

Employee Turnover in Mexican Organizations: The Mexican Automobile Industry Case



Dr. Amado Felipe Vega R.

A high rate of employee turnover can lead to a decrease in productivity and production in organizations as well as high recruitment, selection and personnel training expenses. Therefore, it is necessary to be aware of and control the causes of said turnover in order to maintain a level which permits the smooth running of an enterprise.

The object of this paper is to look into the direct and indirect influences of certain variables which lead to employee turnover in the automobile industry. Said variables are classified in four groups: those of a personal nature, income, organizational and environmental. In the group concerning factors of a personal nature the following have been taken into account: age, sex, job satisfaction, alienation, schooling and hierarchic job level. Direct and indirect income have been included in the income group and mechanization, complexity, formalization, leadership styles and personnel communication have been included in the organizational group. Finally, the internal and external environment is analyzed in the environmental group.

THEORETIC FRAMEWORK

In this study reference is made to the leading research work done on the variables dealt with in this paper on employee turnover.

1. Employee turnover: Employee turnover, also known as movement, mobility or personnel separa-

tion, is defined by the author as the number of employees leaving, including voluntary resignations, dismissals and lay-offs in relations to the employee total during a given year. Employee turnover is calculated using the following formula:

$$E. T. = \frac{\text{Numbers of employees leaving}}{\text{Total number of employees}} \times 100$$

Certain causes of turnover are inevitable: illness, accidents, age, death and a variety of personal reasons. Nevertheless, a minimum turnover could affect the organization's vitality and frustrate the expectations of promotable employees. Therefore, it is necessary to maintain an adequate turnover for the smooth running of and organizations.

2. Personal Situation: Different forms of behaviour before an organization are studied and physical, intellectual and personality factors are taken into account.

2.1 Age: In accordance with studies done by Myers and Mac Laurin, Reynolds and Bakke, employee turnover is higher in the youth bracket than among older people even when skill and attributes remain constant.

2.2. Sex: Studies done by Myers and Mac Laurin, Brissenden and Frankel and Palmer, Yoder and Hauser have shown a higher turnover rate among male workers than female workers.

2.3 Job Satisfaction: In the studies done for the Universities of Minnesota and Michigan by Vroom and by Flowers and Hush, it was found that the higher the degree of job satisfaction, the less likely it is that an employee will resign; furthermore, it is less probable that an employee with high job satisfaction will show frequent and unjustified absenteeism.

2.4 Alienation: Asomoza found that the highest level of alienation is found in the "non-absentee" group and that "absenteeism is an escape valve for the incomformity that workers feel". Asomoza points out that when a person feels a high degree of alienation, the organization exerts a powerful influence which makes him dependant on it which, in turn, leads to an inability to make decisions.

2.5 Schooling: Reynolds found that blue-collar workers with schooling up to 2nd level were more likely to leave their present job than those who had less schooling. This was also found to be true in the army during WW II.

2.6 Hierachic Job Level: March and Simon show that members of the lower levels view work mobility as being more difficult than members at higher levels.

3 Worker's Economic Situation: Man's principal worry has been to find the means and resources to cover his needs. This means which represent income received in exchange for labor are, for purposes of this study, considered as being the worker's economic situation. Storey and Harrison found that there is a positive correlation between personal satisfaction and income received -which ties up with the findings at the University of Minnesota- in the sense that employee turnover is less when worker's income are higher than those for comparable jobs in a community.

4. Organizational Situation: The format of an organizational situation depends on the structures and is influenced by the behavior of the people within them. The production structure is determi-

ned by the mechanization or technology used; the administrative structure is determined by the complexity, formalization, leadership style and communication.

In the bibliographic research done on the variables which make up this situation, only empiric evidence was found on communication.

A study done by Mayo on the motives leading to constant job changes in a textile factory concuded that the reasons were:

- a) Little appreciation of work done.
- b) Monotony
- c) The worker being cut off from the rest due to deafining noise which makes communication impossible.

5. Environmental Situation: The author defines environmental conditions as being the internal and external factors in an organization which influence behavior. In the environmental situation within an organization there are two main aspects: the prevailing internal environment and the external environment in which the organization is located. According to March and Simon "the greater the number of alternatives perceived outside an organization, the easier it is to move".

