

URBAN INTEGRATION: A COMPARATIVE STUDY

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## ABSTRACT

### URBAN INTEGRATION: A COMPARATIVE STUDY

By

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The purpose of this research was to examine the process of integration in urban environments of different levels of economic development. A three-phase analytic paradigm was chosen as the appropriate theoretical conceptualization as it provided an opportunity to study the ameliorating and mitigating forces that might influence the urban dweller's eventual integration.

Data were collected in an industrialized city, Lansing, Michigan; a stable city, Moose Jaw, Saskatchewan; and, data were made available for an industrializing city, Santiago de Chile. Functional equivalence between the questionnaires resulted from original equivalence of questions or by later manipulation of coding categories.

Differences existing between the phases of integration were sufficiently large in extent and variety to merit the use of a wider theoretical perspective. Acculturation variables contributed to the largest number of significant relationships over all sample cities while adjustment variables contributed least. Determinants of success in larger society and measures of cultural integration were found to be more viable indices of urban integration than adjustment of participation variables.

Differences between communities in terms of the relative strength of dependent and independent variables existed and a pattern emerged. Universalistic criteria, such as education, were more salient than particularistic criteria, such as nativity, in the more industrialized community. In the industrializing community, particularistic criteria were more pertinent. This trend also applied to categories of integration - particularistic variables found expression in communities where exposure to individual values and the requisite social structure to support and transmit those values exists.

Differences existed among the categories of the dependent variables across the communities but the strength of the relationships between the independent and dependent variables did not decrease from higher to lower levels of industrialization as expected. A U-shaped distribution resulted primarily because the industrializing community sufficiently resembled the industrialized community.

Implications of this research for a theory of modernity are discussed. Methodological considerations for cross-cultural research are presented.



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By

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For any errors of a technical or interpretive nature, the author assumes full responsibility.

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## CHAPTER I

### INTRODUCTION

...However, knowledge and ignorance of habit patterns are as truly a means of migration as a railroad ticket or the railroad itself. For, if one is accustomed to the habits and patterns of life of a big city, this is as truly helpful to transportation to a city as a railroad ticket. The more experienced in the ways of life of a city a person may be, the easier the transition, and presumably, the more inclined the person is to make the transition. Thus it was probably easier for Daniel Boone to move from Virginia to Kentucky than it is for a person in Brooklyn today to move to the Alaskan wilds, owing to the differences in experience or culture patterns.

Jane Moore, Cityward Migration,  
(Chicago, University of Chicago  
Press), 1938, p. 130.

The purpose of this research is to investigate the process through which migrants, living in cities of different levels of economic development, become integrated into an urban way of life; that is, to search for some causal factors that influence city dwellers to accept and demonstrate those values defined as urban. Such a project would contribute to our knowledge and understanding of integration and urbanism.

With the fluctuation in numbers and interest in international migration to North America, population redistribution within a country, internal migration, has held the interest of researchers and speculators. This interest is also due indirectly to the recognition of the fact that urban growth depends not only upon natural increase in population in urban areas but also upon a continual net gain of migrants from rural or other urban areas. The changes in economic and social life which

have resulted, such as expansion of industrial production, technological advances, decline in agricultural employment and the secularization of value systems -- to name a few concomitants -- have raised our interests in the change process underlying the phenomenon of internal migration. Of the more pertinent writers in this area, Shannon and Shannon express a position we endorse: "...a decline in the proportion of foreign-born in cities or in the number or proportion of persons involved in city-ward migration does not necessarily mean that the impact of migration<sup>1</sup> on urban areas is decreasing."

The justification for pursuing such research then is three-fold: (1) There is a scholarly interest in the effect of a change in environment on behavior which is largely of man's own making; (2) In a pragmatic vein, much of the time and effort spent on urban assimilation programs are based on the assumption that movement to the city and residing there are the only two sufficient conditions to be satisfied for successful urban living; and, (3) Migration is an integral part of industrialization and economic development. As the urban setting provides the catalyst for social and economic changes, the study will shed light on some of the important boundary conditions affecting the change process.

By controlling for environmental factors in the place of origin and destination of migration, we can begin to search for certain

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Lyle W. Shannon and Magdaline Shannon, "The Assimilation of Migrants to Cities," in Leo F. Schnore and Henry Fagin (eds.), Urban Research and Policy Planning: I (Beverly Hills, Calif., Sage Publications, Inc., 1967), p. 50.

regularities predictable on sociological principles concerning the affect of environment on behavior and give validity to these principles for predictions as to the process of social change in general in other related fields of social life. Currently such a task is difficult given the rough estimates available from census migration data. Few countries (Sweden is the outstanding exception) even have a systematic procedure for reporting migratory behavior. Census data also provide no direct information useful for inferences about causes and motives for migration to cities.<sup>2</sup>

The present research takes into account the manifold forces known and/or assumed to exert positive causal influence on the process of integration into urban life. As a result, more utility could be gained from current census data aside from exploring a number of migration differentials. Given the public demand for fewer social science questions in the census, we must seek alternate forms of evaluation of whatever data may be made available as supplemented by information from sample surveys.

As will be pointed out in following chapters, the concern with migration and urban integration as a social process is justified on two grounds. Firstly, the procedure forces the researcher beyond the limited data available in the census. Secondly, it ensures the pursuit of a sociological endeavor. Conceptual analysis presumably leads to rigorous

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The weakness of census data for use in the study of the process of migration is accurately discussed by K.C. Zachariah, "Bombay Migration Study: A Pilot Analysis of Migration to an Asian Metropolis," Demography, 13, (1966), pp. 378-92; and in a special United Nations report, Problems of Migration Statistics, Population Studies No. 5 (New York, United Nations, 1949).

propositions concerning the components of the major concepts involved but previous researcher's central concern with personality equilibrium prevents consideration of a sociological formulation. An overconcern for techniques and procedures has delayed the study of social organization and social effects in the system of interaction in which they take place.

