Work Group Behavior & Work Groups Effectiveness

K J Pillai

Indian Institute of Management Calcutta

1976

Thesis Summary

This research is about Work Group Behavior. In general, it aims to test and confirm Sayles' findings on the influence of Technology on Work Group Behavior and on the influence of Work Group Behavior on Work Group Effectiveness. Precisely, the study attempts to understand Work Group Behavior along Sayles' lines, that is to understand:

i. the difference in behavior of Work Groups;
ii. the association of variables namely, Technology and Work Group Size with Work Group Behavior;
iii. the association of Work Group Behavior with Work Group Effectiveness; and
iv. incidentally, the associations of Technology and Group Size with Work Group Effectiveness, too.

Among the justifications of the study are the need for:

i. more and detailed evidence on Technology-Behavior relationship
ii. quantitative (besides qualitative) measurement of work Group Behavior and Technology; and
iii. verification of the findings reported from a study elsewhere, in the Indian setting.

The following hypotheses were tested:

H : 1 Work Group Cohesiveness is associated with Technology.
H : 2 Work Group Prestige & Power is associated with Technology.
H : 3 Work Group Pressure is associated with Technology.
H : 4 Work Group Predictability is associated with Technology.
H : 5 Work Group Effectiveness is associated with Work Group Cohesiveness.
H : 6 Work Group Effectiveness is associated with Work Group Prestige & Power.
H : 7 Work Group Effectiveness is associated with Work Group Pressure.
H : 8 Work Group Effectiveness is associated with Work Group Predictability.
H : 9 Work Group Size is associated with Technology.
H : 10 Work Group Cohesiveness is associated with Work Group Size.
H : 11 Work Group Prestige & Power is associated with Work Group Size.

H : 12 Work Group Pressure is associated with Work Group Size.

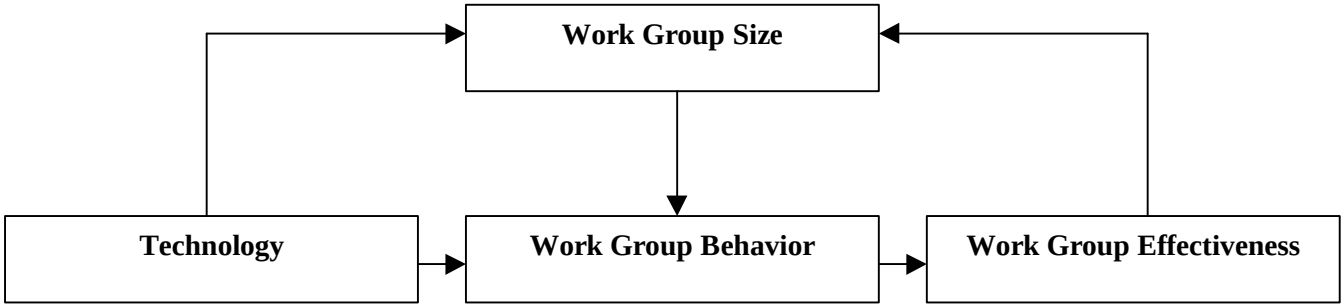
H : 13 Work Group Predictability is associated with Work Group Size.

H : 14 Work Group Effectiveness is associated with Work Group Size.

H : 15 Work Group Effectiveness is associated with Technology.

The summary of the relationship investigated is indicated by Figure 1.

Figure 1



The statistical technique used for testing the hypotheses was chi square test of association.

An Engineering firm ("Company G") in Calcutta was chosen for the investigation. 28 Work Groups were selected for the study, using random sampling.

Work Group Behavior was dimensionalized and operationalized as: (i) Work Group Cohesiveness (ii) Work Group Prestige & Power (iii) Work Group Pressure, and (iv) Work Group Predictability, based on Sayles' descriptions of behavior of different groups.

Technology was studied from the standpoints of "Types" and "Task Attributes". For studying Technology Types, Harvey's classification of Technology was adopted. For measuring Task Attributes, the Turner and Lawrence scale was used. Work Group Effectiveness was measured using Mott's scale.

Both descriptive and statistical analyses were attempted to bring out the Technology-Behavior association and the Behavior-Effectiveness association. At the descriptive level, the following were the main findings and conclusions:

a) Technology of the Shops was found to be classifiable as Technical Diffuseness, Technically Intermediate, Technical Specificity (along Harvey's continuum);
b) The 3 technology types were found to differ in their levels of required Task Attributes (following Turner & Lawrence)
c) When Behavior Scores and Effectiveness were classified into degrees namely High, Medium etc. and analyzed, it was possible to conclude that :
    a) Technology when considered alone does not influence Work Group Cohesiveness
    b) Technology does influence Work Group Prestige & Power
    c) Technology does influence Work Group Pressure
    d) Technology does influence Work Group Predictability
    e) None of the 4 dimensions of Work Group Behavior influences Work Group Effectiveness.

Statistically, the following were the main findings and conclusions:

i. Technology is both directly indirectly associated with Work Group Behavior but both the direct and indirect associations are only partial. That is, out of the four behavior dimensions namely Cohesiveness, Prestige & Power, Pressure, and Predictability, Technology is found to have association (Statistically) with only 2-dimensions, namely Prestige & Power, and Pressure.
ii. Work Group Size is found to be associated with only 2 of the 4 dimensions, namely Prestige & Power, and Pressure (the same as above)
iii. And thus, both Technology and Group Size are only partial predictors of Work Group Behavior (as defined in the present study).
iv. Neither the Behavior dimensions, nor Group Size, nor Technology are found to be associated with Work Group Effectiveness (as defined in the present study).
v. And thus, neither the Behavior dimensions (as defined in the present study), nor Technology, nor Group Size are predictors of Work Group Effectiveness.

It was further concluded that if Work Group Behavior and Work Group Effectiveness as approached in the present study are to be understood fully, there is a need for further investigation, that is, into other possible Variables influencing Behavior and Effectiveness. At

the descriptive level, there are indications that the following are possibly the other Variables influencing Work Group Behavior and Work Group Effectiveness:

1. Perceived Management System practiced by their foremen.
2. Levels of Alienation
3. Levels of Wages
4. Rural-Urban background
5. Religious Homogeneity
6. Caste Homogeneity
7. Socio-Economic background
8. Level of education
9. Occupational Aspirations
10. Level of Skill
11. Degree of Commitment to Factory Work
12. Degree of Involvement in the Union
13. Incentive Satisfaction

A thorough investigation into these possible, additional Variables constitutes a direction for future research.