Methodology

I. Situation Problem:

The Mexican automobile Industry which comprises of terminal businesses (where vehicules are assembled), the spare parts industry (which manufacture vehicule spare parts) and the bodywork and tractor divisions showed a high rate of employee turnover during the 1979-1981 period. In some cases, and according to information furnished by said industry, the turnover led to reductions in productivity, production volume and high costs in employee training and recruitment.

II. Problems:

Bearing in mind that the purpose of this research paper is to determine whether personal, economic, organizational and environmental factors influence employee turnover in the Mexican automobile Industry, the problem the solved is:

Which of the variables are more closely associated with employee turnover in the Mexican Automobile Industry?



III. Hypothesis:

The general hypothesis of this research paper is as follows: The factors which determine employee turnover in the Mexican Automobile Industry are related to the variables which determine the personal, economic, organizational and environmental situations.

This hypothesis is presented in table one.

IV. Sample:

A total of approximately one thousand Mexican Automobile Companies make up the field in which this study was done.

The sample is made up of 91 enterprises in the automobile industry and 540 people employed in them. The 91 enterprises are in both the public and private sectors; 13 are assembly plants, 58 are spare parts manufacturers and 20 in the bodywork and tractor divisions.

V. Measurement Instruments:

The following scales were chosen to measure the variables dealt with in this paper because of their functionality and usefulness:

Job Satisfaction, by Porter and Lawler, and used by Resenos.

Alienation, by Asomoza.

Direct Income, by Vega.

Indirect Income, by Vega.

Mechanization, by Inkson, Pugh and Hickson, as used by Asomoza.

Complexity, by Asomoza.

Formalization, by Hage and Aiken.

Leadership Styles, by Likert, as used by Resenos.

Communication, by Georgopoulos and Mann.

Internal Environment, by Vega.

External Environment, by Vega.

The scales mentioned above were modified by the researcher in order to adapt them to conditions in Mexico. The 11 scales with 103 items are divided into two questionnaires; one for the enterprise and one for the personnel, with an average answer time of 40 minutes of each one.

VI. Sample Development:

The businesses surveyed are located in Mexico City and in 30 municipalities in the following Mexican States: Baja California, Coahuila, Guanajuato, Hidalgo, Jalisco, Estado de México, Morelos, Nuevo

León, Puebla, Querétaro, San Luis Potosí and Sinaloa. The data were gathered during the months of May and June in 1981.

VII. Data Processing.

The data processing was carried out by means of the S.P.S.S. (Statistical Package for the Social Sciences). Bivariate correlation and Factor Analysis were used to ascertain the internal consistency of the scales.

Results and Discussion.

Instruments: the 11 scales used were satisfactorily validated. This confirms what has been previously obtained by Asomoza regarding "Alienation-Mex" and "Complexity-Mex" and by Resenos when referring to Leadership Styles in Mexico. The scales used abroad are adequate for our country when applied to Job Satisfaction, Mechanization, Formalization and Communication. Furthermore, the author of this paper has added four new scales: "Direct Income", "Indirect Income", "Internal Environment" and "External Environment" all of them for Mexico.

On applying these scales, the results obtained showed high reliability in the answers gathered in the surveys.

Employee Turnover:

According to the results obtained in this research, it was found that the independent variable that caused less employee turnover was high direct income. It was also found the employee turnover was higher among men than women.

In accordance with the above mentioned variable, it can be said the employee turnover is determined by personal (age and sex) and economic (direct income) situations.

Since this study was undertaken in a limited time period, there were no positive results on the environmental situation, especially concerning the external environment. Nevertheless, the author considers this factor to be of great importance since the involvement of the other three factors can be conditioned according to the country's economic situation: This research was undertaken in 1981, a year which registered a GNP growth rate of 8% ,



which led to a high demand for labor and made it easy to be mobile.

In 1982 there was a recession in the Mexican Economy which led to massive lay-offs and a lower degree of voluntary turnover.

In a study carried out in 22 businesses of the Spicer group, the average voluntary turnover dropped from 8% in 1980 to 4% in 1982.

