TC — 67668

ISBN

PERMISION TO MICROFILM – AUTORISATION DE MICROFILMER

• Please print or type – Écrire en lettres moulées ou dactylographier

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THESIS – THÈSE

Title of Thesis – Titre de la thèse

A CROSS-VALIDATION OF CERTAIN JOB RELATED FACTORS WITH RESPECT TO EMPLOYEES' INTENTION TO CONTINUE WORKING

Degree for which thesis was presented
Grade pour lequel cette thèse fut présentée

MASTER OF SCIENCE (PSYCH.)

Year this degree conferred
Année d'obtention de ce grade

1985

University – Université

SAINT MARY'S UNIVERSITY

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► ATTACH FORM TO THESIS – VEUILLEZ JOINDRE CE FORMULAIRE À LA THÈSE ◄

Signature

Date

Feb. 25/85

NL-91 (r. 84/03)

Canada

A CROSS-VALIDATION OF CERTAIN JOB RELATED FACTORS
WITH RESPECT TO EMPLOYEES' INTENTION TO
CONTINUE WORKING

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Submitted in partial fulfillment of the requirements
for the degree of MASTER of SCIENCE
From Saint Mary's University
Halifax, Nova Scotia

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ACKNOWLEDGEMENTS

ABSTRACT

A Cross-Validation of Certain Job Related Factors
with Respect to Employees' Interest to Continue Working

Michael M. Afarian

January 15, 1985

Using a path analytic model, this research was concerned with cross-validating the results of a 1983 study which examined employees' intent to remain with the organization for 5 years or more. In the study of "intent to remain", a path analytic model was designed using seven antecedent variables. These variables were, Supervision, Communication with Management, Group Cohesion, Opportunity for Promotion, Financial Compensation, Job Satisfaction and Organizational Commitment. The results from 2,141 employees from a large Ontario organization were cross-validated with a sample of 536 employees from various organizations located in the Maritimes and Ontario (hospital N=407, beverage manufacturing firm N=82, research firm N=47). The results from the original study were supported. From the 1983 study, the model accounted for 18% of the variance in "intent to remain", while in the present study the model accounted for 20% of the variance in the dependent variable.

In an attempt to improve the accuracy of the model, the current study also examined the employees' "intent to remain" in relation to job transferability, specific job categories, and gender of the employee. Job transferability did not improve the accuracy of the model. However, the model did explain a greater percentage of the variance for the professional (24%) and middle/upper management (41%) jobs. Similarly, while the results were not clear cut with regards to gender, they suggest that the model is a better predictor for male employees. In general the results validate the path analytic model. The 18% and 20% of the variance in " intent to remain" explained by the model is consistent with other models of turnover (Mobley et al., 1979; Michaels and Spector, 1982). This model represents a diagnostic tool that can be an aid in the assessment of turnover.

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This study represents a cross-validation of a private unpublished research report conducted by Afarian in the summer of 1983. The original study examined a path analytic model of intent to remain (found on page 13), as applied to a large Ontario organization (N=2,141). Seven variables were used to predict intent to remain. These variables were:

1. Communication with Management

2. Supervision

3. Work Group Cohesion

4. Opportunity for Promotion

5. Financial Compensation

6. Job Satisfaction

7. Organizational Commitment

These variables accounted for 18% of the variance in "intent to remain". However, the model did account for a larger proportion of the variability in Organizational Commitment and Job Satisfaction (47% and 39% respectively). Organizational Commitment had a greater overall path coefficient weight in influencing the dependent variable, "intent to remain". The total influence (beta weights) of these factors was .38 for Organizational Commitment and .29 for Job Satisfaction.

Four recommendations were made to improve the accuracy of the model:

1. Include data on labour market situations.

2. Include data on transferability of job skills.

3. Study intent to leave by job category.

4. Study males and females separately.

It was believed that incorporating information on the above items would substantially improve the predictability of "intent to remain" beyond the 18% of the original study.

The present study deals directly with the last three recommendations. In the present sample, the data were analyzed by job transferability, job category and by male and female populations. With these restrictions, the turnover model was expected to account for a greater proportion of the variance than in the first study where the data were analyzed on a corporate wide basis.

More specifically, it was intended to compare jobs which have a high degree of job transferability, e.g. clerks or secretaries, with jobs that have a low degree of job transferability, that is, those that require highly specific skills. It was hypothesized that the model would be a better predictor of "intent to remain" for jobs of low transferability.

Similarly the accuracy of the model should improve when it is applied to each specific job category rather than an overall corporate measure. It was hypothesized that the model would account for a greater percentage of variance for "intent to remain" when it was applied to specific job categories rather than to corporate wide measures.

Shott, Albright and Glennon (1963), have found that turnover is more predictable for males than for females. Therefore, it was hypothesized that the model would be a better predictor of "intent to remain" for males.

The issue of considering the labour market situation was not dealt with directly in this study. A longitudinal approach, across varying economic times is better suited to measure the effects of this factor.

PREDICTING TURNOVER

Miller and Van der Merwe (1975) reported a consistency in the turnover rates in the rankings of 18 industrial organizations from the same geographic region over a two year period. These findings suggest that there are specific organizational factors that contribute to the differences in labour turnover which carry on over time. They stated that these differences in turnover rates would not be solely attributed to economic conditions.

In a follow-up article, Miller and Van der Merwe (1982) examined whether these rankings in turnover would be consistent over a longer period of time. They considered the time span covered by the study (1972-1980) to reflect the different economic conditions. The authors regarded the period between 1972 to 1975 generally as a time of "growth and expansion" in the area where their study was conducted. As a result of steep fuel prices in

mid-1976, Miller and Van der Merwe felt that this was the beginning of a recession. In 1980 the authors report a "marked upswing in the economy", which they noted was associated with greater turnover rates in all groups.

They concluded from this longitudinal study that there was a consistency in the rankings of the companies regardless of the economic fluctuations. They stated that there was no doubt that economic factors influenced turnover, but that the consistency of the organizational rankings suggested that "internal institutional factors rather than external environmental forces determine turnover rates" (Miller and Van der Merwe, 1982).

In predicting turnover, many studies have found that a single item or a few items predicted turnover as well as more elaborate methods. One simply asks the employees or applicants how long they intend to work on the job. In the present study, the dependent variable was predicted through a single item that measured an employee's intent to remain with the organization 5 years or more. Support linking intentions and actual turnover behaviour have been well established in many studies. Atchison and Lefferts (1972) reported that responses to a single "behavioural interaction item" predicted turnover as well as Herzberg's motivation/hygiene questionnaire. Porter, Steers, Mowday and Boulian (1974), found that a set of questions measuring organizational commitment were a more effective predictor than overall or facet satisfaction as measured by the 72 item Job Descriptive Inventory (JDI). Waters, Roach and Waters (1976) state that a single item measuring intent to remain with a company was a better predictor of

turnover than attitudinal and biodata items (r=-.42, P<.01, over 2 years).

Kraut (1975), using a sample of salesmen, directly measured the employee's intent to remain with the company and several other job satisfaction attitudes items. The results showed that of all the items, intent to remain was the best predictor of turnover. Kraut (1975, p. 235) writes,

> ... it may be too much to expect any imposed model of attitudes and turnover behaviour to be effective. It is more likely that the employee himself is the best means of properly weighing and integrating the factors that go into a decision to quit or remain in a job. If we can rely on the employee himself to provide the best synthesis of attitudes towards his work situation, his opportunities elsewhere, and other aspects of his life that bear on a decision to remain in the current job perhaps the best prediction of turnover can come from the employee's direct estimate of his future tenure.

Kraut added that imposed models of turnover may not account for all individual differences. However, it may be equally true that a response to a single item of "intent-to quit", may only inform the organization of their probable turnover rate. It in no way allows management to counteract a potential problem. While a model may not be as sensitive, an analysis of the model may allow an organization better understanding of the nature of the turnover problem. It can then counteract potential problem areas that may be accountable for an individual's intent to leave.

Peters and Jackofsky (1979), reported a significant relationship between actual employee turnover with the measure "intent to quit". They used three Likert-type items to measure intent to quit. These items were

1.   I will quit my job soon.

2.   I am actively looking for a new job.

3.   I intend to remain on this job.

In a survey study of 203 hospital employees, Mobley, Horner and Hollingsworth (1978), examined "general and facet job satisfaction, thoughts about quitting, the intention to quit, the perceived probability of finding another job, and biographical data". When the data were regressed with actual turnover rates collected 47 weeks after the start of the study, intention to quit was the only significant variable related to turnover ($r=.49$, $P<.01$). Job Satisfaction acted indirectly on turnover, through a direct effect on thinking of quitting and intention to search and intention to quit.

Studying nursing home employees (N=108), Newman (1979) found a significant relationship between turnover and intention to quit ($r=.30$, $P<.01$). Results from the Michaels and Spector (1982) study showed an association between intent to quit and turnover ($r=.41$, $P<.05$). In the Michaels and Spector study which incorporated path analysis, the direct path coefficient between intent to quit and turnover was .47.

It must be stressed that this research paper examines data related to an employee's "intent to remain" and not with actual turnover data.

PATH ANALYSIS

As stated earlier, a path analysis approach was employed in the analysis of the data in this study. Path analysis allows the researcher to examine a model where the selected factors interact with one another in affecting the dependent variable. Path analysis or as it is sometimes called, causal modeling, starts with a theoretical insight or certain underlying assumptions into the relationships of the variables. Kerlinger and Pedhazur (1973), state that path analysis is not a means for discovering causes, but a statistical method where research models are formulated by the researcher based on "knowledge and theoretical considerations". In developing the research model, the initial formulations are based on induction supported by observations that allow one to hypothesize that certain variables are related causally (James, Muliak and Brett, 1982). They continue to write that along with induction, a theoretical framework is needed to propose a causal model.

> The theoretical rationale is typically obtained by development of a theory from careful observations, or by deducing from an existing theory a proposal of how causes produce effects, that is, an explanation of why variables covary. (James et al., 1982, p. 34).

Rather than generate theory, causal modeling is extremely useful in testing theory. As part of a series of books written on Industrial/Organizational

Psychology, James et al. (1982) have advocated the use of causal analysis
and path models in the study of organizations.

Path analysis deals with correlations and, as any student of statistics
will attest, "correlations are no proof of causation". Kerlinger and Pedhazur
(1973, p. 307) write:

> Nor does any other index prove causation, regardless of whether
> the index was derived from data collected in experimental or
> nonexperimental research. Covariations or correlations among
> variables may be suggestions of causal linkages. Nevertheless,
> an explanatory scheme is not arrived at on the basis of the data,
> but rather on the basis of knowledge, theoretical formulations
> and assumptions, logical analysis. It is the explanatory scheme
> of the researcher that determines the type of analysis to be
> applied to the data, and not the other way around.

Variables within a model can be re-arranged in many different
patterns. Therefore, after the analysis of the data, the researcher must
decide whether the results are consistent with the model. It must be
stressed that since these causal linkages are assigned in a particular order
by the researcher, even if the data fit the model, it is no proof of the
theory. The results can only lend support to the model. Support for one
model over another depends on external information. That is, theoretical
and previous research allows the researcher to determine which model has
the most merit.

VARIABLES THAT AFFECT TURNOVER

The seven variables studied in this paper, Work Group Cohesion, Supervision, Communication with Management, Financial Compensation, Opportunity for Promotion, Organizational Commitment and Job Satisfaction have been considered as sources of attrition. No one factor is seen to be the sole determinant of turnover, but some factors have been found to have greater influence on employees than others. In this section these seven variables are discussed with respect to their relationship to turnover.

PROPOSED MODEL

The following review of the literature does not represent an exhaustive search of the research available in the area on turnover. This has not been the intent. The following summary does, however, show how the variables used in this study either directly or indirectly affect an employee's decision to stay or to leave. The path model as proposed by this research, is presented in Figure 1.

In formulating the linkages of this explorative model, both theoretical insights and logical inductions were used. Dealing with the variables,

Supervision, Communication with Management and Group Cohesion, French and Caplan (1973) state that support from peers and supervisors may help to reduce job stress which is linked to job satisfaction. They write:

> Poor relations, perhaps generated by factors such as conflict or inadequate communications between people go on to produce psychological stress in the form of low job satisfaction (r's range from .25 to .47), (French and Caplan, 1973, p. 49).

Porter and Steers (1973) feel that group cohesion is directly related to job satisfaction. Thus it was felt that the model would best be represented by Supervision directly affecting Job Satisfaction, Communication with Management, and Group Cohesion. Communication with Management is regarded as having a direct link with Group Cohesion and it is proposed that Communication with Management has a direct link to Organizational Commitment. Some empirical support for this path comes from the early work of Argyris (1964) and Likert (1967) which have suggested that good relations between members of an organization may result as a key factor in improving Organizational Health. Support for the linkage between Group Cohesion and Job Satisfaction comes from Porter and Steers (1973).

Opportunity for promotion is seen as having a direct path to Financial Compensation due to the fact that, generally, promotions precede financial advancement. In this study it is proposed that Financial Compensation has a direct path to Organizational Commitment.

This research model is designed with Job Satisfaction as having a direct link on Organizational Commitment. Reviewing much of the literature concerning these two variables it was felt that the directional path of Job Satisfaction to Organizational Commitment was the most appropriate. The literature review which follows expands on the relationship between these 7 variables and turnover.

The literature indicated that Work Group Cohesion does have an influence on turnover but its effects are considered rather weak. Therefore, in this study, Work Group Cohesion is thought to affect the dependent variable (intent to remain 5 years or more) indirectly through Job Satisfaction.

As seen in the model (Figure 1) on page 13, Supervision and Communication with Management also work indirectly in affecting the dependent variable. It is felt that these variables have a more direct affect on Work Group Cohesion, Job Satisfaction and Organizational Commitment.

As the literature indicates, there are mixed findings concerning Financial Compensation and Opportunity for Promotion with regard to turnover. In this study these variables will work indirectly through the variables Job Satisfaction and Organizational Commitment in influencing intent to remain five years or more.

Finally previous research shows good evidence that Job Satisfaction and Organizational Commitment influence an individual's decision to stay or leave an organization. This model uses an interactive approach; it is proposed that Job Satisfaction has a direct effect on intent to remain as well as an indirect one on Organizational Commitment. Organizational Commitment is thought to have only a direct effect on the dependent variable.

