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ORGANIZATION DEVELOPMENT FOR ECONOMIC
DEVELOPMENT IN LATIN AMERICA: RESULTS OF
A FOUR-YEAR ACTION-RESEARCH PROGRAM*

Jaud D. Anthony Butterfield and *Franklin* George F. Farris

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*Prepared for delivery at the International Congress of Applied Psychology, Liege, Belgium, July, 1971. This study was supported by Ford Foundation grant 670-0122A.

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ORGANIZATION DEVELOPMENT FOR ECONOMIC DEVELOPMENT
IN LATIN AMERICA: RESULTS OF A FOUR-YEAR ACTION-RESEARCH PROGRAM*

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Increasing numbers of psychologists and other behavioral scientists are turning their attention to the problems of developing countries. Four symposia and colloquia devoted to developing countries at the present ICAP, versus one in 1968, attest to this trend. At the 1968 ICAP, a status report was given on the application of psychology to development banking and economic development in Latin America (Farris, 1968). The field work on that project is now completed, and the present paper offers some preliminary results and conclusions.

The Project

Early in 1967 the Ford Foundation granted funds to MIT and the National Development Bank (NDB) of a Latin American country to develop a collaborative program of technical assistance in development finance. A major goal of the project was to increase the effectiveness of a development finance program operated by the NDB through state and regional development banks throughout the country. The program provided long term credit at low interest rates to small and medium size firms. (It shall be referred to as the "SMF" program in the present paper.) As each project was approved, money was passed from the NDB to the state and regional banks which in turn repassed it on to the borrowing firm.

* Prepared for delivery at the International Congress of Applied Psychology, Liege, Belgium, July, 1971.

As Farris stated at the 1968 ICAP, the MIT-NDB project sought to (1) provide training in current concepts and skills of development banking for professional employees of the agent banks, (2) establish an effective system of information flow and evaluation procedures for decision making and loan control, and (3) build an effective national system of state and regional development banks. The effort was an interdisciplinary one, involving specialists in information systems and development finance as well as psychology.

Throughout, emphasis was placed on working with organizations to get systemic improvements, not just improvements within a single organization, and not just improvements within single individuals. Emphasis was also placed on using whatever techniques were necessary to meet important needs, and on using systematic measurements to discover needs and document changes. Training courses, organization development activities, and management information systems were utilized as appropriate. Finally, continual efforts were made to institutionalize contributions of the project so that advances could continue after the visiting social scientists left.

This action-research, multi-disciplinary, organizational level approach can be compared with two other models for providing assistance to developing countries. On the one hand there is the institution-building-for-future-managers approach, typified by the Michigan State University program to establish a business school in Sao Paulo (Taylor, 1968); on the other hand, there is the grass-roots-training-of-individual-entrepreneurs approach, typified by McClelland's work with the achievement motive (McClelland and Winters, 1969).

Both approaches are valuable; both have limitations. The former requires a long time for pay-off and frequently contributes little in the way of research. The latter may not have much long term effect on economic development if achievement training isn't institutionalized and if high achievers aren't also good managers. The present model, by working at the organizational level through the institution at the apex of the development finance system, offers substantial leverage for achieving both long and short term improvements in economic development.

What follows are some results of this approach in terms of systemic changes in performance and important intermediate variables. Perceptions about causes of change are also presented, as well as a brief description of major project interventions and institutionalization.

Systemic Changes

Data on the performance of the SMF system indicate considerable improvements occurred during the operational phase of the project. For the 13 banks on which complete before-after data are available, number of projects approved by the NDB increased from 73 in 1968 to 122 in 1969 to 190 in 1970, yearly increases of 67% and 56%, respectively. Time necessary to process the loans, after they reached the NDB, was reduced from an average of 59 days in 1968 to 41 days in 1969, a 30.5% savings. Preliminary examination of the 1970 data indicates further reductions in delays. The SMF system is thus granting more loans, and doing so in less time.

Opinions from a variety of sources also indicate improvement. National Development Bank experts evaluating the performance of the agent banks frequently saw improvement from year to year, and only rarely judged a bank's performance

as deteriorating. Similarly, 59% of 98 entrepreneurs who filled out a questionnaire evaluating their regional development bank saw improvement, while only 4% felt bank performance was getting worse. (Thirty-four percent did not know of any change in performance and 3% did not answer the question.) Agent bank personnel themselves thought their banks were improving their SMF operations. On an item from a questionnaire administered in 16 agent banks, 74% of 223 respondents answering saw from moderate to very great improvement in the last three years, while 12% saw little and 7% saw no improvement in SMF operations over the three-year period.

In addition to these objective and perceived improvements in performance, before-after measurements were made on relationships between the NDB and regional development banks. Questionnaires were administered to agent banks early in the project, and again at the close of the project.* Table 1 presents combined bank averages for those items dealing with communications within the SMF system. Data from Table 1 indicate that there was significant positive change in communications within the SMF system.

 Insert Table 1 about here

Other questions about relationships within the system reveal similar improvements.