This shows that job availability in the market is a dominant factor in voluntary resignations.

The hypotheses used in this research paper, after having analyzed the results of the empirical test, will be finally represented in Table 2.

The companies surveyed consider that a high level of employee turnover can lead to a decrease in productivity in production as well as high costs in recruitment and personnel training.

Leadership Style and Alienation:

The results of the correlation coefficients between the independent variables used in this study are of great importance for the administration when relating to leadership styles and alienation.

The variables which determine the personal situation, with the exception of sex, have an important association with some of the variables which determine the organizational and environmental situations. The hierarchic job level and the schooling of the subordinates determine the leadership style which, in turn, influences communications, internal environment and job satisfaction. All of the values, excluding age, determine the degree of worker's alienation. Other associations are found within this general context, as in the case when hierarchic job level is set by schooling and age. This level also influences the type of communication and has a bearing on job satisfaction. The results are shown on Table 3.

Economic Situation of the Worker.

Other important associations found in this study are those which determine the worker's economic situation (direct and indirect income) which correlates with the following organizational situation variables: Formalization, Complexity, and Mechanization.

Direct Income is determined by an organization's complexity, and Mechanization as well as by Indirect Income. The degree of Formalization establishes the level of Indirect Income.

These results are due to the fact that the larger enterprises (which normally have a higher level of formalization, complexity and mechanization) have more financial resources to provide higher incomes for the personnel.

CONCLUSIONS.

* The study showed that instruments to perceive Job Satisfaction, Alienation, Direct and Indirect Income, Mechanization, Complexity, Formalization, Leadership Styles, Communication and Internal and External Environments have a high degree of validity and reliability.

* Two of the fifteen hypotheses proposed in the study were accepted. In these two it was shown that Sex and Indirect Income determine Employee Turnover.

* It is proposed that:

a) There is a higher degree of turnover among men than among women and that greater the number of workers, the higher the turnover rate.

b) A Higher direct income corresponds to lower employee turnover.

* When the economic growth rate of a country is high, the most important variable in determining voluntary turnover is direct income, in accordance with its correlation coefficient. Nevertheless, when facing a recession or a decline in economic activity, the most important variable is the external environment since when there is a drop in job availability due to massive lay-offs, most people try to hold on to their jobs.

* The hypotheses corresponding to the personal situation were not accepted; this could be due to the fact the people who had been laid-off were not interviewed.

* A high rate of employee turnover can lower production and productivity and increases the costs

of recruitment and training processes. On the other hand, minimum turnover can affect the company's vitality and frustrate the expectations of promotable employees.

* According to the sample, in 1980 the Mexican Automobile Industry showed a total employee turnover rate of 37.6% which is considered as being very high since it means that more than a third of the personnel voluntarily left the industry during that year.

* Based on the most notable associations among the independent variables it is proposed that.

- a) Older Subordinates occupy a higher hierarchic level and their superiors used a more democratic leadership style.
- b) The greater the subordinates' job satisfaction, the better the internal environment and the less the alienation. Further, there is a greater job satisfaction for the subordinates when their superiors use a more democratic leadership style.
- c) Less job satisfaction, communication, schooling and hierarchic job level correspond to greater alienation. It also leads to an inadequate internal environment. The subordinates show more alienation when their superiors use a less democratic leadership style.
- d) The higher the level of schooling, the less alienation and the higher the hierarchic job level. Furthermore, the leaders use more democratic styles when dealing with subordinates with higher scholastic levels.
- e) A higher hierarchic job level corresponds to a higher age and schooling and less alienation in subordinates to whom a more democratic leadership style is applied.
- f) If the direct income is higher then a higher indirect income is obtained and the formalization in the organization is greater.
- g) The higher the indirect income, the higher the direct income and the greater the formalization in an organization.
- h) The higher the level of mechanization, the higher the direct income given by the organization to the employees.
- i) The greater the complexity of an organization,

the higher the direct and indirect income earned by the employees.

j) The greater the formalization of an organization, the higher the indirect income.

k) The superiors use a more democratic leadership style when the subordinates are older, have more schooling, a higher hierarchic job level and less alienation; thus obtain better communication, internal environment and job satisfaction for the same subordinates.

l) In the higher hierarchic job levels there is more communication which leads to a better internal environment and less alienation.