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An attempt to formalize such a procedure may be found in Frank E. Jones, "A Sociological Perspective on Immigrant Adjustment," Social Forces, 35 (Oct., 1956), pp. 39-47.

## CHAPTER II

### THEORY AND LITERATURE

Transferring or learning the ability to cope with an urban environment or way of life is immediately confused by the semantic variations in what the task involves and to what it refers. Terms such as "assimilation," "acculturation," "adjustment," and "integration" have been utilized to refer to the urban dweller being absorbed into an urban way of life. Often the terms have been used interchangeably while their meanings overlap. In most cases, however, reference is made to an end product which entails conformity to an urban culture or way of life as variously defined by level of living, participation patterns and other typically urban forms of behavior and interaction.

Park's concept of social assimilation implied social stability rather than complete absorption at all levels. He defined assimilation as "the process or processes by which peoples of diverse racial origins and different cultural heritages, occupying a common territory, achieve a cultural solidarity sufficient at least to sustain a national<sup>1</sup> existence." Although the definition was destined for application to the absorption of international migrants, it is relevant to the procedure through which migrants and non-migrants become absorbed into urban

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<sup>1</sup> Robert E. Park, "Assimilation, Social," in Edwin R. A. Seligman and Alvin Johnson (eds.), Encyclopedia of the Social Sciences (New York, The Macmillan Co., 1930), p. 281.



life.

Park's notion is not uncommonly representative of the trend of thought which argues that the migrant forfeits some of his identity in exchange for the local and/or national culture. It may be traced back to Fairchild's physiological analogy of the nutriment being taken into the system of a living organism where it "ultimately becomes an integral part of the physical body."<sup>2</sup>

Such an ecological approach restricts itself to the study of groupings of men through time and space as buffeted by the non-rational, subsocial forces originally suggested by biologists. Phenomena were studied at the aggregate level and the existence of phenomena were explained with reference to homogeneous social organization found within each subarea. This method, however, provided little insight as to the process through which persons and groups acquire the memories, sentiments and attitudes of other persons or groups and sharing such history and experience are incorporated into a common<sup>3</sup> cultural life.

It should be pointed out that what different authors perceive as necessary and/or sufficient for assimilation is partially a function of their ideological fervor for one or another philosophy with respect to the "proper" state of assimilation. Gordon presents the three basic<sup>4</sup> philosophies of Anglo-conformity, melting pot, and cultural pluralism.

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<sup>2</sup>  
Henry Pratt Fairchild, Immigration (New York, Dryden Press, 1925), p. 396-ff.

<sup>3</sup>  
Robert E. Park and Ernest W. Burgess, Introduction to the Science of Sociology (Chicago, University of Chicago Press, 1921), p. 735.

<sup>4</sup>  
Milton M. Gordon, Assimilation in American Life (New York, Oxford University Press, 1964).

Each demands a different degree of migrant renunciation of previous socialization and cultural life and political and economic integration into the receiving society. Since his point of reference is the national level, his ideal types do not necessarily adhere at the local (community) level. Such complications are avoided in the present research by focusing on those variables which have proven theoretically to be necessary and/or sufficient for urban integration while avoiding those deemed "desirable" for the cultural tone of society.

Although most of the relevant concepts are still used interchangeably, general agreement is developing as to the elements involved and perhaps some consensus as to the order of occurrence. Differences between the migrating groups and receiving societies slowly disappear, the loss of old identities and loyalties heralds the eventual common culture the effect of which is more significant than only the token acceptance of certain cultural artifacts.

For our purposes, urban assimilation is defined as "the process of interpenetration and fusion in which persons and groups acquire memories, sentiments and attitudes of other persons or groups, and, by sharing their experience and history, are incorporated with them in a common cultural life." Such a definition encourages interest

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See for example Edward Byran Reuter, Handbook of Sociology (New York, Dryden Press, 1941), p. 84; Brewton Berry, Race Relations (Boston, Houghton-Mifflin Co., 1951), p. 217; Joseph H. Fichter, Sociology (Chicago, University of Chicago Press, 1957), p. 229; Arnold M. Rose, Sociology: The Study of Human Relations (New York, Alfred A. Knopf, 1956), pp. 557-8; John F. Cuber, Sociology: A Synopsis of Principles (New York, Appleton-Century-Crofts, 3rd Edition, 1955), p. 609; and Arnold Green, Sociology: An Analysis of Life in Modern Society (New York, McGraw-Hill Book Co., 1st Edition, 1952), p. 66.

6

This definition parallels Gordon's, op. cit., p. 62.

in the process of assimilation rather than in an end-product. The introduction of attitudes recognizes the variability between cultural groups and between the receptiveness of different receiving communities and societies. The persistence of cultural traits in spite of fluctuations in the labor market, community conflicts and the like suggests an irrationality in assuming that a conformity in urban values exists for all urban dwellers. Stone's<sup>7</sup> distinction between urbanism as a way of life and as a way of life has merit here in that a matrix of identifications are available for distinguishing oneself as an individual in an urban setting, giving rise to different contexts of urbanism.