The interaction of all these variables suggests a working model through which an organization can analyze and understand the process of turnover. More importantly, an organization may be able to use the information provided by the model to help curb and prevent the loss of dysfunctional turnover.
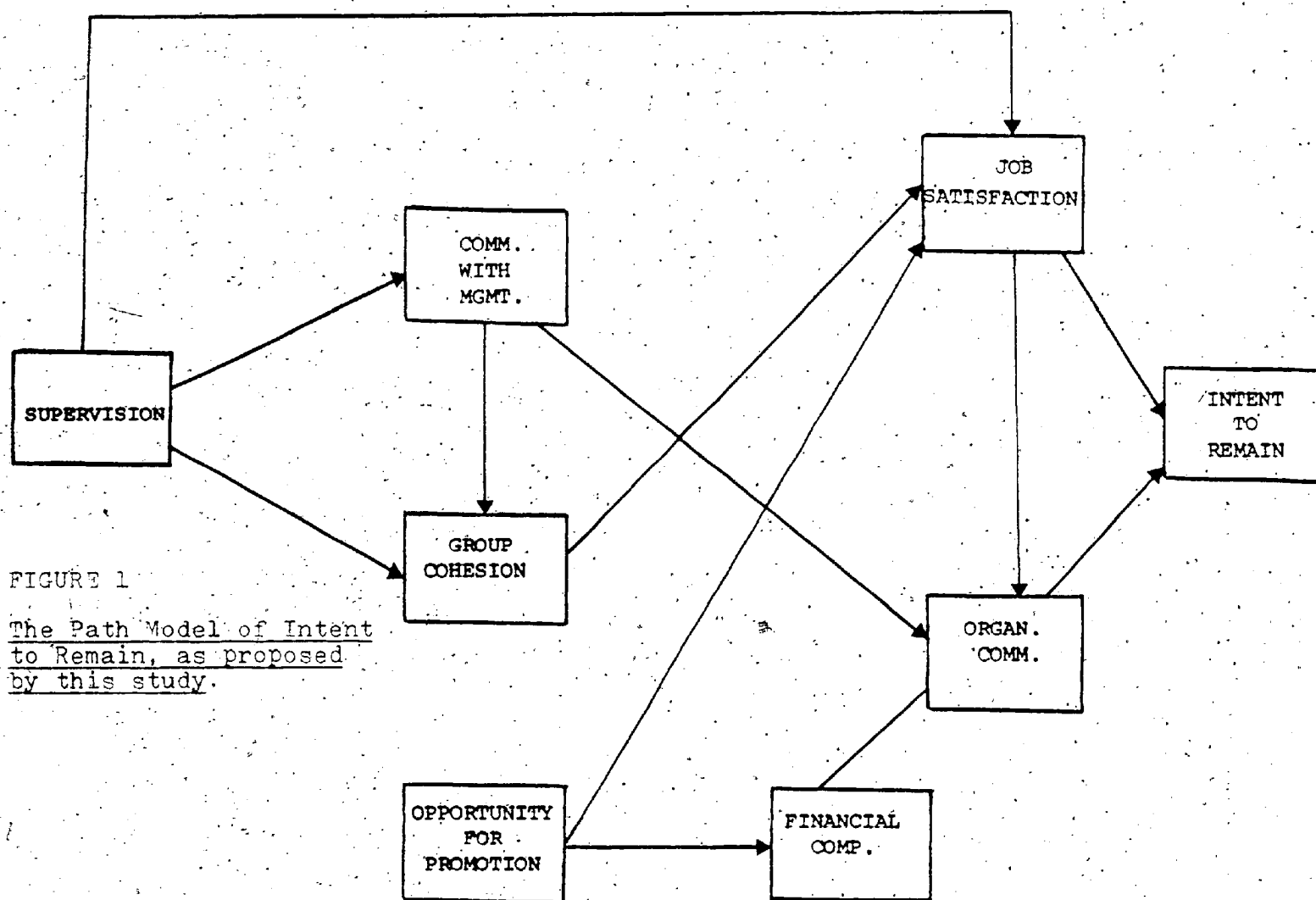
FIGURE 1

The Path Model of Intent
to Remain, as proposed
by this study.

WORK GROUP COHESION

Work Group Cohesion has been defined as:

> the degree to which members are motivated to remain in the
> group. Members of highly cohesive groups are energetic in group
> activities, they are less likely to be absent from group meetings,
> they are happy when the group succeeds and sad when it fails,
> etc., whereas members of less cohesive groups are less
> concerned about the group's activities (Shaw, 1971, p. 192).

Work group or group cohesion has been associated with a high degree of interaction and felt responsibility among members of the group (Cartwright and Zander, 1968). This high level of interaction in turn is related to social involvement which is positively associated with commitment (Buchanan, 1979; Rotondi, 1975). Using a sample of 77 non-management entry level public agency employees, Koch and Steers (1978), found a significant relationship between co-workers and turnover, however only 4 percent of the total variance in turnover was explained by group cohesion. After reviewing the available data, Mobley et al. (1979), concluded that group cohesion is not a very strong predictor of turnover. They suggested that individual differences in need for affiliation and the nature of the task, along with methodological problems contribute to difficulties in establishing a turnover-group cohesion association.

Similar difficulties were discovered by Hellreigel and White (1973) in trying to relate "team-effectiveness" to turnover in a group of Certified Public Accountants (N=349). Although they established a moderate positive relationship for "team effectiveness" and the non-turnovers, their results indicated that the relationship changed from positive to negative over the given items that were used. Hellreigel and White felt that the inconsistencies were due to the formal organization imposing a motivational system which encouraged competition among CPAs while the informal social system of the CPAs in part rejected this system in favour of cooperation.

Work group cohesion is related to the size of the work group (Porter and Steers, 1973). Larger work groups lead to lower group cohesion, higher task specialization and poorer communications. Porter and Steers (1973) suggest that these findings result in lower satisfaction which in turn is related to high turnover. Kerr, Koppellmeier and Sullivan (1951) found a positive association between work unit size and turnover in data from 894 factory workers; Mandell (1956) replicated this finding with 320 clerical workers. However, Argyle, Gardner and Coiffi (1958) did not find this relationship for production workers. Porter and Steers (1973) argue that as blue collar workers, there should be more of a relationship between work unit size and turnover in blue collar occupations. In reviewing these studies Muchinsky and Tuttle (1979) concluded that there is a moderate, negative relationship between Work Group Cohesion and turnover. As this relationship is somewhat weak, the present study incorporates the effects of Work Group Cohesion on turnover indirectly through Job Satisfaction.

That is, in this present study Work Group Cohesion will not be assumed to have a direct path to "intent to remain" but rather to have an indirect effect on the dependent variable through Job Satisfaction.

SUPERVISION AND COMMUNICATION WITH MANAGEMENT

As used in this study Supervision pertains to the employees opinion of how well a job is being accomplished by their immediate supervisor and how much support is shown by the supervisor for the employees' success on the job. Communication with management deals with upper management being generally interested in improving the success of the organization through listening and disseminating information to their employees.

A significant negative relationship between satisfaction with supervision and turnover was found to exist in a sample of Certified Public Accountants (N=349, Hellereigel and White, 1973). This relationship was also found in a 1964 study conducted with a group of engineers working at General Electric. Engineers who quit General Electric were found to be dissatisfied with the amount of feedback they received from their supervisors. They felt it was inadequate to allow them to improve their performance (cited in Muchinsky and Tuttle, 1979). The more human relations ability supervisors show, the less the turnover will be among the supervisor's employees (Lundquist, 1958, cited in Muchinsky and Tuttle, 1979). Supporting these results, Ley (1966) found that the amount of

authoritarianism displayed by the supervisor was positively correlated to the turnover of his or her employees.

High levels of commitment have been correlated with supervision that is not overly controlled. Employee felt responsibility was found to be higher with supervisors who allowed their employees to have a greater role in how the job was conducted (Salancik, 1977). Rhodes and Steers (cited in Mowday et al., 1982), state that "felt responsibility" and commitment increase when supervisors encourage employees to actively make decisions on the job.

This relationship between turnover and supervision has not always been consistent. Koch and Steers (1978), Mobley, Horner and Hollingsworth (1978), Newman (1974) and Waters, Roach and Waters (1976), did not find a significant relationship. Mobely et al. (1979, p. 503), cautioned:

> Overall, recent studies offer moderate support for the negative relationship between satisfaction with supervision and turnover. However, the number of studies finding no significant relationship between these variables indicates the need to more closely examine the nature of leadership measures, to conduct more microanalyses of leader-member exchange, and to assess the contribution of supervision in multivariate designs that consider other salient variables.

Low turnover rates result when communications between workers and management is instrumental and formal (official communications directed at role performance of an employee, Goodman, Salipante and Paransky, 1973; Lawler, 1973, Lyons, 1968; Porter and Steers, 1973, cited in Price, 1977). The critical issue concerning communications and turnover is that

when job related information is officially conveyed, the rate of turnover is reduced (Price, 1977). With a sample of female skilled workers, significant differences between "stayers" and "leavers" were evident on certain selected job needs. Those workers who left had perceived themselves as having received less feedback and recognition than those employees who remained (Ross and Zander, 1957). Interviews with bank tellers and branch managers also showed that turnover among tellers was related to communication problems (Krackhardt et al., 1981). Nurses who were likely to quit their jobs at their work place felt that rules and regulations were not clear, limits of authority were not specified, exchange of information between departments was difficult and decisions concerning their work were poorly explained (Wieland, 1965, cited in Price, 1977).

On the whole there appears to be a negative relationship between satisfaction of supervision and turnover. This relationship also appears to hold for communication with management. When communications are not clear (work related information) there seems to be greater turnover. Although neither variable is regarded as a sole contributor to turnover, in this study these variables will be considered to have an indirect effect on intent to remain.

FINANCIAL COMPENSATION AND OPPORTUNITY FOR PROMOTION

Financial compensation deals with the employee's opinion concerning

the amount of pay and benefits received from the company. Opportunity for promotion is concerned with the employee's perception of availability and necessary skills needed for promotion.

A negative relationship between financial compensation (pay) and tenure is evident. That is, higher salaries are related to longer tenure (Frederico et al., 1976). Also, higher salaries and the difference between perceived and actual salaries are associated with shorter tenure. However, it must be noted that better paying positions are not necessarily concomitant with greater organizational commitment (Mowday et al., 1982). Perceived equity of pay may be a more important antecedent to commitment than amount of pay (Rhodes and Steers, cited in Mowday et al., 1982).

Employees who are "turnovers" tend to have greater negative attitudes toward pay policies and the comparibility of salary than "nonturnovers" (Hellriegel and White, 1973). Also in the same study it was discovered that the turnover sample had 20 percent higher salaries on their new jobs. Friedlander and Walton (1964) found a negative relationship between turnover and satisfaction with pay and promotions for a group of scientists and engineers (N=82). This is not surprising as promotion is most often related to increase in pay. Saleh, Lee, and Prien (1965) replicated this relationship with a sample of nurses.

Dealing with the effects of reward (pay) on work, Mowday et al. (1982, p.60), write:

Salancik (1977) suggested that the level of reward influences the perceived instrumentality of work. However, he suggested when instrumental rewards for work are salient, it reduces the employee's felt responsibility. This follows from the view that salient extrinsic rewards provide external justification for engaging in the tasks and lowers the need for employees to provide internal justification for task involvement.

Generally a negative association has been found between financial compensation and promotion with turnover. However, Koch and Steers, (1978); Kraut (1978); Mobley, Horner and Hollingsworth, (1978); Newman, (1974); and Waters, Roach and Waters (1976), all report a nonsignificant relationship between pay and turnover. In regards to promotion and turnover, these same studies report that as with pay there is no relationship evident between turnover and satisfaction with promotion or advancement. However, Hellriegel and White (1973) state that leavers had more dissatisfied attitudes toward promotion than stayers.

While the evidence is not conclusive; most of the literature on this subject suggests that a negative relationship exists between opportunity for promotion and pay with turnover. It must be kept in mind, however, that some studies emphasize that perceived inequities may be a more important determinant of turnover. This study considered pay and promotion to have an indirect effect on the dependant variable, "intent to remain five years or more".

ORGANIZATIONAL COMMITMENT

Organizational Commitment is defined as:

strength of an individual's identification with and involvement in a particular organization. Such a commitment can generally be characterized by at least three factors; (a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership (Porter et al., 1974, p. 604).

Attitudes towards organizational commitment are predictive of subsequent turnover. The turnover group in the Porter et al. (1974) study clearly had less favourable attitudes towards the organization than those who remained. Results from a longitudinal study found that the relationship between attitudes, particularly organizational commitment, and turnover strengthened over time (Porter et al., 1976).

Organizational commitment is significantly related to intent to leave and has greater influence as an antecedent variable of turnover than job satisfaction (Peters, Bhagat and O'Connor, 1981). Job satisfaction not only has a direct effect on turnover but also interacts through other variables. Satisfaction with co-workers, the work itself, supervision and the job overall all help to increase understanding of the turnover process. Unfortunately, the interactive effects of

organizational · commitment and job satisfaction have not been adequately addressed (Peters et al., 1981).

Morris and Steers (1980) related formalization, functional dependence and decentralization of authority to commitment. Employees who experienced greater decentralization, greater dependence on the works of others and greater formality of written rules and procedure to the organization felt more committed than those employees who did not experience these factors to the same degree (Morris and Steers, 1980). Atchison and Lefferts (1972) found evidence that intention to remain with the organization (which they regard as a sign of commitment) is strongly and inveresly related to turnover.

Voluntary termination may occur if there appears to be a definite decline in an employee's commitment to the organization. Although turnover is not dependent on this decline in commitment, it is felt to be a reliable sign of turnover (Porter et al., 1976).

Steers (1977) examined hospital employees (N=382) and scientists and engineers (N=119). He found that for both samples personal characteristics influenced level of organizational commitment. More specifically, the need for achievement, group attitudes towards the organization, education (inverse relation), organizational dependability, perceived personal importance to the organization and the task identity all influenced organizational commitment (Steers, 1977). Drawing on the work of March and Simon (1958), Hrebiniak and Alutto (1972), Steers argued that a common

element of exchange was prevalent in these findings. Employees come to organizations with certain skills, needs and abilities and anticipate that the work environment will fulfill their needs. Organizational commitment is enhanced when these needs are satisfied. On the other hand organizational commitment is diminished when the organization fails to fulfill their needs. Steers (1977) speculated that the negative relation between education and organizational commitment might stem from the organization not being able to satisfy the needs or to provide adequate rewards from the individual's perspective to "equalize the exchange".