Subordinates' communication is better when the superiors use a more democratic leadership style. m) If there is satisfactory internal environment, the subordinates experience greater communication and job satisfaction as well as less alienation and a more democratic leadership style is applied to them.

* Besides the findings on employee turnover, other significant results which relate to administration were found. These results principally refer to leader behavior, alienation and the employee's economic situation.



Table 1.

HYPOTHESIS OF VARIABLES WHICH DETERMINE EMPLOYEE TURNOVER.

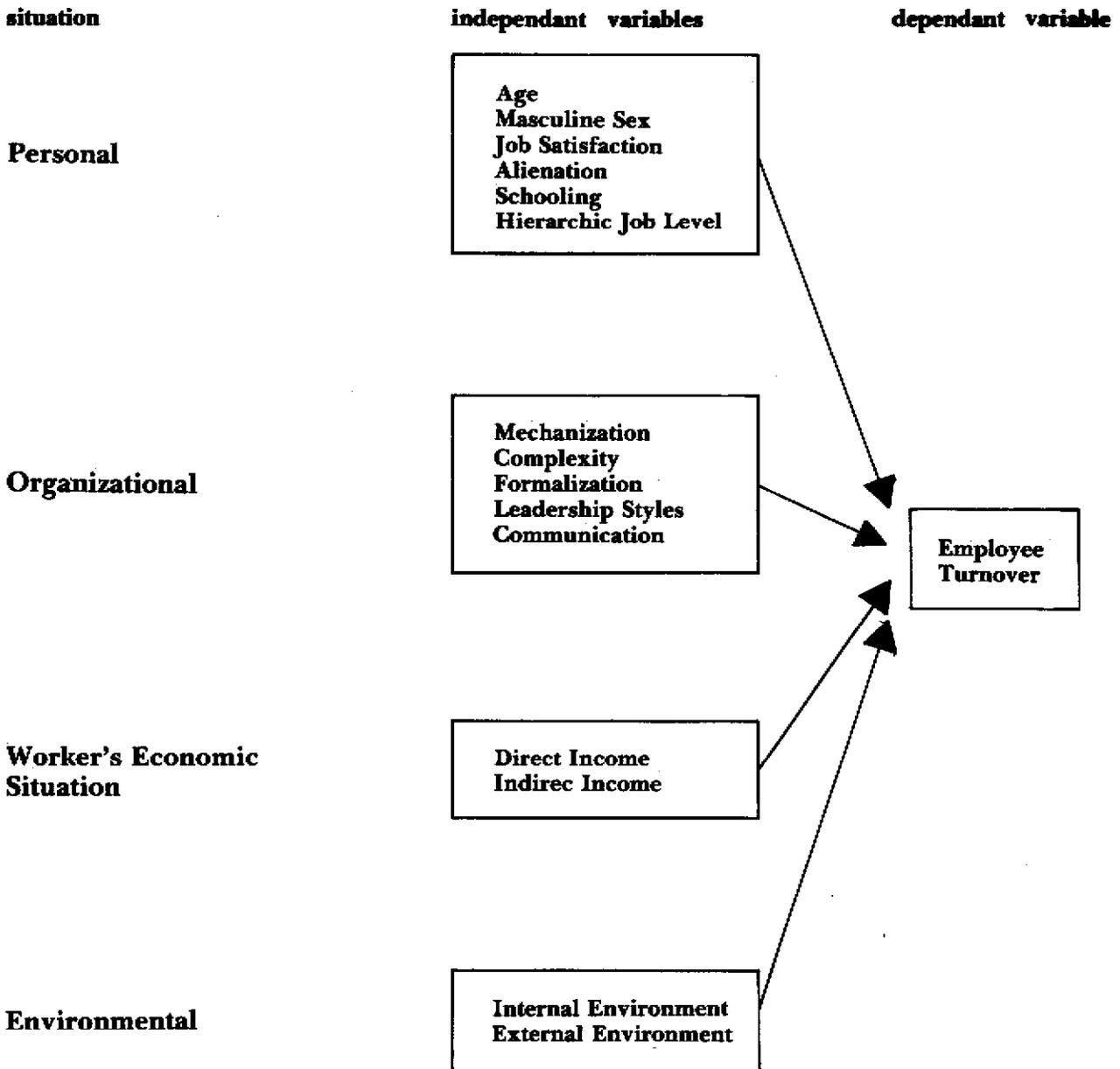


Table 2.