We intend to focus on such different contexts of urbanism to determine the extent to which the process of integration is facilitated by formal and informal patterns of interaction the urban dweller develops given a specified level of social organization in a host community. Urban dwellers, then, will receive different levels of social support and insurance against the insecurities of urban life.

What is necessary now, in order to avoid further semantic and theoretical confusion, is a systematic and rigorous treatment of the process of urban integration. All relevant factors and variables included under the rubric of the working definition must be explored to comprehend "how the migrant acquires the behavioral patterns of larger society and learns how to play major roles appropriate to his

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Gregory P. Stone, "City Shoppers and Urban Identification: Observations on the Social Psychology of City Life," American Journal of Sociology, LX (July, 1954), p. 36.

position in society.<sup>8</sup> This does not infer that standard integration processes exist; only that certain factors crucial to the process are present to varying degrees according to the different levels of economic development of cities, that is, according to their capacity to provide the stage on which the process could be acted out.

UNESCO's conference dealing with the cultural integration of immigrants,<sup>9</sup> held in Havana in 1956, was also faced with a myriad of definitions and conceptual approaches to a similar problem. Their conclusion, to accept the pragmatic view that whatever term may be used, it should reflect a concern with a process of economic, social, and cultural adjustment, and that deliberations of the conference should be concerned with the major problems of the process, is adhered to here. The task now is to isolate the major elements of such a process, expand upon the (causal) forces that lead to eventual urban assimilation, and describe the methodology used for testing the hypotheses derived from the discussion.

Few researchers have moved beyond semantic haggling in attempting to explain why some people are successfully absorbed into host communities (and integrated into the larger society) while others are not. Two analytic paradigms will be presented. They are useful as both have proceeded furthest with coping with the number of variables found to be related to urban assimilation as well as presenting an explanation for

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Shannon and Shannon, op. cit., p. 53.

9

The proceedings of the conference are found in W.D. Borrie, The Cultural Integration of Immigrants (France, UNESCO, 1959).

how such a process operates. We will incorporate our refinements in with the second paradigm.

Reviewing the literature in this area, Shannon and Shannon argue that in order to successfully perform the roles assigned to him (in the social order of which he is a part, <sup>10</sup>) an urban dweller must be assimilated in two ways. First, he must be culturally integrated into the local milieu. He must no longer be distinguishable from members of the host community or society. This entails not only the borrowing of cultural traits and behavior patterns (acculturation) but a change in behavior such that his self-concept changes; he accepts the beliefs of the host community as well as paying lip service to food habits, dress and other cultural artifacts.

The second way is economic absorption in terms of full-time employment. New roles are learned, a transformation of primary group values is evident and participation is extended beyond the primary group into the main spheres of the social system. This involves not only securing work but "becoming a part of the regularly employed labor force at a level consistent with one's capabilities and the capabilities <sup>11</sup> of others at every level or position in the economic institution."

Economic absorption is necessary but not sufficient for urban integration. Integration into the economic institution and securing

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See Ronald Taft, "Shared Frame of Reference Concept Applied to the Assimilation of Immigrants," Human Relations, 6 (February, 1953), pp. 263-74.

11

Lyle W. Shannon, "The Economic Absorption and Cultural Integration of Immigrant Workers: Characteristics of the Individual vs. The Nature of the System," (paper read at the Conference on Migration and Behavioral Deviance, San Juan, Puerto Rico, November 6-8, 1968), p. 4.

employment are requisites for personal adjustment and essential for fuller cultural integration in that such absorption exposes the migrant to the culture patterns to which he is expected to internalize or conform. As Borrie points out, "While economic absorption may be taken as an essential first condition of cultural integration, it does not follow that once the former is achieved, the latter will automatically follow."<sup>12</sup> The establishment and pervasiveness of ethnic enclaves in highly urbanized regions testifies to such an assumption.

Shannons' approach is useful but neglects some of the ameliorating and mitigating factors which often influence the migrant's or urban dweller's eventual cultural integration or economic absorption. The problems the migrant faces during the transition period, the receptiveness of the community to him, etc., all influence the extent to which the migrant will become assimilated. This approach then is incomplete and does not effectively handle the problem of conceptual overlap referred to earlier.

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Germani is cognisant of these problems and his phasing of the process reflects this. He proposes three stages or phases but the actual number would vary with cultural factors and situational effects. It is difficult to determine where Germani's proposed scheme leaves off and our refinements begin. Much of the difficulty lies in the highly abstract level of the major concepts. This is partially overcome by stating the relationships between the concepts in more rigorous fashion. Each of the concepts has multiple referents and until these referents

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Borrie, op. cit., p. 102.

13

Gino Germani, "Migration and Acculturation," in Philip M. Hauser (ed.), Handbook for Social Research in Urban Areas (New York, UNESCO, 1965), pp. 159-78.

have been analyzed and their inter-relationships formulated, it is difficult to state relationships between the major concepts at anything but a crude level. Such a rigorous treatment would also promote a clearer statement of the relative strength of the independent variables. We shall now discuss Germani's concepts and elaborate upon their relevance for this research.

### Acculturation

Acculturation is defined as "the procedure (and degree) of acquisition and learning by the migrant of urban ways of behavior, including the necessary roles, habits, attitudes, values and knowledge."<sup>14</sup> The migrant, during this period, learns about the statuses and roles relevant to an urban-industrial society if he was previously unfamiliar with such an environment. This assumes, of course, that he is allowed to engage in the appropriate activities so that he might be exposed to such roles and statuses.