Steers's (1977) study showed that the three antecedent categories of personal characteristics, job characteristics and work experiences all added to organizational commitment but that work experience had the greatest relationship. Commitment was associated with employees desires and intent to remain with the organization. Steers did not find strong evidence to suggest that commitment was related to job performance. Commitment was also found to be inversely related to turnover. Steers (1977) noted that one of the major consequences of increased organizational commitment is a "stable work force."

The literature does indicate a consistent negative relationship with organizational commitment and turnover. There also appears to be evidence that job satisfaction and organizational commitment have an interactive effect on turnover. This study not only looked at the direct effect of job satisfaction and organizational commitment, but also the joint influence of these variables on the dependent variable.

JOB SATISFACTION

Attitudinal factors are the most consistent and reliable factors that are related to turnover (Muchinsky and Tuttle, 1979). By "attitudinal factors", Muchinsky and Tuttle mean global and job-facet satisfaction as well as attitudes and morale concerning the employee's work place. Generally, most research studies relating turnover and satisfaction have found a negative correlation between these two variables.

Using a prospective design, Hulin (1966) first measured job satisfaction and later found that workers who left the organization had scored significantly lower on the job satisfaction measure. Over a two-year period Waters and Roach (1971, 1973) showed that overall satisfaction, as well as, satisfaction with work, growth and responsibility, sense of achievement and responsibility all predicted turnover in female clerical workers.

Although job satisfaction generally has been negatively related to turnover, it usually accounts for less than 14% of the total variance associated with turnover (Mobley et al., 1979). Additionally, it has been found that when job satisfaction is included in multiple regression with other variables such as commitment and intentions, much of it's effect on turnover is reduced (may become non-significant: Marsh and Mannari, 1979; Mobley et al., 1978).

Dansereau, Cashman and Graen (1974) found that satisfaction with work, but not satisfaction with supervisors, predicted turnover among a sample of office workers. For managers, however, satisfaction with supervision, rather than satisfaction with work, was a better predictor of turnover. However, Koch and Steers (1979) did not find a relationship between job satisfaction and turnover for a group of entry level public agency employees.

Muchinsky and Tuttle (1979, p. 58), offer an appropriate summary concerning the relationship between job satisfaction and turnover.

The larger amount of research on attitudinal predictors of turnover yields highly consistent results: job dissatisfaction is associated with turnover. This finding has been evidenced across very different types of samples and across various types of attitudinal measures (e.g., overall satisfaction, facet satisfaction, morale, need satisfaction, etc.). Some of the early studies used "home-made" global measures of attitude, while many of the later studies assessed overall and facet satisfaction with the JDI, an instrument which has well-established reliability and validity. If one considers turnover to be an indicator of withdrawal behaviour, the vast amount of research indicates that people withdraw from their jobs because they are not satisfied with their jobs. The attitude-turnover relationship has been demonstrated in predictive, concurrent, and ex post facto research designs.

The literature shows that Job Satisfaction has a consistent negative relationship with turnover. In this study Job Satisfaction has a direct path to "intent to remain", as well as an indirect route through Organizational Commitment.

METHOD

Subjects

This study was based on employee surveys conducted in four different types of organizations. Two of the organizations are based in Ontario (N=2,141 and N=47) and the other two are based in the Maritimes (N=407 and N=82). The data from the large Ontario firm that is used in the current study represents a secondary analysis of a larger employee opinion survey that was conducted in 1983 using 2,442 employees. In that original 1983 study, these employees were randomly selected to reflect the proportional distribution from the different departments within the organization. From the original sample only subjects less than the age of 55 were used in the present study; therefore, of the 2,442 subjects, only 2,141 were used in this analysis. Additionally, approximately 1,400 questionnaires were distributed to the three remaining organizations. Of the 1,400 questionnaires, 80 were distributed to a research organization, 313 to a beverage manufacturer and 1,000 to a hospital. The entire full time staffs of both the research firm and the beverage firm were surveyed. The return rate from the research firm was over 50 percent and for the beverage manufacturing firm, 30 percent. As in the original study, only data from employees less than the age of 55 was considered. For the hospital sample, distribution of the questionnaires was based on a random selection of employees from predetermined departments. The return rate is presented in TABLE 1.

TABLE 1

The breakdown of the distribution and usable return rate (less than age 55) for the hospital sample.

		Number Returned	Percentage Returned
1.	Secretarial	41	57.7%
2.	Technologist/technicians	83	57.4%
3.	Nurses	216	43.5%
4.	Ward clerks	30	34.4%
5.	Store Persons	9	18.7%
6.	Laundry Workers	5	25.0%
7.	Nurse's Assistant/O.R. Technicians	22	21.5%

TABLE 2 summarizes the demographic information for the four organizations involved.

TABLE 2

Median Age, Sex, Education, Length of Service for the employees of the four organizations sampled.

	Age	Sex Female	Male	Education	Length of Service
Original 1983 study	35-39	23%	77%	community college	6-10 yrs.
Present study (all organ.)	25-29	76%	24%	community college	4-5 yrs.
Hospital	25-29	89%	11%	community college	4-5 yrs.
Beverage Firm	35-39	15%	84%	Grade 12	5-6 yrs.
Research Firm	30-34	28%	71%	3rd yr. univ.	2-3 yrs.

MATERIALS

As part of a more intensive employee opinion survey, the original 1983 study incorporated a 61 item questionnaire. In order to develop the questionnaire used in this study, the responses to those 61 items were factor analyzed. Nine factors emerged from this procedure; the seven strongest variables were used to formulate the path model. From these seven factors, the five highest loaded items (three for Organizational Commitment) were selected to represent that particular factor (variable). This analysis generated 33 items and the dependent variable, "expect to be working at least five or more years". The process of developing this questionnaire is more fully explained in the section titled "Statistical Procedures". An additional eight demographic items were added, giving the questionnaire the 42 items used in this study. All results presented in this study are based on the 42 item questionnaire; that is, the data collected from the three new organizations and the analysis of the 1983 study. The non-demographic items were scored by the respondents on a 7 point Likert-type scale. The original 61 item questionnaire was devised by a private consultant for use in the original 1983 study. The entire questionnaire used in this study can be found in Appendix B. It is estimated that 20-30 minutes were needed to complete the questionnaire.

PROCEDURES

In the original 1983 study, the questionnaires were distributed within the organization through its internal mail system by the personnel department. The participants were fully aware that the study was being conducted by the personnel department of their organization. Participant confidentiality was guaranteed.

In the present study, the bulk of the questionnaires were distributed at the employee's work place. For the research firm, pre-stamped, addressed envelopes were provided for the return of the questionnaires. In the case of the beverage manufacturing firm, the questionnaires were mailed to the employees' homes. The completed questionnaires were returned directly to the researcher. The hospital sample returned the completed questionnaires through their internal mail system where they were picked up on a regular basis.

In all cases, it was made clear to the participants that the results would only be used for purposes of research. Anonymity was ensured for all who chose to participate.

STATISTICAL PROCEDURES

An oblique factor analysis at delta .2 using SPSS (Nie, Hall, Jenkins, Steinbrenner and Bent, 1975) was performed on the data from the original study. From this analysis 9 factors emerged. The seven strongest factors along with their eigenvalues were:

Factors	Eigenvalues
1. Communication with Management	18.54
2. Supervision	3.53
3. Job Satisfaction	2.86
4. Work Group Cohesion	2.21
5. Financial Compensation	1.67
6. Opportunity for Promotion	1.36
7. Organizational Commitment	.84

A single value for each factor was necessary to conduct a path analysis. Thus, the five items that had the highest factor loading for each factor (3 for Organizational Commitment) were selected. This resulted in a shortened version from the original 61 item questionnaire. Each of the 33 items and the dependent variable were standardized. After this procedure, each standardized item was weighted according to its factor weight which emerged from the oblique factor analysis. After being weighted, the items were again standardized, then averaged (respectively for each factor) to obtain a single value which represented that particular construct. For example, Financial Compensation consisted of 5 items:

1. How do you rate the amount of pay you get on your job?

2. In comparison to people in similar jobs in other companies, I feel my pay is:

3. How do you rate your total benefits program (insurance, medical, etc.)?

4. Generally, my pay is an accurate indicator of my performance.

5. How would you rate the benefits at (company name) in comparison to benefits offered by similar companies?

These items emerged from the oblique factor analysis with respective factor loadings of .80, .73, .57, .59, .53. Next, these 5 items were standardized and weighted with its factor loading. After being weighted, they were once again standardized, then averaged together to represent a single value for Financial Compensation. This procedure was conducted for all the factors. Table 3 represents the corporate wide inter-correlation of the seven factors and the dependent variable from the original study. Table 4 represents the same information as Table 3 but for the sample that is made up of the beverage manufacturing firm, research firm, and the hospital.

Table 3

Correlation Matrix of the Eight Variables for the original 1983 Study.

	Comm. w/Mgmt	Super- vision	Job Sat.	Group Coh.	Fin. Comp.	Opp. Prom.	Org. Comm.	Intent Remain
Comm. w/Mgmt.	1.00	.47	.46	.45	.32	.59	.55	.22
Super- vision		1.00	.47	.54	.27	.47	.39	.18
Job Sat.			1.00	.47	.21	.54	.60	.33
Group Coh.				1.00	.16	.40	.37	.17
Fin. Comp.					1.00	.31	.30	.15
Opp. Prom.						1.00	.45	.29
Org. Comm.							1.00	.41
Intent Remain								1.00

Table 4

Correlation Matrix of the Eight Variables for the present Study (Hospital, Beverage Manufacturing Firm and Research Firm).

	Comm. w/Mgmt	Super-vision	Job Sat.	Group Coh.	Fin. Comp.	Opp. Prom.	Org. Comm.	Intent Remain
Comm. /Mgmt.	1.00	.41	.35	.46	.54	.54	.57	.24
Super-vision		1.00	.44	.43	.12	.34	.28	.09
Job Sat.			1.00	.42	.22	.46	.46	.26
Group Coh.				1.00	.24	.36	.30	.12
Fin. Comp.					1.00	.37	.55	.34
Opp. Prom.						1.00	.51	.19
Org. Comm.							1.00	.44
Intent Remain								1.00

For each path analysis conducted, that is, for each job category (eg. secretaries or laboratory technicians etc.), a separate inter-correlation table was constructed using only the data appropriate to that job category. The regressions and path coefficients are directly computed from these correlation matrices.

Path analysis involves a series of multiple stepwise regressions that result in path coefficients (beta weights) which reflect the degree to which one variable has a linear causal effect on another. Path coefficients vary in magnitude from -1 through +1. SPSSX (1983) was used in the analysis of the present data.

The results from the decomposition tables presented in the results sections were calculated according to Seawell Wrights rules. These rules are presented by Asher (1976, p. 33):

(a) no path may pass through the same variable more than once;

(b) no path may go backward on (against the direction of) an arrow after the path has gone forward on a different arrow;

(c) no path may pass through a double-headed curved arrow (representing an unanalyzed correlation between exogenous variables) more than once in any single path.

RESULTS

CROSS VALIDATION

As this study represents a cross-validation of the results of the original 1983 study, the original data from that study were compared to the results from the three organizations surveyed in the present research. As stated earlier, the original sample accounted for .18% (N=2,141) of the variance in the dependent variable, "intent to remain". Combining the beverage manufacturing firm, the research firm and the hospital, the turnover model explained 20% (N=536) of the variance. Examining these organizations separately, the proportion of variance explained by the model was 23% (N=82) for the beverage manufacturing firm, 23% (N=47) for the research firm and 14% (N=407) for the hospital.

Figure A-1 and A-2 illustrate the path coefficients and zero-order correlations between each variable for the original study and for the combined results from the beverage manufacturing firm, research firm and hospital. To assist in the interpretations of these results, the decomposition tables (Tables A-1 and A-2) enable one to see the direct effect, indirect effect and total effect one variable has on another. All figures and tables referred to are presented in Appendix A. From the decomposition tables, the results show that Organizational Commitment for both samples had a greater effect on "intent to remain" than did Job Satisfaction. The total

effect of Organizational Commitment and Job Satisfaction on the dependent variable for the original sample is .38 and .29, respectively. For the combined organizations, Organizational Commitment had a total effect of .45 on the dependent variable; however, Job Satisfaction failed to reach significance and therefore a direct path coefficient was not available, but the indirect effect of Job Satisfaction on the dependent variable is .15.

The decomposition table (Table A-1) for the original study shows that Opportunity for Promotion has the greatest effect on Job Satisfaction (.36) followed by Group Cohesion (.31) and Supervision (.28). Influencing Organizational Commitment, Job Satisfaction has the greatest effect (.49) followed by Communication with Management (.39) and by Financial Compensation (.15). Group Cohesion was affected by Supervision (.53) and by Communication with Management (.44).

The decomposition table (Table A-2) for the combined organization shows that Opportunity for Promotion, Group Cohesion and Supervision were very close in their influence on Job Satisfaction (.30, .31, .32, respectively). Financial Compensation had the greatest effect on Organizational Commitment (.39) followed by Job Satisfaction (.35) and Communication with Management (.33). Group Cohesion was affected by Supervision (.43) followed by Communication with Management (.34).

The residual terms represent error or standard error, confounding variables and/or those factors that affect the endogenous variables but have not been measured. The R squared (coefficient of determination) of each

endogenous variable gives the total variance accounted for by the antecedent variables. The residual path coefficients and the R squared for the original sample are presented in Table 5.

TABLE 5

Residual and R Squared terms for the Original 1983 Study and for the Combined Organizations

Variables	Residuals		R Squared	
	1983 Study	Present Study	1983 Study	Present Study
Intent to Remain	.90	.89	.18	.20
Job Sat.	.78	.81	.39	.34
Org. Comm.	.73	.71	.47	.49
Fin. Comp.	.94	.92	.10	.14
Group Coh.	.80	.88	.35	.22
Comm.	.88	.91	.22	.17

The results showed that the model accounted for 18% and 20% of the variance in the dependent variable for the original 1983 study and the combined organization sample, respectively. It was also evident from table A-1 and A-2 that Organizational Commitment had a greater influence on "intent to remain" than did Job Satisfaction.