ASSOCIATION OF VARIABLES WHICH DETERMINE EMPLOYEE TURNOVER.

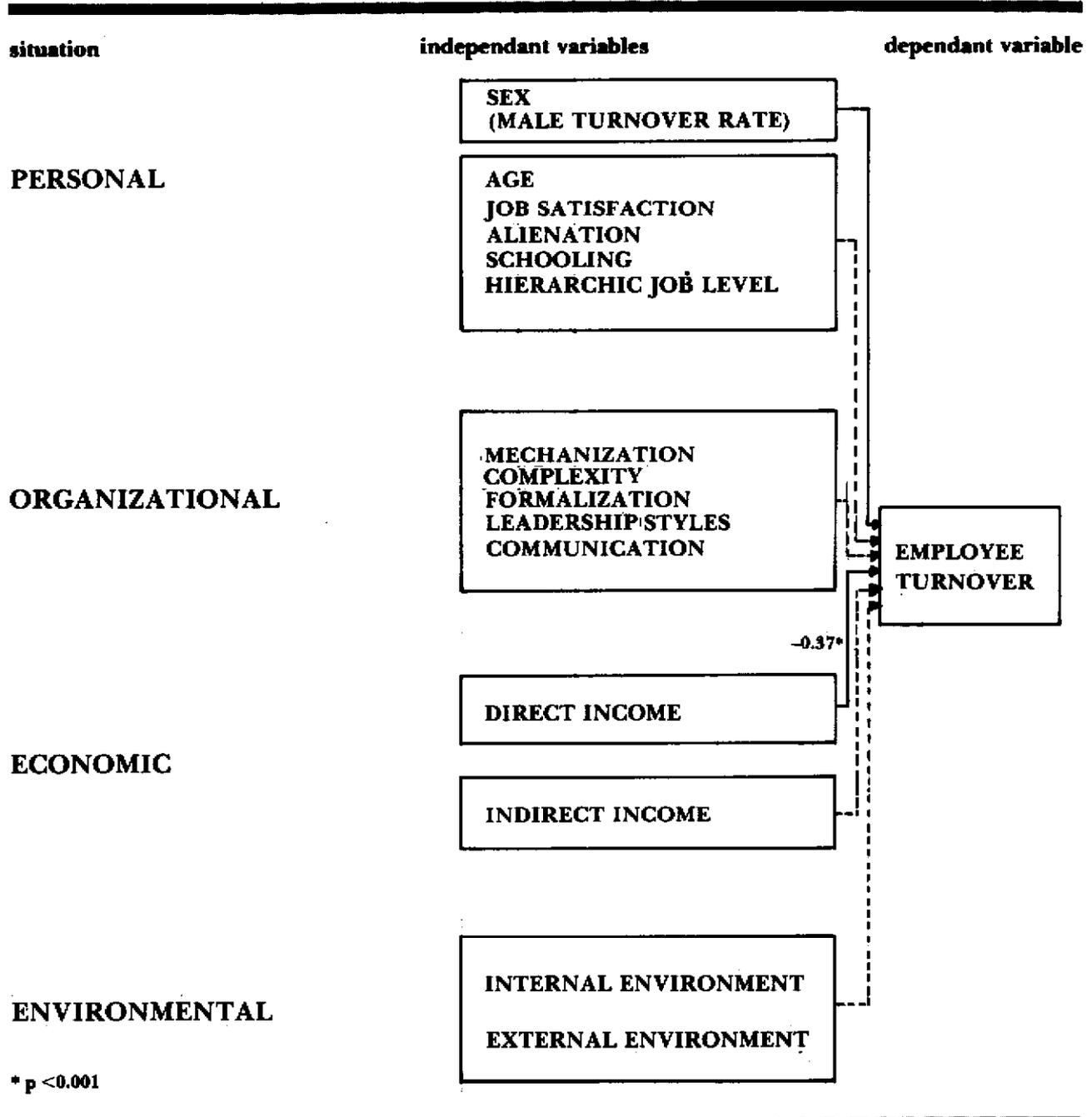
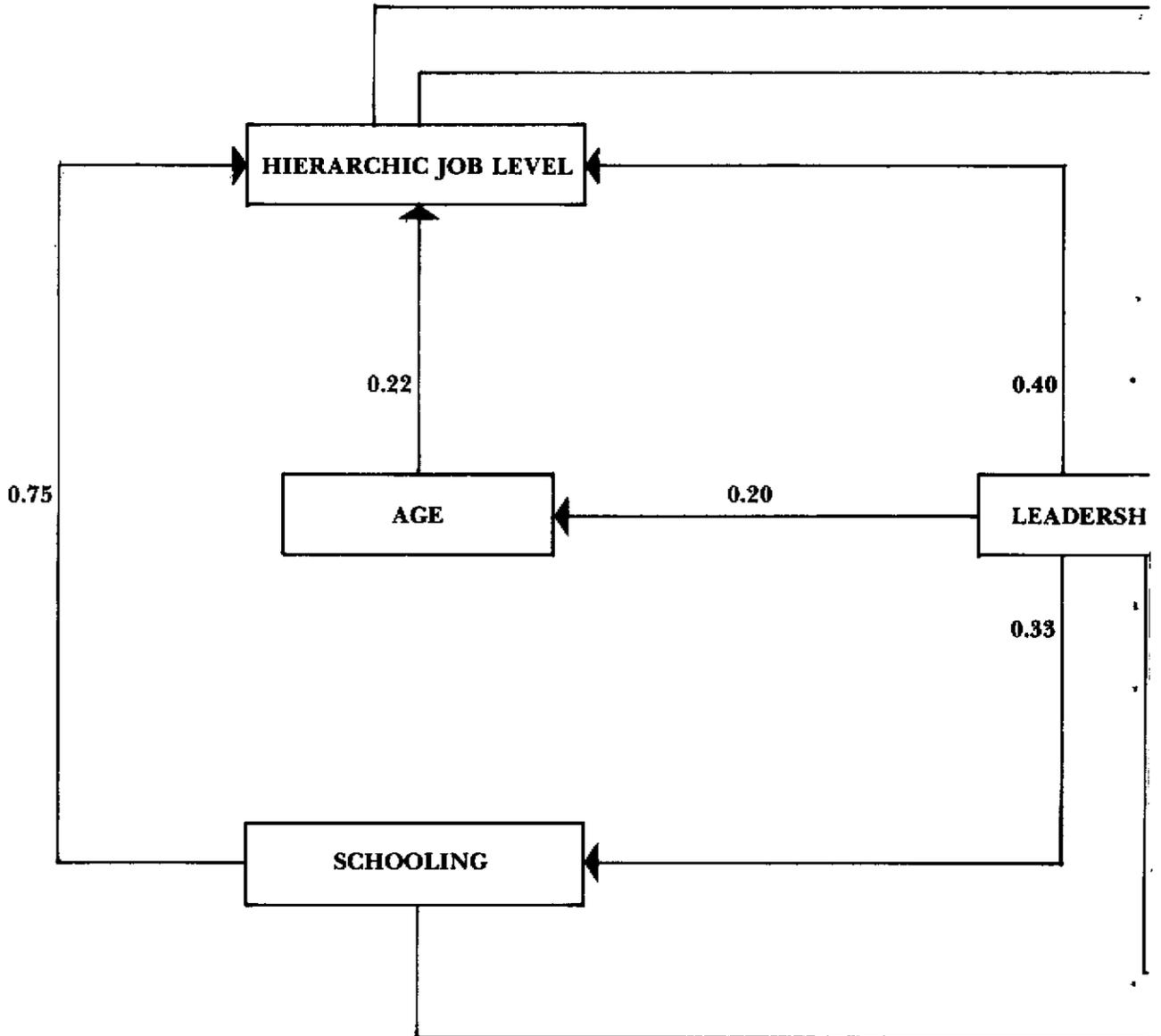


Table 3.