Different forms and degrees of acculturation take place. We would include in this category Shannons' "cultural integration" and "economic absorption,"<sup>15</sup> as both adapting or acquiring behavior patterns and securing work in the regular labor force are necessary preconditions to integration into the larger society. Certain forms of learning (such as memorizing bus routes) are easier than others where emotional and affective components dominate (such as when to say what to whom). As Germani points out, "...rural migrants are able to acquire with relative speed new technical skills; at the same time, however, their acculturation to new types of modern industrial social relations in the

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<sup>14</sup>

Ibid. p. 62.

<sup>15</sup>

Shannon and Shannon, op. cit., pp. 52-3.

factory or in the union will usually require much more time and may not  
 be achieved so completely."<sup>16</sup>

The case of the occupationally mobile person is an interesting one. Although they achieve economic absorption in various industrial environments, a lesser opportunity is available for complete cultural integration. The basic skills exist as evidenced by their ability to transfer through various but closely associated value systems and to gain employment in them but they lack the necessary time to participate as fully in the other phases of assimilation.

Acculturation, in a societal framework of tolerated cultural pluralism, demands conformity to certain norms (for example, freedom of speech) while permitting different behavioral patterns to be displayed on route to similarly valued goals. The term "integration" is used to refer to the incorporation of various culture groups into a singular social structure. The only restriction this places on the semantic use of the two terms is the caveat regarding the permissiveness of the society in which either attitude exists. Borrie expresses the claim thusly:

To say that 'integration' is a happier and more exact term than others to describe the successful inclusion of a new group into an existing society is not idle pedantry. The older term 'assimilation,' besides its misleading biological connotation, implies a one-way street in group relations. It suggests that the newcomer is divested of his old culture completely and is virtually remoulded in everything from clothes to ideology. It denies or ignores the many gifts brought by the immigrant to his new home, and the impact of his ideas, his talents, his hopes upon the community that has admitted him.<sup>17</sup>

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<sup>16</sup>

Germani, op. cit., p. 165.

<sup>17</sup>

Borrie, op. cit., p. 93.



It is important at this point to avoid semantic confusion. While it is generally agreed that there is a difference between a discussion of the effect of the community on the urban dweller and a discussion of the reciprocating influences of the community on its denizens and vice versa, the labels used to refer to each have been used interchangeably. For purposes of this discussion, "integration" will refer to the incorporation of individuals into community life while the term "assimilation" will refer to the interaction between the two. We agree with Borrie's distinction (above) then, but would alter the labels used. In accepting the restrictions this places on any eventual analysis, the need to carefully consider the forces encouraging and discouraging integration with-  
18  
in various cultural milieus is recognized.

Mention should be made of a special case of acculturation, the ethnic enclosure. Here a network of organizations and informal relationships develops which permits and encourages the members of the ethnic group to remain within the confines of the group for all of their primary relationships and some of their secondary relationships  
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throughout all stages of the life cycle. Such a style of interaction may also apply to specialized activities. These activities tend to

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Lloyd Warner and Leo Srole make an attempt to reduce such forces to an ordered system in The Social System of American Ethnic Groups (New Haven, Yale University Press, 1945).

19

See Herbert J. Gans, Levittowners (New York, Pantheon Books, 1967); H. Cayton and St. C. Drake, Black Metropolis: A Study of Negro Life in a Northern City (New York, Harper Torchbacks, 1962); and Bennett Berger, Working Class Suburb (Berkeley, University of California Press, 1967).

pre-empt most or all primary group relationships, while secondary relationships across ethnic group lines are carried out in community spheres of institutional life. This accounts for the pull of migrants into both occupations and geographical areas already peopled by their cultural group. Such activity reduces the probability of total acculturation resulting from a lack of contact with the host population in the school, church, neighborhood and other institutions but may assist them in adjusting personally.

### Adjustment

Germani's second concept is adjustment, the manner in which the migrant performs his roles in the various spheres of activity in which he participates. In other words, the interest here is focused upon the way the migrant adjusts to conditions (housing, welfare, etc.) in the area of destination. One indication of a migrant's ability and willingness to adjust is reflected in his willingness to take poorly paid and poorly esteemed unskilled jobs - this criterion is more applicable to rural migrants, unaccustomed to mobility, who eventually become concentrated in service-production occupations. The more adjusted urban dweller is more likely to have established a stable pattern of life, in terms of a dynamic equilibrium, and, by developing a stable set of norms applicable in most environments, his movements are not necessarily

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Stanley Lieberson, "The Impact of Residential Segregation on Ethnic Assimilation," Social Forces, 40 (October, 1961), pp. 52-7.

21

Russell Dynes, "Rurality, Migration and Secretarianism," Rural Sociology, 21 (March, 1956), pp. 25-8.

disorganizing to him. Such flexibility in the face of changing habits, attitudes and customs is another indication of the ability to adjust.

Both scholarly and literary critics of urban life refer to the impact of urban life on migrants. The personal and social disorganization which allegedly results has been referred to as the polar antithesis of personal, familistic, sacred and consensual life of the rural tradition-bound community.<sup>22</sup> Mumford refers to the phenomenon as "negative symbiosis"<sup>23</sup> and Hall speaks of the "behavioral sink"<sup>24</sup> that results, which, in addition to the complexity of dealing with strange communication systems and uncongenial spaces, creates feelings of deprivation, conflict and/or hostility.

Many variables affect the rate and extent of adjustment. Problems arising from contact with institutions and associations have elements in common but the process of adjustment is highly variable. Consequently, the adjustment required is related to attitudes as well as to associational and institutional factors.