HYPOTHESIS I

Hypothesis I states that the model will account for more variance in "intent to remain" for jobs that have lower transferability. Unfortunately, because of the nature of the organizations sampled there were inadequate numbers of responses from employees in jobs which were considered as having low transferability (it was assumed that secretaries have highly transferable jobs). However, the original study contained data for a job category that is considered to be extremely low in transferability. This position entails highly specialized training in the operation and surveillance of specialized equipment.

The model was not able to account for any of the variance in the dependent variable for this specialized job. The two antecedent variables, Organizational Commitment and Job Satisfaction, failed to reach significance; therefore, path coefficients going into the dependent variable are not available. Figure A-3 represents the path coefficient and zero order correlations between the variables. The decomposition table (Table A-3) shows that Organizational Commitment and Job Satisfaction did not explain any of the variance in the dependent variable. Opportunity for Promotion accounted for the greatest amount of variance in Job Satisfaction (.39) followed by Group Cohesion (.29) and by Supervision (.07). Job Satisfaction had the most influence on Organizational Commitment (.59) followed by Communication with Management (.44) and by Financial Compensation (.12). Group Cohesion was affected by Communication with Management (.53) and

by Supervision (.25).

The residual path coefficients and R squares are shown in Table 6 for the low transferable job:

TABLE 6

Residuals and R Squared for Low Transferable Jobs from the original 1983 Study

Variable	Residuals	R Squared
Intent to remain	0	0
Job Satisfaction	.82	.34
Organizational Commitment	.59	.65
Financial Compensation	.81	.35
Group Cohesion	.85	.28
Communications with Mgmt.	.88	.23

As for the secretarial data from the original sample (highly transferable job), the model accounted for 14% of the variance in "intent to remain". Figure A-4 shows the path coefficients and zero-order correlations between the variables. The decomposition table (Table A-4) shows that in influencing the dependent variable, Organizational Commitment had the greatest effect (.34), while Job Satisfaction had a lesser impact (.28). Job Satisfaction was affected by Group Cohesion (.39) followed by Supervision (.32) and by Opportunity for Promotion (.31). Organizational Commitment

was influenced by Communication with management (.48), Job Satisfaction (.47) and by Financial Compensation (.04). Group Cohesion was influenced by Supervision (.57) and by Communication with Management (.44).

The residual path coefficients and R squared for the secretarial sample from the original research are given in Table 7.

TABLE 7

Residuals and R Squared for the Secretarial (highly transferable jobs) for the original 1983 Study

Variable	Residuals	R Squared
Intent to remain	.93	.14
Job Satisfaction	.79	.38
Organizational Commitment	.74	.44
Financial Compensation	.95	.10
Group Cohesion	.79	.37
Communications with Mgmt.	.87	.24

Figure A-5 shows the path coefficients and zero-order correlations for the secretarial sample from the beverage manufacturing firm, research firm and hospital. The decomposition table (Table A-5) shows that Organizational Commitment did not account for any variance in the dependent variable. However Job Satisfaction accounted for 10% of the variance in the dependent variable. Job Satisfaction had the only influence

on the dependent variable (.32). Job Satisfaction was influenced by Group Cohesion (.41) and by Supervision (.26). Of the three variables influencing Organizational Commitment, only Financial Compensation met significance (.53). Group Cohesion was influenced by Supervision (.62) followed by Communication with Management (.35).

◊

Table 8 presents the residual path coefficients and R squared for the secretarial sample from the combined study.

TABLE 8

Residuals and R squared for the Secretarial sample (highly transferable jobs) for the present study (hospital, beverage firm, research firm)

Variables	Residuals	R Squared
Intent to remain	.95	.10
Job Satisfaction	.92	.17
Organizational Commitment	.85	.28
Financial Compensation	0	0
Group Cohesion	.78	.39
Communications with Mgmt.	.83	.32

The results do not support Hypothesis I. The model was not able to account for any of the variance in the dependent variable for jobs of low

transferability. However, the model did account for 10% of the variance in

"intent to remain" for highly transferable jobs.

HYPOTHESIS II

Hypothesis II states, that by examining "intent to remain" by job category, the model will account for a greater percentage of variance for specific job categories as compared to overall corporate wide measures. In the case of the beverage manufacturing firm and research firm, job categories were not examined separately due to the small number of employees in particular job categories. However, two job categories were common to the three organizations (secretaries and laboratory technicians) and these job categories were collapsed across the beverage manufacturer, research firm and hospital.

Overall the model accounted for 18% of the variance in "intent to remain" in the original study and 20% for the combined organization in the current study. The results from this analysis show that generally the variance explained in the dependent variable by job category did not exceed the variance explained by examining the data corporate wide. The tables found in Appendix A (Table A-6 and Table A-7) list the variance accounted for in the dependent variable for the samples.

HYPOTHESIS III

Hypothesis III, states that the model will account for a greater amount of variance in "intent to remain" for males. Mixed results were evident. The original study showed that the model accounted for 19.6% (N=494) of the variance in "intent to remain" for females and about the same percentage, 18% (N=1,634) for males. In the present study, the results supported the hypothesis. The model accounted for 16% (N=410) of the variance in the dependent variable for females in the combined organization sample, but increased to 28% (N=129) for the males in this sample.

Figure A-6 and A-7 show the path coeffecients and the zero-order correlations between each variable for the females and males from the original study. The decomposition table (Table A-8) for the females in the original study shows that Organizational Commitment had a greater effect (.39) than does Job Satisfaction (.32) in influencing "intent to remain". Group Cohesion had the greatest effect on Job Satisfaction (.42) followed by Supervision (.37) and Opportunity for Promotion (.32). Organizational Commitment was influenced by Communication with Management (.48), by Job Satisfaction (.46) and Financial Compensation (.03). Group Cohesion was influenced by Supervision (.57) and by Communication with Management (.43).

For males in the original sample, the decomposition table (Table A-9)

showed that Organizational Commitment had the greatest influence on the dependent variable (.40) while Job Satisfaction's effect was somewhat lower (.28). Job Satisfaction was influenced by Opportunity for Promotion (.38), Group Cohesion (.29) and by Supervision (.27). Job Satisfaction had the greatest effect on Organizational Commitment (.52) followed by Communication with Management (.37) and by Financial Compensation (.17). In affecting Group Cohesion, Supervision (.54) was followed by Communication with Management (.46).

Table 9 presents the residual path coefficient and R squared for females and males from the original study:

TABLE 9.

Residuals and R squared for females and males from the original 1983 study

Variables	Residuals		R Squared	
	Females	Males	Female	Males
Intent to Remain	.88	.90	.19	.18
Job Satisfaction	.76	.78	.41	.38
Organizational Commitment	.74	.71	.44	.48
Financial Compensation	.95	.93	.09	.12
Group Cohesion	.79	.80	.36	.34
Communication with Management	.90	.87	.18	.23

As stated earlier, the model accounted for 16% (N=410) of the variance in the dependent variable for the females in the combined survey sample, and 28% (N=129) of the variance for the males.

Figure A-8 and A-9 show the path coefficients and the zero-order correlations between each variable for the females and males. The decomposition table (Table A-10) for the females of the combined sample shows that for "intent to remain", Organizational Commitment had the greatest influence (.37), while Job Satisfaction had a lesser effect (.26). Supervision (.34) had the greatest influence on Job Satisfaction, followed by Group Cohesion (.32) and by Opportunity for Promotion (.27). Job Satisfaction (.42) had the greatest effect on Organizational Commitment followed by Communication with Management (.39) and by Financial Compensation (.24). Influencing Group Cohesion were Supervision (.37) and Communication with Management (.29).

Figure A-9 shows the path coefficient and zero-order correlations for the males in the combined organization sample. For the males in this sample, the decomposition table (Table A-11) shows that Organizational Commitment (.48) had the greatest impact on the dependent variable followed by Job Satisfaction (.30). Job Satisfaction was influenced by Opportunity for Promotion (.46), Group Cohesion (.24) and by Supervision (.13). Financial Compensation (.56) had the greatest influence on Organizational Commitment, Job Satisfaction (.29) and by Communication with Management (.28). Supervision (.55) had the greatest influence on Group Cohesion, followed by Communication with Management (.51).

The residual path coefficients and R squared for the females and males from the combined organization sample are presented in Table 10.

TABLE 10

Residuals and R squared for females and males from the combined sample (hospital, beverage firm, research firm)

Variables	Residuals		R Squared	
	Females	Males	Female	Males
Intent to Remain	.91	.85	.16	.28
Job Satisfaction	.83	.79	.31	.38
Organizational Commitment	.74	.63	.46	.61
Financial Compensation	.92	.93	.15	.12
Group Cohesion	.91	.80	.17	.36
Communication with Management	.92	.81	.14	.35

DISCUSSION

The present study investigated "intent to remain" on the job of employees of a beverage manufacturing firm, research firm, and a hospital through a path analytic model which had been previously developed for use in a large Ontario organization. On the whole, the present study validated the findings from the original 1983 research. The original model proposed that Organizational Commitment, Job Satisfaction, Financial Compensation, Opportunity for Promotion, Group Cohesion, Communication with Management and Supervision would predict an employee's "intent to remain" on the job. These variables explained 18% of the variance in the original study. In the current study, the model explained 20% of the variance for "intent to remain" across the three organizations. Examining the three organizations in the present study showed variable results. While the model accounted for 23% of the variance in the dependent variable for both the research firm and beverage manufacturing firm, it explained only 14% of the variance in the hospital sample. This may be due to the fact that the total hospital sample was made up of 216 nurses which represents 53% of the total sample. A look at table A-7 shows that the model accounted for 14% of the variance in the dependent variable for the nurses. It is likely that with a sample that is more evenly distributed across different hospital jobs that the accuracy of the model for the hospital sample would have improved.

Adding support to the validation of the model is the fact that in addition to the overall consistency in predicting "intent to remain", the variance explained in each of the eight variables in the original study and the combined organization sample were quite consistent between both studies. Generally, the same variable between the samples did not vary by more than 5% (except for Group Cohesion which varied by 13%) in the amount of variance explained. Also, the rank order of variance accounted for in each variable across the samples was identical. For both samples the greatest amount of variance was accounted for in Organizational Commitment followed by Job Satisfaction, Group Cohesion, Intent to Remain, Communication with Management and Financial Compensation.

Mobley et al. (1979) state that generally less than 20% of the variance in turnover can be explained. Michaels and Spector (1982), who tested the Mobley et al. model, also reported that they could account for 19% of the variance in turnover. It must be noted, that both of these studies report the variance accounted for in actual turnover, whereas this study reports the variance accounted for in "intent to remain". Nonetheless, the results from this study corroborate those findings. Additionally, if 20% of the variance in turnover is the upper limit that can be explained, then the present model appears to be extremely useful.

In the sections to follow the results of Hypotheses I, II, and III will be discussed.

HYPOTHESIS I

Hypothesis I stated that the model would explain a greater proportion of the variance in "intent to remain" for jobs of low transferability. An employee in a low transferable job might develop greater commitment to his present organization and develop greater satisfaction since alternative positions with different employers would be scarce. Due to limited alternative employment opportunities, the employee might bring himself or herself to believe that he or she was more greatly satisfied than should be the case and to become more committed towards the organizations. The results do not support this hypothesis as the model incorporated Organizational Commitment and Job Satisfaction as the only direct antecedent variables of "Intent to Remain".

Examining highly transferable jobs of secretaries, the model accounted for 14% of the variance in the original sample and 10% in the combined organizational sample. Dansereau et al. (1974) found similar results; the perceived expectancy of alternative employment moderated the relationship between attitudes of work and supervision towards turnover. Dansereau et al. found for both office employees and managers a mildly negative relationship between attitudes and turnover. Miller, Katerberg and Hulin (1979), using a sample of National Guardsmen, found that perceived alternatives were mildly related to turnover behaviour. However, in both studies the contribution of perceived alternatives was weak in aiding the understanding of turnover.

HYPOTHESIS II

Hypothesis II stated that the model would account for a greater percentage of the variance for specific job categories as compared to overall corporate measures. To examine this hypothesis the model was applied to each job category separately. By examining the data from a more homogeneous group, a group which shares much of the same job related conditions and attributes, the model should be a better estimator of turnover.

Generally, the results do not support this hypothesis. For most of the job categories, the variance in "intent to remain" explained by the model was less than the variance explained by a corporate wide anaylsis of the data. However, the model did account for 24% of the variance in "intent to remain" for professionals and 41% for middle/upper managers. These percentages were more than for a corporate wide analysis of the data. Hackman and Oldham's (1976) Job Characteristic Model may provide an explanation for the result. Hackman and Oldham state that motivation and satisfaction rely on three critical psychological states: (1) the experienced meaningfulness of work, (2) experienced responsibility for the outcome of the work, (3) knowledge of the actual results of the work activities. When these psychological states are present, Hackman and Oldham contend that employees are satisfied with their jobs, show internal motivation, show low absenteeism and turnover and produce high quality work. Hackman and Oldham hypothesized that these three psychological states resulted from five job characteristics:

Skill Variety: Job that requires a variety of abilities and skills.

Task Identity: The completion of whole and identifiable work projects as opposed to sectional operations.

Task Significance: The degree to which the job has impact on the lives of others.

Autonomy: The ability to perform and complete job requirements as one sees appropriate.

Feedback: Work activities providing clear knowledge of results.

It is highly likely that based on the nature of their jobs that these three psychological states may be more prevalent in the professional and upper management samples than in jobs of lower stature. Therefore, this may explain the greater percentage of the variance that the model accounted for in the professional and upper management sample.

However, the importance of studying turnover by job category cannot be over emphasized. By studying job categories, some of the variance in turnover explained by the model may be lost; but, this process may allow management a better understanding of the turnover process for each job category.

HYPOTHESIS III

The third hypothesis stated that the model would account for a greater amount of variance in "intent to remain" for males rather than females. The results from this study provided mixed support for this hypothesis. For

the original sample virtually no difference was found between males and females (18% and 19.6% respectively). On the other hand, the results for the combined data for the present study showed that the model did explain a greater percentage of the variance for males (males: 28.5%; females: 16.2%). Shott et al. (1963) also found that turnover was more predictable for males than for females. This study does not totally confirm their findings but the results do lend support to their research.

From an organizational point of view, it may be beneficial to study turnover across gender. The results indicate that very little variance (if any) is lost in the dependent variable by this procedure. However, greater sensitivity is gained by examining the results for each sex. That is, the organization obtains a better understanding of the attitudes of their employees concerning turnover.