ASSOCIATION OF VARIABLES WHICH DETERMINE LEADER BEHAVIOR AND ALIENATION.



* $p < 0.001$
 (*) Taken at the lowest level.



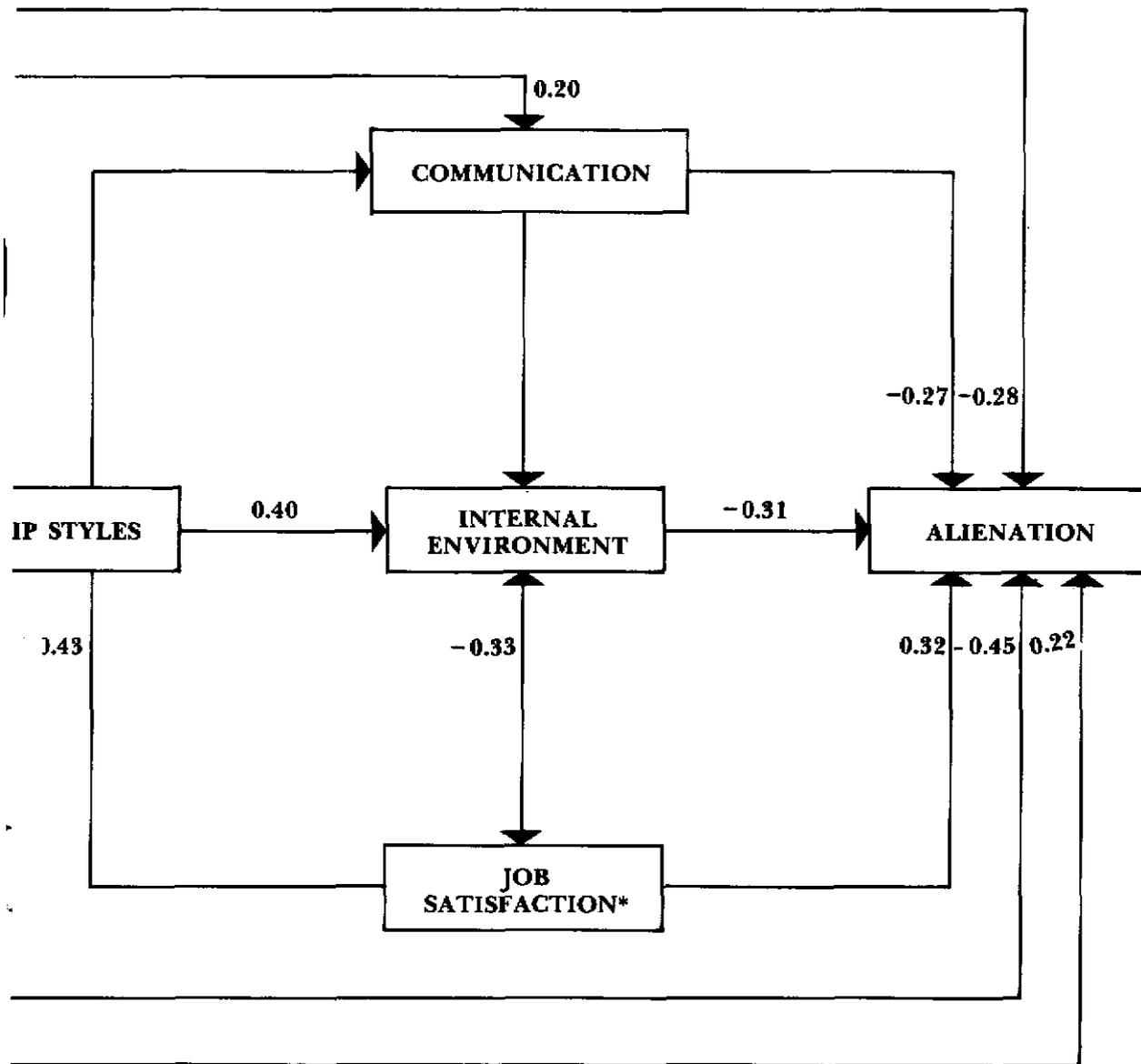