Adjustment may not be a rapid process as progressive states are required whereby the migrant slowly becomes adapted to the physical and social-cultural environment. The more sophisticated he is, the more critical of the shortcomings and the living conditions in his new

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What is considered as the classic statement may be found in Louis Wirth, "Urbanism as a Way of Life," American Journal of Sociology, 44 (July, 1938), pp. 1-24. Another historical review of the subject is found in Stone, loc. cit.

23

Lewis Mumford, "Mission of the City," in S. Riemer, et al (eds.), Metropolis: Values in Conflict (New York, Wadsworth Publishing Company, 1962), p. 44.

24

Edward T. Hall, The Hidden Dimension (New York, Doubleday, 1966), p. 157.

environment makes his integration more difficult.

The urban dweller can have a sense of security and stability which will be reflected in stable behavior and will give meaning to his daily activities, thereby making it possible for him to satisfactorily fulfill the roles required of him. A major result will be to put the migrant in a psychological state favorable to the influences of the new social environment and thereby prevent his developing an attitude of rejection with the consequences which would follow.

First impressions, if profound, could influence the whole subsequent course of the assimilation process. If they are favorable, it will be facilitated; if unfavorable, it will be made more difficult and slower. Attitudes toward the community with respect to its progressiveness, inhabitants and facilities could inhibit integration on one hand or minimize the effects of previous attachments on the other.

The presence of family and strength of kinship ties may act as a brake on assimilation if the family employ constraints on essential activities. Advantages accrue, however, where the family also belongs to associations; especially where the presence of family members encouraged migration. However, strong attachments to family not present in the urban area will effectively brake assimilation and has been shown as a causal agent in forcing the migrant to return home. Any such lag in adaptation could force a return to home or community

of similar level of economic development.

Those who rent homes may be less well adjusted than owners.

Unstable tenancy may reflect the migrant's unwillingness or indecision to locate permanently where he is or may be a reflection of the state of the housing market and/or prevalent social norms regarding home ownership. Such data should therefore be interpreted with caution.

Adjustment to the new environment is conditioned by many factors, one of which is the migrant's original rationale for leaving the place of origin and choosing the place of destination. The "push-pull" protagonists argue that the two lie on the same continuum but they need not: hypothetically, one may leave A because he was fired and choose B because his kin reside there -- he may not have moved at all

if he had not lost his job. A concern with economic variables has resulted in a glossing over or failure to incorporate at all such sources of variation. Important aspects of motivation then are: (1) manifest motives in terms of economic, educational and other reasons; (2) manifest intention of the migrant regarding the temporary or permanent character of the migration; and, (3) nature of the decision -- the degree of deliberation from high rationality to sheer

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This thesis is developed by Jane Moore, Cityward Migration (Chicago, University of Chicago Press, 1938).

See Ronald Freedman, "Cityward Migration, Urban Ecology and Social Theory," in Ernest W. Burgess and Donald J. Bogue, Urban Sociology (Chicago, University of Chicago Press, 1964), p. 100.

Such selective forces in migration are discussed in Calliope Moustuka, The Internal Migrant: A Comparative Study in Urbanization (Athens, Social Service Centre, 1964).

impulsivity.

In preparing a systematic analysis of the particular urban condition under which impersonal social relations arise and those conditions under which they arise least, Bell and Boat analyzed the relationships amongst the amount of socializing with neighbors, relatives, co-workers and friends. The nature of informal contacts, source(s) of friendships and the amount of personal relations in formal associations were examined to determine if the alleged attributes of city life are equally present in every section of the city.

The major conclusion they reached paralleled Axelrod's that the extended family may have lost its function as an economic producing unit in the city, but relatives continue to be an important source of companionship and mutual support. Family interaction varied inversely with other contacts such as with friends, neighbors and co-workers. Kin were more likely to provide intimate family social contacts than neighbors or co-workers in each neighborhood. This suggests then that extra-familial contacts can to some extent replace kin to aid urban

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Wendell Bell and Marion D. Boat, "Urban Neighborhoods and Informal Social Relations," American Journal of Sociology, 62 (January, 1957), pp. 391-8.

30

Morris Axelrod, "Urban Structure and Social Participation," American Sociological Review, 21 (February, 1956), p. 17.

31

The utility of kinship attachments is explored by Janet Abu-Lughod, "Migrant Adjustment to City Life: The Egyptian Case," American Journal of Sociology, 67 (July, 1961), pp. 22-32; Leonard Blumberg and Robert Bell, "Urban Migration and Kinship Ties," Social Problems, 6 (Spring, 1959), pp. 328-33; W. T. Morrill, "Immigrants and Associations: The Ibo in 20th Century Calabar," Comparative Studies in Society and History, 5 (1963), pp. 424-48; and A. Pearse, "Some Characteristics of Urbanization in the City of Rio de Janeiro," in Philip M. Hauser (ed.), Urbanization in Latin America (New York, International Documents Service, 1961), pp. 191-205.

integration in terms of participation, adjustment and acculturation especially where such contacts are "close."

The immense value of kin accrues to the migrant who travels to strange surroundings with no contacts other than kin. With time, kin may be replaced for this purpose by new-found friends, neighbors and co-workers. In whatever form, contacts are necessary for complete acculturation to the values and life style of the community.<sup>32</sup>

Urban residents' feelings of satisfaction are another important source for measuring adjustment. How well they perceive they are doing in the community and how alienated they are, especially if they feel any positive change as a result of the move,<sup>33</sup> can influence their amount of community satisfaction. What is important is the specification of social experiences that make for the successful transmission of values and behavioral patterns followed by the types of social experiences that are most likely to facilitate this process in any given society, depending on its social organization and level of economic development.