Perceived Causes of Improvements

The systemic changes in both performance and relationships among SMF banks, while comforting to observe, do not necessarily indicate that the project had such a favorable effect. Other factors could have brought about the improvements.

* Time between the before and after measures varied from approximately 3 years to approximately 1 year, due to differences in timing of the before measure. These differences in time did not affect change scores.

At the end of the after questionnaire, we asked bank personnel how much improvement (if any) they saw, what the possible causes of this improvement were, and how much help the project had been to their organization. These data are presented in Table 2, broken down by degree of bank involvement with the project.

 Insert Table 2 about here

It is evident from the top and bottom lines of Table 2 that banks which participated more actively in the project saw greater improvement in SMF operations and saw the project as being more of a help than did banks less involved in the project. The effect of involvement is greatest for those two items. More involved banks tend to attribute more of an effect to all of the possible causes, except for better procedures within the bank.

It is unlikely that the possible causes are independent. For example, the project developed the NDB courses, and also worked to improve procedures within the national and regional development banks. Note that the category, "Other project activities", does not distinguish significantly between low and high involved banks and is not seen as a major cause. Yet, "Time, learning, and experience", seemingly not a function of the project, is the perceived cause with the greatest difference between low and high involved banks, and is seen as an important cause. Thus, experience was helpful for all the banks, some (those in the high involved group) more than others. Whether this was because of the project, or because of some predisposition to benefit from experience, we can't be sure.

Additional analyses of involvement revealed two interesting tendencies. First, as Figure 1 shows, the more highly involved banks tended to be better performers initially (as measured by number of projects per bank) and to remain so throughout, although both high and low involved banks improved.

Insert Figure 1 about here

Since involvement in the project was largely a function of the bank's own initiative, this may indicate that the better banks were more attracted to the project and, subsequently, got more out of it. Second, banks with least involvement in the project, namely with courses but nothing else, tended to be lower performers initially and to improve less than banks with involvement in the course and at least one other project activity, either organization development or management information systems or both. Thus, more effective banks may have seen more potential benefits to participation in the project, and participation beyond courses alone may have been the key to receiving those benefits. We report these findings as tendencies since other factors unaccounted for may also be influencing the results. In any case, greater involvement in project activities is related to greater perceived benefits to the bank.

Interventions and Institutionalization

There were three major interventions by the project: courses, management information systems, and organization development. Three courses in development finance, with particular emphasis on project appraisal, were held in the home city of the NDB. Each lasted two months. A total of 86 development bankers from 30 financial institutions, including two private investment banks, attended these courses. By design, MIT played a decreasing role in each course. The NDB is now planning to run additional courses on its own, and has designated part of its facilities as a training center.

A management information system for small and medium size firms, the type served by SMF, was developed by the project. Based on experimental work with two

firms testing the system, a regional bank with MIT's help held a special course in management assistance for 14 persons from 6 banks. The bank subsequently created a department of management assistance and has plans to make a major effort in this field, one sorely needed by small and medium size firms in the country.

Organization development work was based on a survey-feedback program organized by MIT through the NDB (Butterfield, 1970). The program reached 16 SMF banks and was very well received. It utilized the Likert Profile of Organizational Characteristics (Likert, 1967) as a quick and easy means of providing information about the human side of the organization to each bank. The NDB is now discussing ways of using the profile periodically.

Conclusions

Because the present study is lacking in rigorous experimental control, conclusions must be tentative. The data suggest that the SMF development finance system has improved and that the MIT-NDB project has had beneficial effects, especially for those banks more involved with the project. We are now in the process of analyzing the data about change more thoroughly, as well as additional data about organizational effectiveness of the development banks.

The leverage afforded by virtue of working at the top of a development finance system did help bring about systemic change. One hazard in working at the organizational level in such a system is that of spreading resources too thinly to make a genuine impact. While this hazard was apparently avoided in the present project, the data from Table 2 and our own impressions

suggest that, had more project resources been available, and had banks been able to become more involved in the project, benefits might have been greater. Courses alone, while valuable, may not be sufficient. It's the old story of getting out of something what you put into it.

Success with the SMF financial system is leading the National Development Bank to consider operating other development funds in a similar manner. Success with the contributions made by the MIT project is leading to institutionalization of those contributions within the system. From our experience and the data of this report, it appears that applied psychologists can influence socioeconomic development through systemic change efforts with development finance institutions.