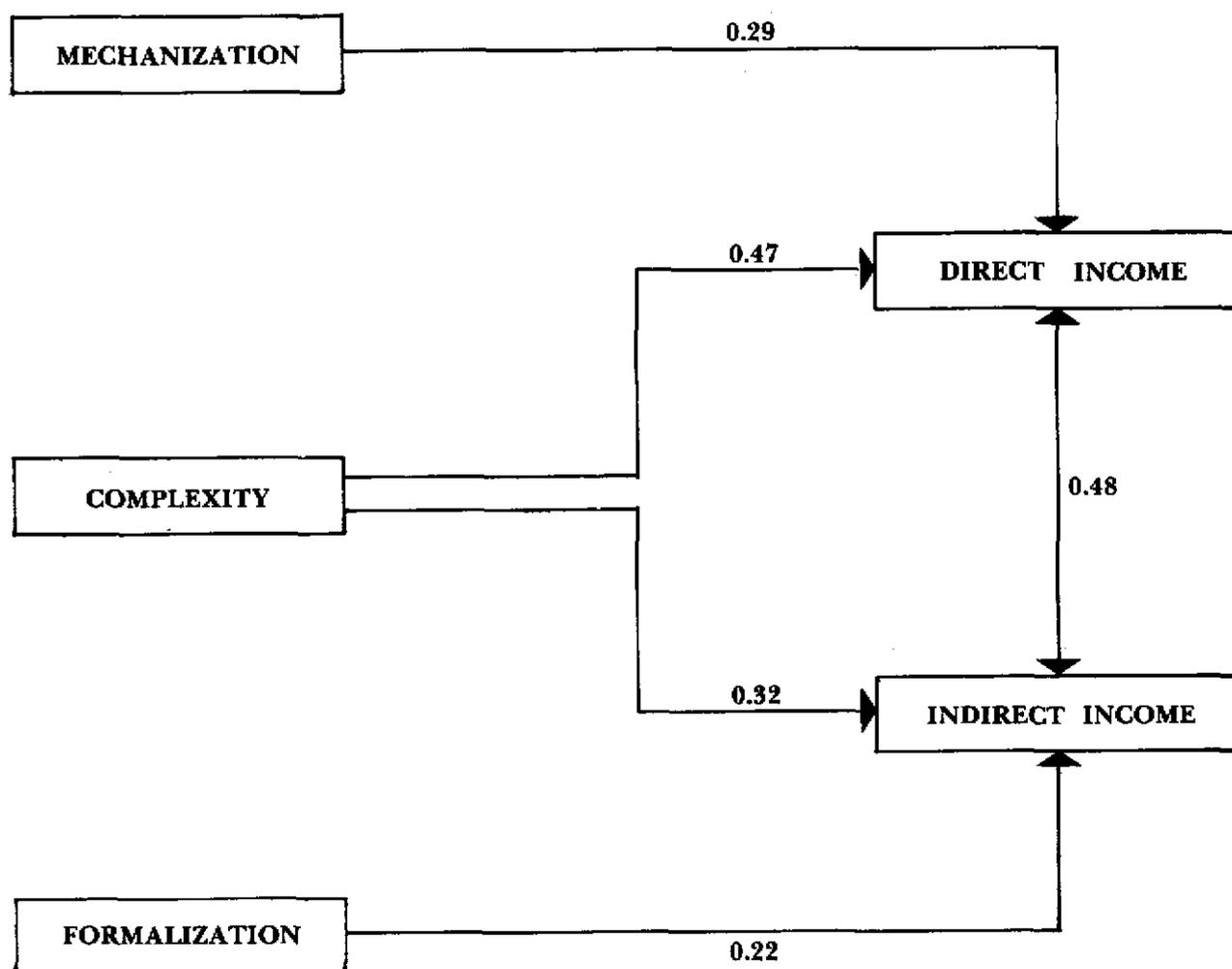


Table 4.

**ASSOCIATION OF VARIABLES WHICH DETERMINE
THE WORKER'S ECONOMIC SITUATION.**

$p < 0.001$