### Participation

Where acculturation and adjustment provide the migrant with the basic social and cultural skills and the ability to perform them, participation, Germani's third phase of the assimilation process, channels such activity past the sustenance functions into the realm of interaction in the urban milieu. Although participation may serve to link

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See P. M. Blau, "Social Mobility and Interpersonal Relations," American Sociological Review, 21 (1956), p. 291.

33

Shannon and Shannon, op. cit., p. 67.

together various roles necessary to maintain the routine activities of the community (or other secondary groups) in meeting its daily needs, the extent and nature of such participation is a function of the degree of acculturation and adjustment. The order of significance of the three phases (acculturation, adjustment, and participation) may vary but the order here suggests that meaningful participation, in terms of efficiency and commitment, can only accrue once acculturation and adjustment have occurred to some extent.

Participation in the form of organizational membership and with specific reference to leadership positions (officer or member of a committee), is a function of the (status) motivation of the migrant where the opportunity exists for such participation. At any rate, the participation will be facilitated by previous experience which would more readily accrue to the urban migrant. Time, and the concomitant advantage of experience, in the new environment will also lead to  
<sup>34</sup> increased participation, and the ability to adjust to new and changing situations. Urban values, such as planning, are likely to emerge in such a transition.

Participation in activities and associational life, which Eisenstadt  
<sup>35</sup> refers to as "institutional dispersion," leads to full exposure to the norms and expectations to which one is to adhere. It is only possible when such participation is not inhibited by discrimination or

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See Basil G. Zimmer, "Farm Background and Urban Participation," American Journal of Sociology, 61 (March, 1956), pp. 470-5.

<sup>35</sup>

Samuel N. Eisenstadt, The Absorption of Immigrants (London, Routledge and Kegan Paul, 1954).



other overt attempts to restrict the flow of information and/or resources. Such activity must take place then on "a footing of equality,"<sup>36</sup> to ensure that all are allowed to engage in the appropriate activities or as Broom and Kitsuke point out, "the validation of acculturation is a precondition to assimilation."<sup>37</sup>

Church membership is differentially included as membership in an organization. Since even the fact of belonging places the member sociologically in society, it should be counted whether such affiliation is token or places them in the hierarchy of the church directorship.

A similar logic applies to membership in formal organizations, such as clubs and societies, as opposed to officership in such organizations. Although it could be argued that higher intensity involvement nurtures a fuller understanding of, and appreciation for, the organization, the fact of membership alone is sufficient indication that at least channels for the flow of information are available.

Moustuka points out that the rarity of office holding in village life and its absence in the town did not restrict the flow of information while membership at least existed.<sup>38</sup> It is non-membership which

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36

Georges Mauco, "L'Assimilation des Etrangers en France," L'Assimilation Culturelle des Immigrants (Paris, Institut National d'Etudes Demographiques, 1950), p. 21.

37

Leonard Broom and John I. Kitsuke, "The Validation of Acculturation: A Condition to Ethnic Assimilation," American Anthropologist, 57, (February, 1955).

38

Moustuka, op. cit., p. 44.

is important. And Komarovsky adds, "Non-membership...no doubt implies that sections of our population are cut off from channels of power, information, growth, and a sense of participation in purposive social action."<sup>39</sup>

<sup>40</sup>  
Wirth's traditional view of the impact of urbanism on group membership emphasized the impersonality of relationships in the urban community, the decline of kinship ties and the resulting importance of formal and secondary group membership. Since then, the informal group contacts spawned and necessitated by the absence of kin have been shown to have performed a replacement function of sorts, now playing a changed, more circumscribed role and now are a less pervasive force in the urban-<sup>41</sup>ization of migrants.

<sup>42</sup>  
Hagedorn and Labovitz have recently offered a test of three theories of participation or lack of it in community associations. They found that workers in an occupation with a high percentage of

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<sup>39</sup>  
Mirra Komarovsky, "The Voluntary Associations of Urban Dwellers," American Sociological Review, 11 (December, 1946), p. 698.

<sup>40</sup>  
Wirth, loc. cit.

<sup>41</sup>  
Research supporting this view has been carried out by Floyd Dotson, Patterns of Voluntary Association Among Urban Working Families, " American Sociological Review, 16 (October, 1951), pp. 687-93; Morris Janowitz, The Community Press in an Urban Setting (Glencoe, Illinois, The Free Press, 1952); and Robert A. Nisbet, Community and Power (New York, Oxford University Press, 1962).

<sup>42</sup>  
Robert Hagedorn and Sanford Labovitz, "An Analysis of Community and Professional Participation Among Occupations," Social Forces, 46 (June, 1967), pp. 483-91.

structural alienation may either generalize the state of alienation to all similar situations, or compensate by seeking situations where alienation is not likely, for example, where they have power or are not isolated. Individuals may compensate for perceived isolation but generalize structural powerlessness.

Axelrod explains the importance and relevance of group activity in the following manner:

...The secondary groups link together the various roles necessary to maintain the routine activities of the community meeting its daily needs. Informal group association creates cohesion and common values in the population. The intimate informal group, such as the family or peer group, is a source of cohesion and access to universal norms which regulate behavior for most people and not a specialized segment, apart from specialized roles such as work relationships wherein proper role behaviors associated with various socio-economic roles are specified.<sup>43</sup>

He maintains further that relatives still continue to be an important source for companionship and mutual support. Both forms of social experience are necessary for the transmission of values and behavioral patterns to facilitate assimilation in any given society or integration into any given community, depending on its type of social organization and level of economic development.