FURTHER CONSIDERATIONS

The turnover model was constructed with Organizational Commitment and Job Satisfaction as the only direct antecedent variables to influence "intent to remain". Many previous studies have related these two variables directly to turnover (Hulin 1966; Porter et al., 1974; Porter et al., 1976; Waters et al., 1971, 1973). The model did account for a good proportion of the variance in Job Satisfaction and Organizational Commitment. Taking an average of the variance explained in Job Satisfaction and Organizational Commitment from Table 5 to Table 10, a mean of 34.4% and 48% was,

accounted for in these variables respectively. Many researchers have stated that Job Satisfaction and Organizational Commitment are major contributors of turnover. Being able to account for a great percentage of the variance in these variables allows one a certain confidence in understanding the dependent variable, "intent to remain".

The results of the present research coincide with the work of Peters et al. (1981). They stated that Organizational Commitment is significantly related to turnover and has a greater influence on turnover than Job Satisfaction. Mobley et al. (1979) also stated that when Job Satisfaction is included in multiple regressions with other variables (eg. commitment), the effect of Job Satisfaction on turnover may become nonsignificant. The path model (Figure A-2) for the overall measure of turnover for the combined organizational data support these arguments. In the present study, Organizational Commitment had a greater total effect on "intent to remain" than did Job Satisfaction (see Decomposition Tables A-1 to A-11).

Using the seven variables discussed in this study as a means to understand the process of turnover allows management an excellent opportunity to assess where to introduce an intervention program. This model incorporates variables that could be controlled by management. For example, Financial Compensation, Communication with Management, Supervision, Opportunity for Promotion, call all be changed either directly or indirectly through training by management. The advantage of the multivariate technique of path analysis is that it allows one to see and predict the extent of the effects of certain variables. As Ghiselli (1966) and

Owens (1976) have shown, biodata items are very useful in the understanding of turnover. However they were not included in the model because organizations can not actively control these variables. The present research shows that Organizational Commitment and Job Satisfaction are direct antecedents to "intent to remain". Therefore, if an organization is experiencing turnover, it may intervene by trying to increase an employee's Organizational Commitment and Job Satisfaction. The model shows that by influencing the antecedent variables which effect Organizational Commitment and Job Satisfaction, direct effects may be evident on an employee's intent to remain. A major advantage of this model is that it could possibly allow organizations to actively influence turnover.

Jeswald (1974) questioned whether all turnover is "bad" for an organization. He stated that certain types of turnover were advantageous; pay rates are less for new hires, eligibility for certain employee benefits which are associated with seniority do not mature, new hires may be an opportunity to upgrade the quality of the employees and opportunity for promotion is created for existing employees.

Dalton, Krackhardt and Porter (1981) also point out that the traditional view of turnover has been one where turnover is considered to be very expensive for the organization. Recently many articles have questioned the issue of turnover as being costly or dysfunctional (Staw, 1980; Staw and Oldham, 1978; Muchinsky and Morrow, 1980). Dysfunctional turnover defined by Dalton et al. is when an employee leaves an organization which would prefer to retain that individual. Functional turnover is when an employee decides to leave and the organization is

unconcerned or has a negative evaluation of the employee.. Dalton et al. (1981) recognize that even functional turnover is expensive with regard to hiring and training costs, but a "positive phenomenon" may balance out the situation.

In the same article Dalton et al. also looked at voluntary turnover with respect to the organizations control and lack of control of certain antecedent factors concerning turnover. Such factors which the organizations have no control are educational leave, family commitments, health matters, etc.. Their results indicated that half of the cases of dysfunctional turnover were not in the control of the organization. Overall, their results from a sample of bank employees (N=1,389) indicated that 71% of the turnover was functional and that 52% was unavoidable. The results imply that much of the turnover experienced by organizations may not be detrimental to their functioning.

Muchinsky and Tuttle (1979) and Schuh (1967) have advocated that studies that deal with predictor-turnover relationships be cross-validated. In part, the purpose of this study was to cross-validate the original 1983 study. Using a varied sample of organizations and job categories, this model of turnover has been quite consistent with the literature on turnover and its accountability of "intent to remain". Not only have the overall results within this study been consistent, this model has also been consistent with the findings of other research.

Due to the nature of the data gathering and statistical analysis, certain limitations must be considered with respect to this study. Using a

mail survey in gathering much of the data for this study, one is alerted to certain generalization issues. Although this research does provide good regional generalizability (Ontario and Maritimes) and incorporates various organizations, one must still take into account the fact that the number of nonrespondents in survey studies generally are quite high. The present study did have a good return rate, none-the-less one must be concerned with having a potentially biased sample due to the nonrespondents. As Gannon, Northern and Carroll (1971) have shown that survey respondents tend more often to be women, more highly educated, more stable, older and more effective workers.

The statistical procedure of multiple regression calls for a "large" sample size. There is a great deal of controversy concerned with the issue of how "large" a sample is large enough. Harris (1975), provides a formula (N-M)50, where N=sample size, M=independent variables) which allows the researcher to make valid conclusions from the data. While the majority of the results from the path analyses reported in this study exceed or closely meet the limits of this formula, the results from the research firm (N=47), the secretaries (N=54) from the combined sample (hospital, beverage firm, research firm) and the secretaries from the hospital sample (N=41) should be viewed with some caution.

In conducting the path analysis, standardized path coefficients were reported. Asher (1976) has stated that there are no formal rules as to deciding the use of standardized or unstandardized coefficients. However as stated by Nie et al. (1975, p. 397);

If one is interested in the relative amount of variance explained in Y for a given sample or population by various independent variables, the standardized coefficients are appropriate.

The nature of the study was not to make direct comparisons between subsets. Rather, it was concerned with validating the results from the original 1983 study and with increasing the variance accounted for in the dependent variable. Therefore, it was felt that the use of standardized coefficients was appropriate.

As stated in the method section, the questionnaire used in this study was developed by a private consultant, and no reliability or validity coefficients are available. In the original 1983 study, this questionnaire was then factor analysed, from which the seven variables emerged. This study represents a secondary analysis and a cross-validation of the original study. In order to reduce certain confounding elements, this study was required to incorporate the same questionnaire. It is suggested that the use of a more standardized questionnaire, eg. the Job Descriptive Inventory (Smith, Kendall and Hulin, 1969), or the Organizational Commitment Scale (Mowley, Steers and Porter, 1979), may help facilitate greater reliability and validity. However, this model as measured by this questionnaire provided consistent results with other models of turnover which use different measures for many of the same variables.

In conclusion, this study cross-validated the results from the original 1983 study as well as examined three hypotheses that were formulated with the intentions of improving the overall efficiency of the model. The results

proved rather mixed. For a sample of middle/upper managers, the model did a considerably good job of accounting for the variance in the dependent variable, "intent to reamin". None-the-less, other researchers in the past have not been able to improve greatly the efficiency of predictor models. It may be that prediction of turnover may not lend itself to much more improvement. Perhaps as Kraut (1975) has argued, an imposed model of turnover may not be effective and the employee has the best means of assessing his decision to quit or remain. Yet it is felt that a model, even accounting for a modest amount of the variance in "intent to remain", may provide greater understanding of the turnover process.

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APPENDIX A

TABLE A-1

Decomposition table for the original 1983 study across all job categories.

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super . --- Job Sat. .	.47	.16	.12	.28
Super. --- Comm./Mgmt.	.47	.47	-	.47
Super. --- Group Coh.	.54	.42	.11	.53
Comm/Mgmt. --- Organ. Comm.	.56	.32	.07	.39
Comm/Mgmt. --- Group Coh.	.45	.25	.19	.44
Group Coh. --- Job Sat.	.47	.23	.08	.31
Opp. for Prom. --- Job Sat.	.54	.36	-	.36
Opp. for Prom. --- Financial Comp.		.32	-	.32
Job Sat. --- Intent to Remain	.33	.14	.15	.29
Job Sat. --- Organ. Comm.	.60	.43	.06	.49
Financial Comp. --- Organ. Comm.	.30	.10	.05	.15
Organ. Comm. --- Intent to Remain	.41	.32	.06	.38

TABLE A-2

<u>Decomposition table for the present study (hospital, beverage manufacturing firm and research firm) across all job categories.</u>

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super. --- Job Sat.	.44	.24	.08	.32
Super. --- Comm./Mgmt.	.41	.41	–	.41
Super. --- Group Coh.	.43	.35	.08	.43
Comm/Mgmt. --- Organ. Comm.	.57	.29	.04	.33
Comm/Mgmt. --- Group Coh.	.35	.20	.14	.34
Group Coh. --- Job Sat.	.30	.21	.10	.31
Opp. for Prom. --- Job Sat.	.46	.30	–	.30
Opp. for Prom. --- Financial Comp.	.37	.37	–	.37
Job Sat. --- Intent to Remain	.26	–	.15	.15
Job Sat. --- Organ. Comm.	.46	.26	.09	.35
Financial Comp. --- Organ. Comm.	.34	.36	.03	.39
Organ. Comm. --- Intent to Remain	.44	.45	–	.45

TABLE A-3

Decomposition table for low transferable jobs from the original 1983 study.

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super : --- Job Sat.	.48	–	.07	.07
Super. --- Comm./Mgmt.	.48	.48	–	.48
Super. --- Group Coh.	.42	–	.25	.25
Comm/Mgmt. --- Organ. Comm.	.68	.36	.08	.44
Comm/Mgmt. --- Group Coh.	.53	.53	–	.53
Group Coh. --- Job Sat.	.46	.29	–	.29
Opp. for Prom. --- Job Sat.	.52	.39	–	.39
Opp. for Prom. --- Financial Comp.	.59	.59	–	.59
Job Sat. --- Intent to Remain	.18	–	–	–
Job Sat. --- Organ. Comm.	.75	.54	.05	.59
Financial Comp. --- Organ. Comm.	.46	–	.12	.12
Organ. Comm. --- Intent to Remain	.18	–	–	

TABLE A-4

Decomposition table of highly transferable jobs from the original 1983 study.

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super. --- Job Sat.	.47	.15	.17	.32
Super. --- Comm./Mgmt.	.49	.49	--	.49
Super. --- Group Coh.	.58	.47	.10	.57
Comm/Mgmt. --- Organ. Comm.	.57	.40	.08	.48
Comm/Mgmt. --- Group Coh.	.44	.21	.23	.44
Group Coh. --- Job Sat.	.51	.30	.09	.39
Opp. for Prom. --- Job Sat.	.50	.31	--	.31
Opp. for Prom. --- Financial Comp.	.31	.31	--	.31
Job Sat. --- Intent to Remain	.30	.16	.12	.28
Job Sat. --- Organ. Comm.	.56	.38	.08	.47
Financial Comp. --- Organ. Comm.	.29	--	.04	.04
Organ. Comm. --- Intent to Remain	.35	.26	.07	.34

TABLE A-5

Decomposition table of highly transferable jobs from the present study (hospital, beverage manufacturing firm, research firm).

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super. — Job Sat.	.32	—	.26	.26
Super. — Comm./Mgmt.	.56	.56	—	.56
Super. — Group Coh.	.62	.62	—	.62
Comm/Mgmt. — Organ. Comm.	.41	—	—	—
Comm/Mgmt. — Group Coh.	.43	—	.35	.35
Group Coh. — Job Sat.	.41	.41	—	.41
Opp. for Prom. — Job Sat.	.31	—	—	—
Opp. for Prom. — Financial Comp.	.20	—	—	—
Job Sat. — Intent to Remain	.32	.32	—	.32
Job Sat. — Organ. Comm.	.48	—	—	—
Financial Comp. — Organ. Comm.	.53	.53	—	.53
Organ. Comm. — Intent to Remain	.32	—	—	—

TABLE A-6

Overall variance accounted (R squared) by job category for the original 1983 study.

	R Squared	N
Clerks and Secretaries	.14	386
Middle/Upper Management	.41	88
Engineers/Professionals	.24	771
Operator of Specialized Equipment	-	70
Technicians	.14	370
Trades	.14	350
Supervisors	.13	88
Corporate Wide	.18	2,141

TABLE A-7

Overall variance accounted (R squared) by job category for the present study (hospital, beverage manufacturing firm, research firm).

	R Squared	N
Overall Combined Data	.20	536
(Beverage, Research Firm & Hospital)		
All Secretaries	.10	54
All Lab. Technicians	.13	117
Hospital	.14	404
Ward Clerks and Secretaries	.17	71
Nurses	.14	214
Lab. Technicians	.15	83
Secretaries (only)	–	41

TABLE A-8

Decomposition table for females from the original 1983 study.

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super. --- Job Sat.	.50	.20	.17	.37
Super. --- Comm./Mgmt.	.43	.43	--	.43
Super. --- Group Coh.	.56	.47	.10	.57
Comm/Mgmt. --- Organ. Comm.	.58	.40	-.08	.48
Comm/Mgmt. --- Group Coh.	.43	.22	.20	.43
Group Coh. --- Job Sat.	.52	.31	.11	.42
Opp. for Prom. --- Job Sat.	.50	.32	--	.32
Opp. for Prom. --- Financial Comp.	.31	.31	--	.31
Job Sat. --- Intent to Remain	.35	.18	.14	.32
Job Sat. --- Organ. Comm.	.56	.37	.09	.46
Financial Comp. --- Organ. Comm.	.26	--	.03	.03
Organ. Comm. --- Intent to Remain	.41	.31	.08	.39

TABLE A-9

Decomposition table for males from the original 1983 study.