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TABLE 1

Before-After Changes in SMF System Communications:
 Combined Averages for 14 Banks

<u>Questionnaire Item</u>	<u>Before</u>	<u>After</u>	<u>p</u>
"...do you get sufficient information about:"			
a) NDB* decisions affecting your work	1.96**	2.41	.01
b) NDB plans and objectives for SMF	2.23	2.51	.05
c) Functioning of NDB/SMF system .	2.19	2.51	.05
d) Activities in progress & projects of general interest	1.73	2.16	.01
e) Functioning of your institution as SMF agent	2.20	2.50	NS

*NDB-National Development Bank

**Scale reads from (1), "much less than I need", to (3), "about all that I need", to (5), "much more than I need".

TABLE 2

Perceived Improvement, Possible Causes, and Overall
Effect of Project by Bank Level of Involvement
in Project Activities

<u>Questionnaire Item</u>	<u>Bank Involvement in Project Activities</u>		<u>p</u>
	<u>Low (N=80)</u>	<u>High (N=120)</u>	
Improvement in SMF operations	2.86*	3.38	.01
Improvement due to:			
Time, learning, experience	3.41	3.85	.01
NDB courses	3.06	3.29	NS
Other project activities	2.84	2.94	NS
Better procedures, own bank	3.30	3.23	NS
Better procedures, NDB	3.19	3.30	NS
Overall helpfulness of project to bank	2.64	3.22	.01

Note - Involvement based on amount of bank participation in course, organization development, and management information system activities. Categorization derived from records made by project personnel independently of questionnaire data. N of banks is 8 for Low and 8 for High categories.

* 5 point scale: (1) = none, (5) = great.

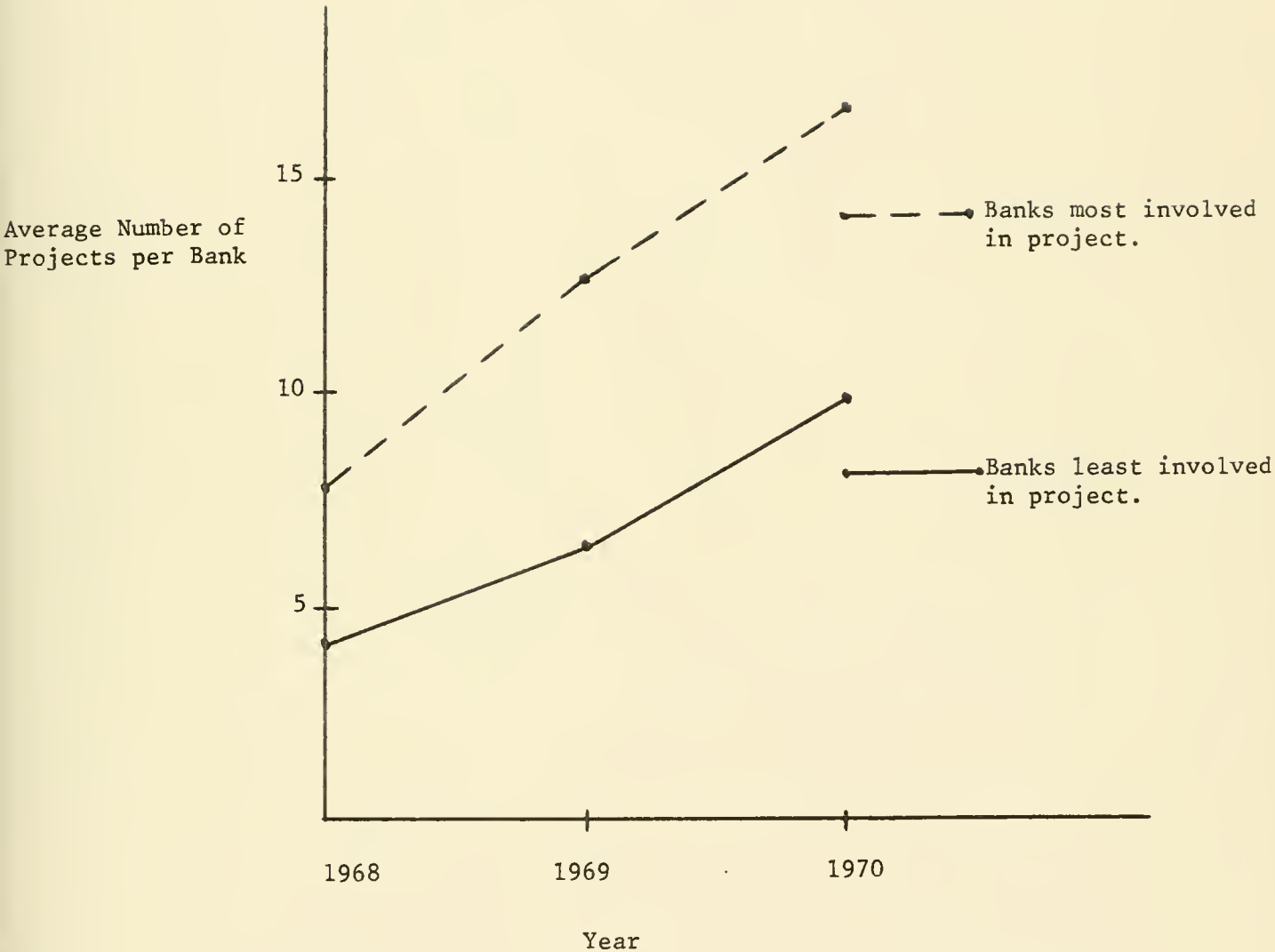


Fig. 1. Average number of projects per year for banks most and least involved in project activities.

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