The analytic paradigm we shall employ is Germani's. His three phases of integration, as we have expanded them, are sufficiently broad to encompass most of the criteria found in the literature to be important to integration of persons into the urban milieu. The number of phases is also sufficiently restrictive to ensure that some theoretical closure is possible after analysis. It is now possible to discuss the general

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Axelrod, loc. cit.

sources of variation attributed to the selectivity in urban integration.

### Independent Variables

There are three general sources of variation attributed to the selectivity in urban integration. The present research provides a test to determine which of the three is the most appropriate explanation and fruitful line for further research.

#### 1. Socio-economic status

The hierarchical arrangements of people in society, which may not be formally delineated, tends to spawn a network of characteristic organizations and activities. People are drawn into such organizations and activities by virtue of similarity in interests and tastes, common (social) experiences, work experiences or educational background. Status generated by virtue of a person's education, occupation and income contributes to his placement in a power structure and such interaction may be the result of intentions to protect that position. The quality and quantity of social interaction then becomes a function of socio-economic status -- evaluation on this criteria does not rest solely on the economic criterion of cash returns.

(a) Education. Of the more important aspects of socialization which promotes specific behavior patterns, formal education is a crucial factor in creating certain culturally approved values. One of these is social and economic betterment<sup>44</sup> and participation in community affairs<sup>45</sup>

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Philip G. Olson, Job Mobility and Migration in a High Income Rural Community (Purdue University Agricultural Experiment Station, Bulletin 708, November, 1960).

45

Hagedorn and Labovitz, loc. cit.

is another. Not only does education instill the positive values then, but it also provides the knowledge for carrying them out, and the verbal and technical capacity to accomplish the task(s).

Shannon and Shannon point out that the social organization of society is of importance in determining how such education is necessary.<sup>46</sup> Insofar as education facilitates social and economic advancement, the educational environment of the community of socialization delimits the possible range of behavior.<sup>47</sup> Zimmer demonstrated, for example, that college migrants who have lived in the community less than two years have a membership rate which is much higher than natives in the grade school group.

The quality of education also shapes one's world view, the latter having been linked to successful assimilation. Those with more education are likely to have a more independent, active world view than those with less education regardless of how appropriate that world view is. As Shannon points out:

...The world view of the educated may be inaccurate in reality, that is, active, independent world view may not square with how things really work in society, but this world view is a hypothesized consequence of education. Persons...may well be able to manipulate their social environment in order to maximize their gain but not everyone who acquires an active world view is in a position to do so.<sup>48</sup>

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<sup>46</sup>

Shannon and Shannon, loc. cit.

<sup>47</sup>

Zimmer, loc. cit.

<sup>48</sup>

Shannon, op. cit., p. 11.

Olson makes a similar point:

Motives of betterment or stability are not forces in themselves. The individual must perceive how his goals may be achieved before any force for movement or action to gratify these motives is exerted.<sup>49</sup>

Education provides the incentive and knowledge to perceive how goals may be realized. It in turn leads to organizational participation and office holding in as much as such activity is seen as a step towards achieving the goal.<sup>50</sup> This accounts for the high correlation<sup>51</sup> between the two and partially accounts for the migration itself.

Consequently we hypothesize that:

I. If: The higher the level of education, the higher the level of knowledge and opportunity.

And if: The higher the level of knowledge and opportunity, the greater are the urban dweller's chances for integration.

Therefore: The higher the level of education, the greater are the urban dweller's chances for integration.

(b) Income. Income (and education) is important in that its presence allows the potential migrant to express and act out his desire for movement. More importantly, the presence of income provides a stronger motive to express such desires. For example, when persons in social status systems perceive that the relationships between economic and social status exist, mobility in the form of job change

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Olson, op. cit., p. 6.

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Komarovsky, op. cit., pp. 468-98 and Moustuka, loc. cit.

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See Freedman, op. cit., pp. 92-114 and Lois K. Cohen and G. Edward Schuh, Job Mobility and Migration in a Middle Income Small Town with Comparisons to High and Low Income Communities (Purdue University Agricultural Experiment Station, Bulletin 763, May, 1963).

or migration may become the means whereby they attempt to achieve higher status.

Those with higher incomes participate more (fully) than those of lower income in organizational activities. <sup>52</sup> <sup>53</sup> Axelrod also demonstrated that income was directly related with secondary-group membership and level of activity therein. Consequently we hypothesize that:

II. If: The higher the income, the greater is the motive and ability to act out desires.

And if: The greater is the motive and ability to act out desires, the greater are the urban dweller's chances for integration.

Therefore: The higher the income, the greater are the urban dweller's chances for integration.

(c) Occupation. Where occupation can promote status, it is likely that job mobility would occur (among status seekers). It is also reasonable to assume that movement to an occupation will occur at relatively the same skill level, if for no other reason than the requirements of the new job are related to the previous training and experiences of the migrant. Again, as with income and education, the implicit knowledge of skills and the ability to manipulate them render the migrant more flexible, durable and able for the assimilation process in his new job and/or environment.

With advances in transportation and communication facilities, residential setting has become less important in determining the range

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See R. D. Geshwind and V. W. Ruttan, Job Mobility and Migration in a Low Income Rural Community (Purdue University Agricultural Experiment Station, Bulletin 730, September, 1961).