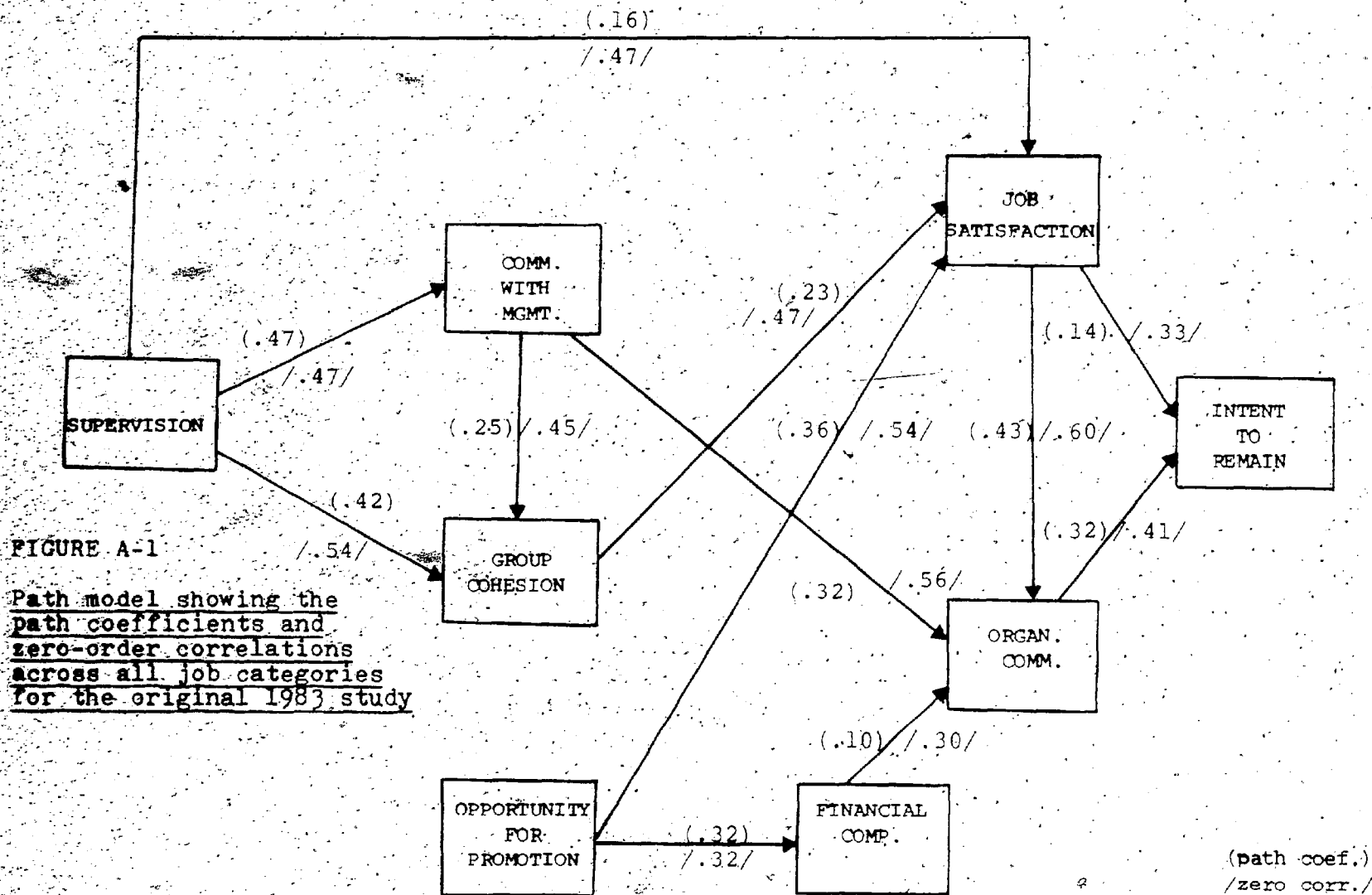|	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super. --- Job Sat.	.47	.16	.11	.27
Super. --- Comm./Mgmt.	.48	.48	–	.48
Super. --- Group Coh.	.54	.41	.13	.54
Comm/Mgmt. --- Organ. Comm.	.55	.29	.08	.37
Comm/Mgmt. --- Group Coh.	.46	.26	.20	.46
Group Coh --- Job Sat.	.46	.21	.08	.29
Opp. for Prom. --- Job Sat.	.56	.38	–	.38
Opp. for Prom. --- Financial Comp.	.35	.35	–	.35
Job Sat. --- Intent to Remain	.33	.12	.16	.28
Job Sat. --- Organ. Comm.	.62	.45	.06	.52
Financial Comp. --- Organ. Comm.	.32	.11	.06	.17
Organ. Comm. --- Intent to Remain	.41	.34	.06	.40

TABLE A-10

Decomposition table for females from the present study (hospital, beverage manufacturing firm, research firm).

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super. --- Job Sat.	.42	.26	.08	.34
Super. --- Comm./Mgmt.	.38	.38	–	.38
Super. --- Group Coh.	.37	.31	.06	.37
Comm/Mgmt. --- Organ. Comm.	.55	.33	.05	.38
Comm/Mgmt. --- Group Coh.	.29	.17	.12	.29
Group Coh. --- Job Sat.	.40	.22	.10	.32
Opp. for Prom. --- Job Sat.	.41	.27	–	.27
Opp. for Prom. --- Financial Comp.	.39	.39	–	.39
Job Sat. --- Intent to Remain	.29	.12	.14	.26
Job Sat. --- Organ. Comm.	.58	.35	.07	.42
Financial Comp. --- Organ. Comm.	.52	.20	.04	.24
Organ. Comm. --- Intent to Remain	.39	.32	.05	.37

TABLE A-11

Decomposition table for males from the present study (hospital, beverage, manufacturing firm, research firm).

	Original Corr.	Direct Effect	Indirect Effect	Total Effect
Super. --- Job Sat.	.46	-	.13	.13
Super. --- Comm./Mgmt.	.59	.59	-	.59
Super. --- Group Coh.	.56	.39	.16	.55
Comm/Mgmt. --- Organ. Comm.	.61	.26	.02	.28
Comm/Mgmt. --- Group Coh.	.51	.28	.23	.51
Group Coh. --- Job Sat.	.47	.24	-	.24
Opp. for Prom. --- Job Sat.	.58	.46	-	.46
Opp. for Prom. --- Financial Comp.	.35	.35	-	.35
Job Sat. --- Intent to Remain	.37	.18	.12	.30
Job Sat. --- Organ. Comm.	.44	.17	.12	.29
Financial Comp. --- Organ. Comm.	.69	.53	.03	.56
Organ. Comm. --- Intent to Remain	.51	.43	.05	.48

FIGURE A-1

Path model showing the
path coefficients and
zero-order correlations
across all job categories
for the original 1983 study
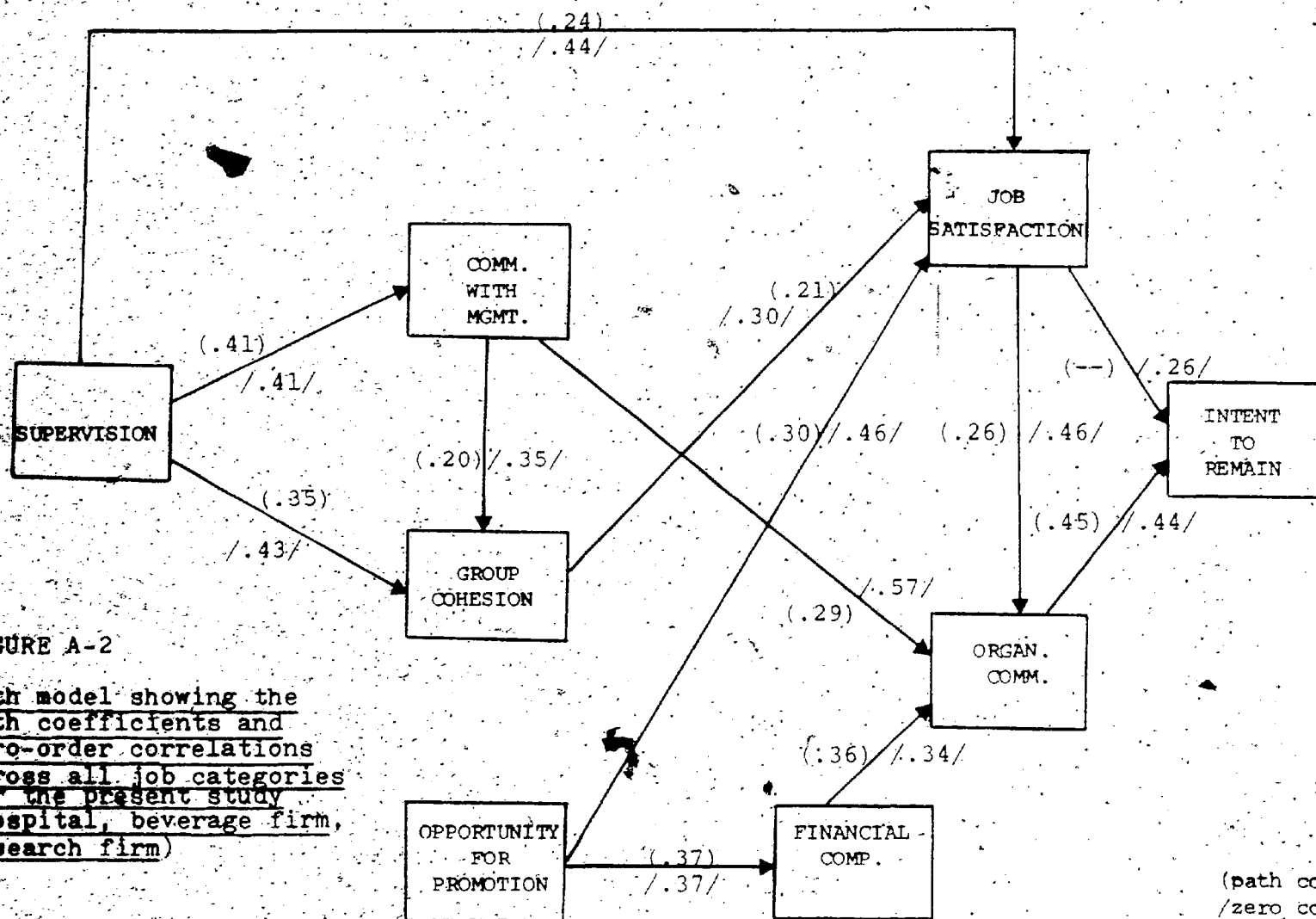
(path coef.)
/zero corr./

FIGURE A-2

Path model showing the path coefficients and zero-order correlations across all job categories for the present study (hospital, beverage firm, research firm)
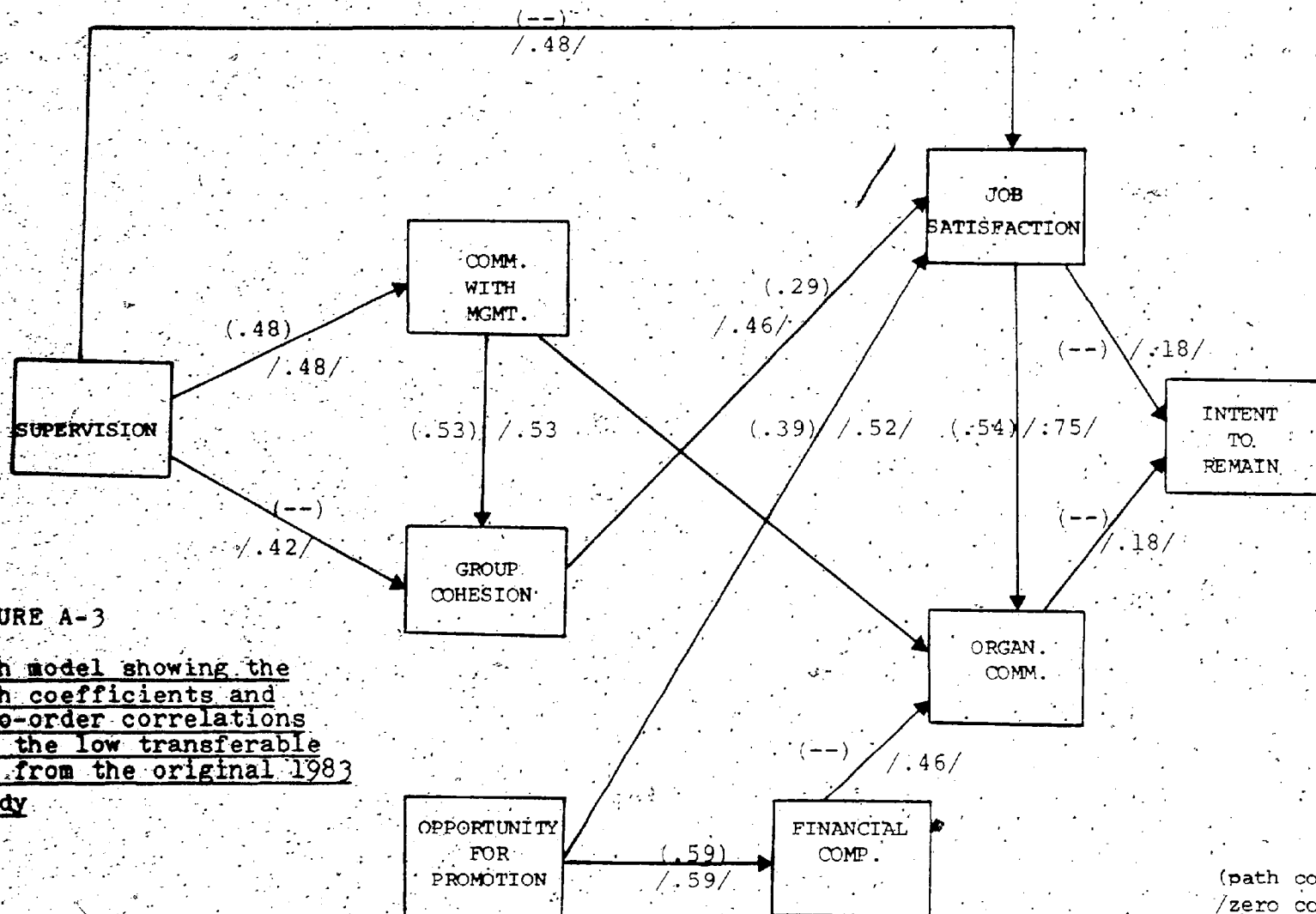
FIGURE A-3

