  (closeness =  $1/\text{distance}$ )

$T(j)$  = turnover of coworker  $j$  ( $= 1$  if  $j$  left;  $= -1$  if  $j$  stayed)