Path model showing the path coefficients and zero-order correlations for the low transferable job from the original 1983 study
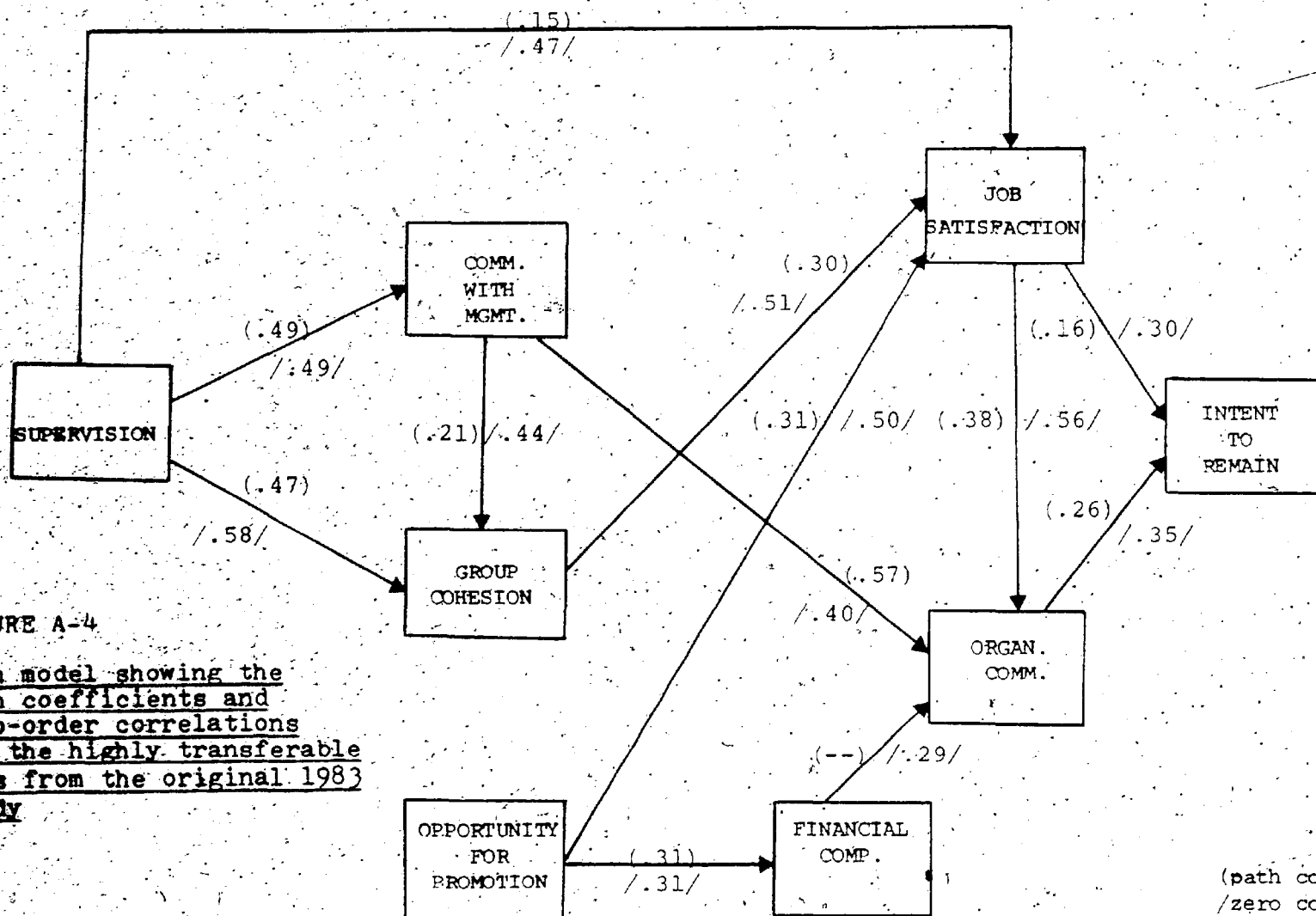
FIGURE A-4

Path model showing the
path coefficients and
zero-order correlations
for the highly transferable
jobs from the original 1983
study
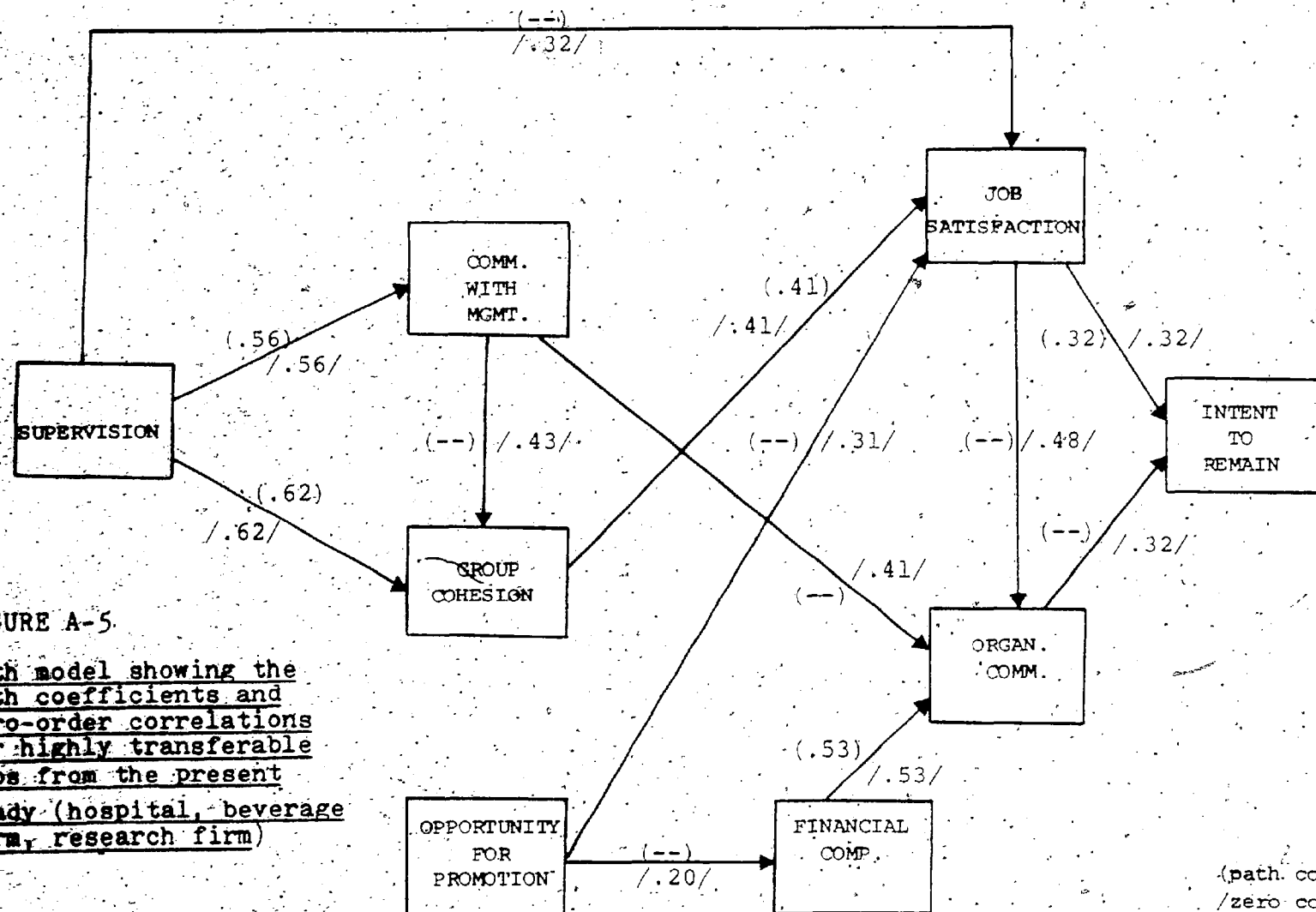
FIGURE A-5

Path model showing the path coefficients and zero-order correlations for highly transferable jobs from the present study (hospital, beverage firm, research firm)
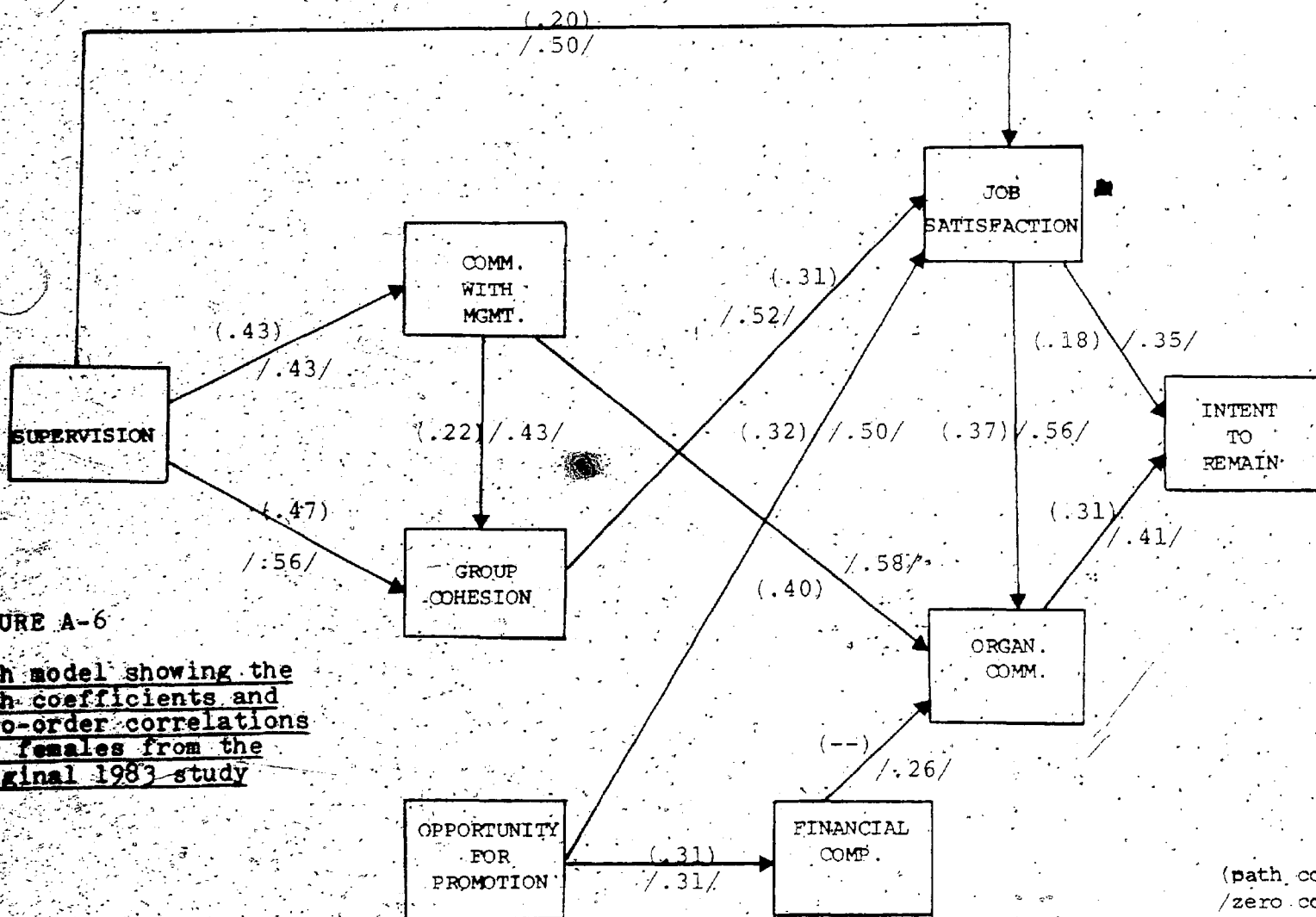
FIGURE A-6

Path model showing the path coefficients and zero-order correlations for females from the original 1983 study
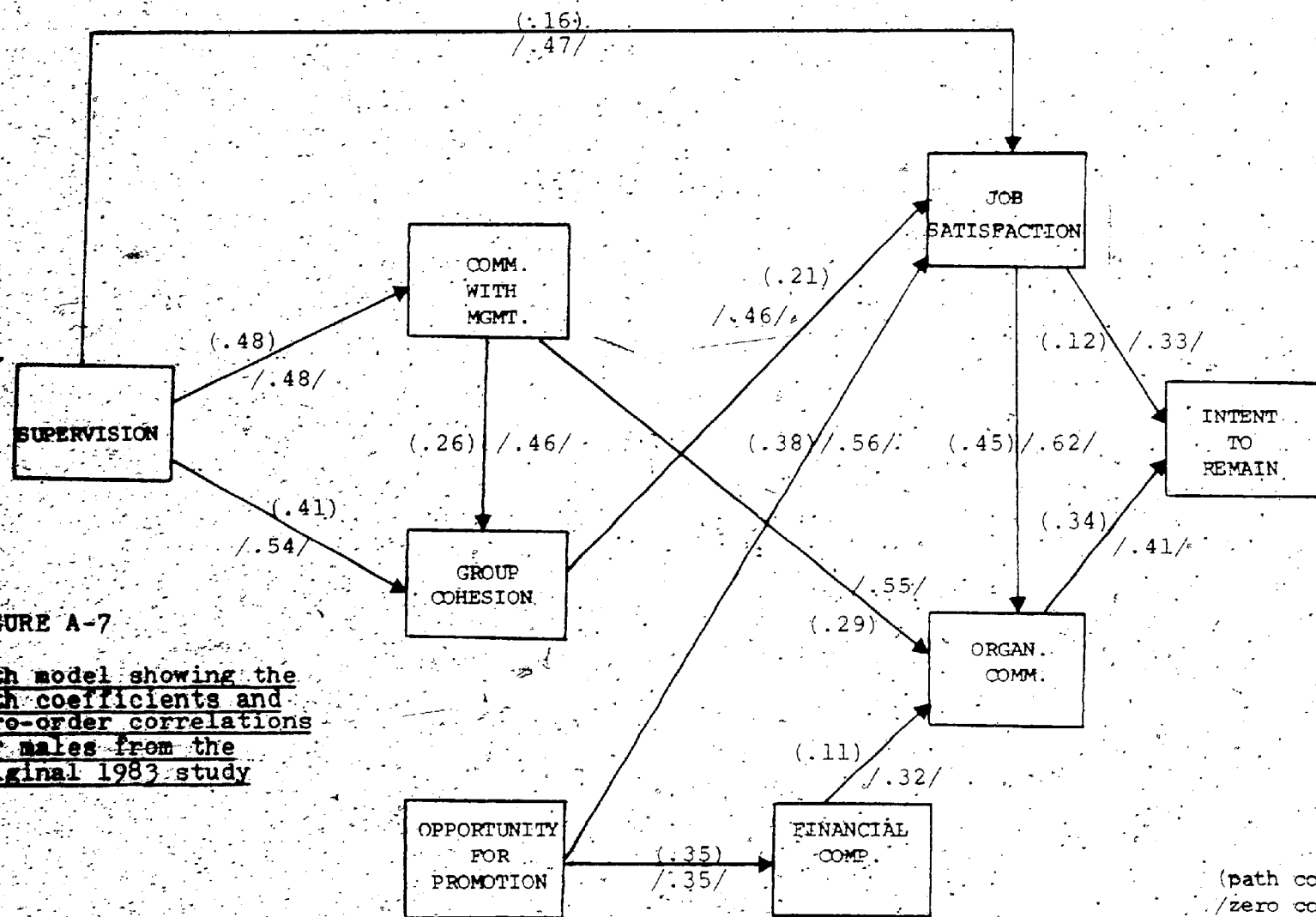
(path coef.)
/zero corr./

FIGURE A-7

Path model showing the
path coefficients and
zero-order correlations
for males from the
original 1983 study

(path coef.)
/zero corr./

EMPLOYEE OPINION SURVEY

You are invited to participate in a survey where your opinions about **(COMPANY NAME)** can be expressed. The views you express about your work environment, will be treated anonymously and in the strictest confidence. The information provided by the Employee Opinion Survey will enable **(COMPANY NAME)** to obtain a clearer understanding of your work environment.

INSTRUCTIONS

- To ensure confidentiality, you should **NOT** write your name on the questionnaire.

- When returning the questionnaire, be sure to **SEAL** the envelope.

- Please complete the survey on your own, rather than discussing your opinions with others.

- Please answer **ALL** the questions.

In **PART I** of the survey, there are 34 questions. For each item, you are to indicate how you feel about the PRESENT conditions. For each item, simply CIRCLE the number 1 2 3 4 5 6 7 which best describes how you feel at present about the item.

EXAMPLE

1.   I think my job is challenging.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Some of the questions mention your "supervisor". This refers to the person to whom you report to directly.

A definition that may be helpful:

Workgroup/Department; Your formal unit or department OR the employees you work with on a day to day basis.

PART I

COMMUNICATION WITH MANAGEMENT

1. People at the top of this organization are aware of the problems at my level of the organization.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. Sufficient effort is made to get the opinions and thinking of the people who work here.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. Management usually responds to employee suggestions.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. Management usually responds to employee complaints.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5. Management is interested in trying to improve the (COMPANY).

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

SUPERVISION

6. Overall how good of a job is being done by your immediate supervisor?

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7. How good is your immediate supervisor at listening to you and considering what you have to say?

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

8. My immediate supervisor helps me with work related problems.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

9.   My immediate supervisor is interested in my success.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

10.   My immediate supervisor lets me know exactly what's expected of me.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

JOB SATISFACTION

11.   Considering everything, how satisfied are you with your job?

Very Dissatisfied 1 2 3 4 5 6 7 Very Satisfied

12.   My job makes good use of my skills and abilities.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

13.   My work gives me a feeling of personal accomplishment.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

14.   I am really doing something worthwhile in my job.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

15.   My job is exciting and interesting.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

WORK GROUP COHESION

16.   How much cooperation is there in you workgroup/department?

Very Little 1 2 3 4 5 6 7 Very Much

17.   Conflict is dealt with constructively in my workgroup/department.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

18.   There is a feeling of teamwork in my workgroup/department.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

19.   How well does your workgroup/department solve interpersonal problems?

Very Poorly 1 2 3 4 5 6 7 Very Well

20.   People in my workgroup/department really trust each other.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

FINANCIAL COMPENSATION

21.   How do you rate the amount of pay you get on your job?

Very Poor 1 2 3 4 5 6 7 Very Good

22.   In comparison to people in similar jobs in other **(COMPANIES)**, I feel my pay is:

Much Lower 1 2 3 4 5 6 7 Much Higher

23.   How do you rate your total benefits program (insurance, medical, etc.)?

Very Poor 1 2 3 4 5 6 7 Very Good

24.   Generally, my pay is an accurate indicator of my performance.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

25.   How would you rate the benefits at **(COMPANY NAME)** in comparison to benefits offered by similar companies?

Much Lower 1 2 3 4 5 6 7 Much Higher

OPPORTUNITY FOR ADVANCEMENT

26. There is opportunity for advancement and promotion in **(COMPANY NAME).**

    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

27. There is opportunity for advancement and promotion in your branch (department).

    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

28. Generally, promotions in **(COMPANY NAME)** are based on good performance.

    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

29. How satisfied are you with your opportunity to get a better job in this company?

    Very Dissatisfied 1 2 3 4 5 6 7 Very Satisfied

30. I am given a real opportunity to improve my skills in this company.

    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

ORGANIZATIONAL COMMITMENT (Pride)

31. I am proud to a part of **(COMPANY NAME).**

    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

32. I feel a responsibility to help **(COMPANY NAME)** be successful.

    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

33. Considering everything, how would you rate your overall satisfaction with **(COMPANY NAME)?**

    Very Dissatisfied 1 2 3 4 5 6 7 Very Satisfied

34. I expect to be working at **(COMPANY NAME)** at least five or more years.

    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

PART II

DEMOGRAPHIC DATA

The following information will be used for a basic analysis of the results. This information will not be used to try and identify your booklet. If appropriate to your work situation, please answer ALL questions. For each question, circle the number that corresponds to your answer.

A. Please indicate in which area you work.

1.

2.

3.

4.

5.

B. Please indicate your present job category.

1.

2.

3.

4.

5.

C. Length of service with (COMPANY NAME) to nearest years.

1. 1 year or less

2. 2-3 years

3 4-5 years

4. 6-10 years

5. 11-15 years

6. more than 15 years

D. What is the length of time you have been in your current job level (to nearest years).

1. 1 year or less

2. 2-3 years

3 4-5 years

4. 6-10 years

5. 11-15 years

6. more than 15 years

E. Do you directly supervise any other (COMPANY NAME) employees.

1. no

yes, I supervise:

2. 1-2 employees

3. 3-6 employees

4. 7-10 employees

5. 11-15 employees

6. 16-20 employees

7. 21 employees or more

F.   Please indicate the highest level of schooling you have completed.

1.   less than grade 12

2.   grade 12 (or equivalent)

3.   grade 13 (or equivalent)

4.   community college program (did not graduate) or 1-2 years of university

5.   community college program (graduation)

6.   university degree

7.   honours university degree

8.   masters degree

9.   PhD or equivalent

10.   other (please specify)

_____

G.   Sex

1.   male

2.   female

H.   Age to the nearest year

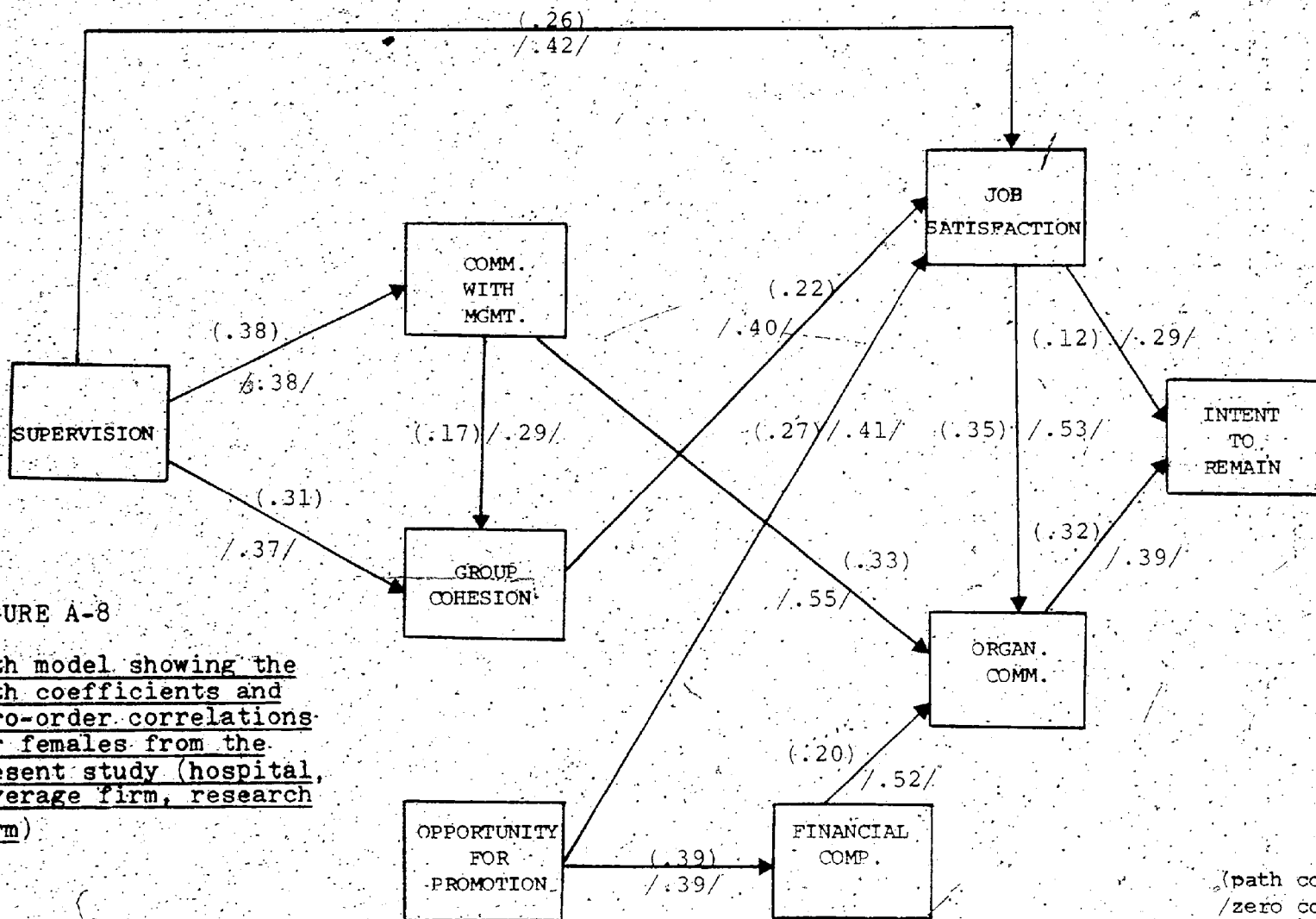|			
1.	less than 20 years old	6.	40-44
2.	20-24	7.	45-49
3.	25-29	8.	50-54
4.	35-39	9.	55-60
5.	35-39	10.	60 or older

FIGURE A-8

Path model showing the
path coefficients and
zero-order correlations
for females from the
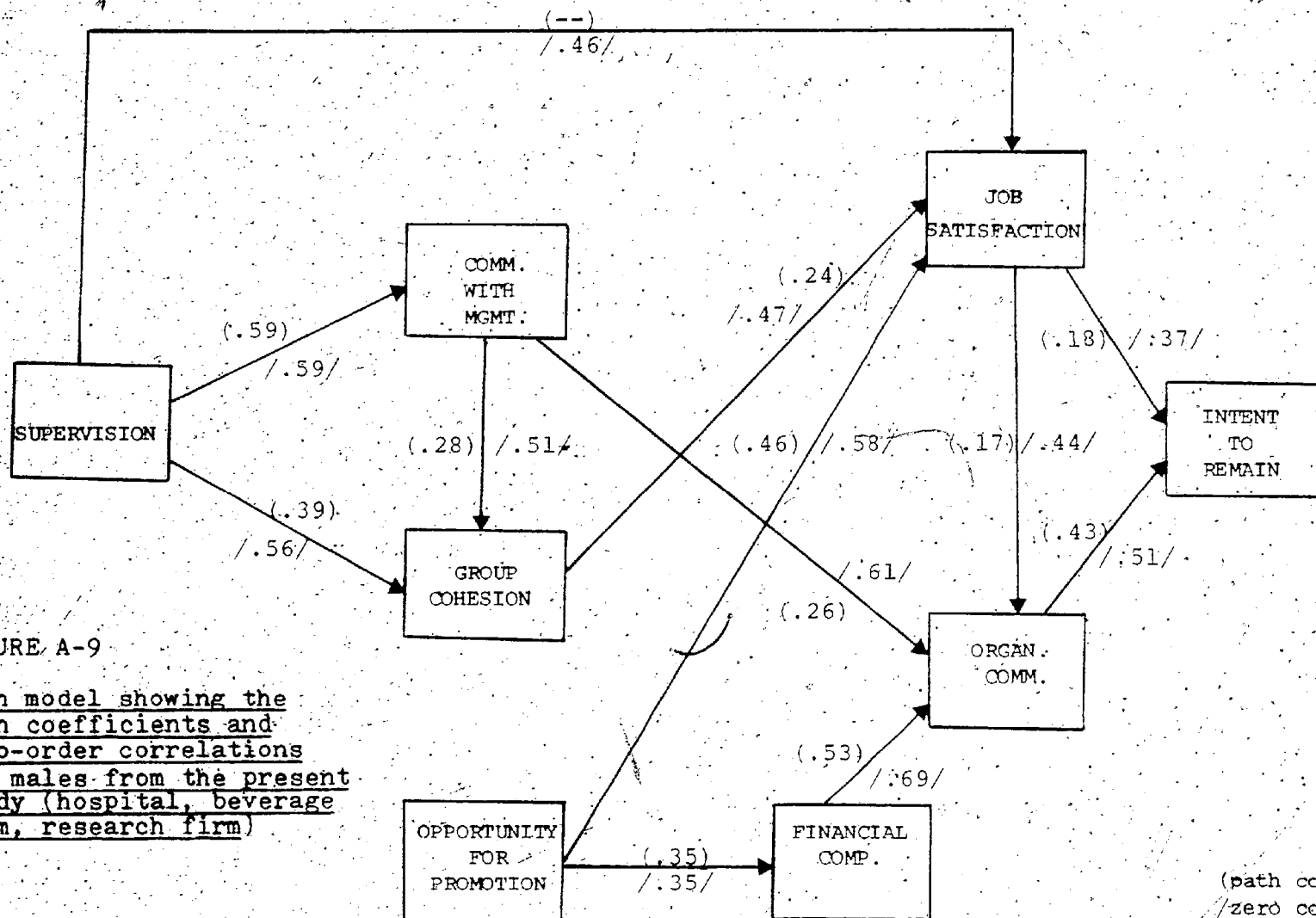present study (hospital,
beverage firm, research
firm)

FIGURE A-9

Path model showing the
path coefficients and
zero-order correlations
for males from the present
study (hospital, beverage
firm, research firm)

(path coef.)
/zero corr./

APPENDIX B