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Axelrod, loc. cit.

of social contacts than occupational situs. Differences in types of  
 organizational participation have been demonstrated by occupation:<sup>54</sup>  
 working-class men predominate in occupational and fraternal groups.  
 Those occupations with relatively high leadership skills have a larger  
 percentage of its membership in leadership community organizations.  
 These differences are attributed to occupational socialization, that  
 is, the learning that occurs through interaction and verbal communica-  
 tion.<sup>55</sup> Similar socialization processes inhibit the migration of  
 farmers where mobility is not expected.<sup>56</sup> Consequently we hypothesize  
 that:

III. If: The higher the occupational skills, the greater the know-  
 ledge and ability to adjust to a new environment.

And if: The greater the knowledge and ability to adjust to a new  
 environment, the greater are the urban dweller's chances  
 for integration.

Therefore: The higher the occupational skills, the greater are  
 the urban dweller's chances for integration.

## 2. Duration of Residence

Time functions to allow the urban dweller the opportunity to  
 assimilate without the pressure of deadlines. The best climate for  
 such integration, to repeat, is one of free consent with a minimum of  
 coercion and constraint.

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See Komarovsky, loc. cit.

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Hagedorn and Labovitz, loc. cit.

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Geshwind and Ruttan, op. cit., p. 12.



Research tends to support the notion that aspects of integration tend to increase directly with the length of time in the community. Recent migrants, for example, have lower participation rates than natives upon entering a community but become more similar to the natives the longer they live there.<sup>57</sup> The length of time required to become active in the community varies according to personal characteristics but high social status facilitates such participation. The argument presented by temporal theory then is that the limiting effects of migration are only temporary.

There is little doubt that getting used to an (un)usual everyday life demands that one constantly change. He is moulded by the environment or at least he changes as a result of it. It is difficult to deny also that "adjustment is a process of growth which demands considerable time and which does not go in sudden jumps."<sup>58</sup> What is at question here is not the absoluteness of time required but rather to investigate the forces that ameliorate or affect the period of transition during which he learns about the new statuses and roles that are found in urban-industrial society. Consequently we hypothesize that:

IV. If: The longer an urban dweller has been exposed to an urban environment, the more aware he will be of opportunities and facilities there.

And if: The more aware he is of opportunities and facilities, the greater are his chances for integration.

Therefore: The longer an urban dweller has been exposed to an urban environment, the more integrated he will be.

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This is demonstrated by Howard W. Beers and Catherine Heflin, Rural People in the City (Kentucky Agricultural Experiment Station Bulletin, July, 1945) and Zimmer, loc. cit.

58

N. Anderson, The Urban Community - A World Perspective (New York, Holt, 1960), p. 180.

### 3. Nativity

The socialization that the urban dweller receives and the social experiences he has been exposed to prior to his move to the city are crucial to his ability to adapt. Where opportunities are available, he must perceive their existence and act on them. His place of origin influences then not only his personal adjustment but also the likelihood of absorption into the local economy. Research has indicated that what a migrant transfers to the city may facilitate or impede his assimilation;<sup>59</sup> that if he has little in the way of skills or status,<sup>60</sup> his chances for integration are reduced; and, previous training to live in an urban setting will facilitate participation in the urban<sup>61</sup> community.

<sup>62</sup> Moore demonstrated that in Sweden different types of communities produce different sets of behavior patterns which persist no matter what the subsequent type of environment. To reduce this effect, migrants ventured to increasingly more divergent cities in terms of economic<sup>63</sup> development. Myrdal refers to such movement as "interchange

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<sup>59</sup>

Charles Tilly, Migration to an American City (University of Delaware, Agricultural Experiment Station and Division of Urban Affairs, April, 1965).

<sup>60</sup>

See Roscoe Griffin, "Appalachian Newcomers in Cincinnati," in Thomas E. Ford (ed.), The Southern Appalachian Region, A Survey (Lexington, University of Kentucky Press, 1962), pp. 79-84.

<sup>61</sup>

Zimmer, loc. cit.

<sup>62</sup>

Moore, loc. cit.

<sup>63</sup>

Gunner Myrdal, Richard Sterner and Arnold Rose, An American Dilemma (New York, Harper and Row, 1944).

migration" -- migration between two communities of different types is "non-interchange migration." Inasmuch as socialization contributes to the perpetuation of previous behavior patterns, the degree of industrial development of the birthplace, place of socialization, is of added importance and is a constraint on the process of integration.

That opportunities for social and occupational advancement are facilitated by education was discussed earlier.<sup>64</sup> The quality of such education reflects upon the urban dweller's ability to act on such opportunities. A similar argument holds for the type of experience, opportunities for special training and higher education afforded by occupational skills gained before migrating to a city. As Moore points out, "...the type of community of birth does not limit the range of occupations which a person born in any one particular type may enter, but it increases the relative number of persons in a certain type of occupational class...with reference to the degree of industrial development of the community of birth."<sup>65</sup> Consequently, urban migrants<sup>66</sup> make a more rapid adjustment to urban life than other migrants,

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<sup>64</sup>

Freedman, op. cit., p. 98 states that the process is facilitated where the place of origin coincides more closely with the place of destination.

<sup>65</sup>

Moore, op. cit., p. 96.

<sup>66</sup>

Germani, op. cit., p. 175 points out that when the cultural distance between the place of origin and place of destination is smaller, when the place of origin is less valued than the place of destination, and the degree of integration in the former is rather low, migration will tend to be permanent and much easier.

given their ability to establish a greater range of contacts than non-urban migrants.

Beijer provides some insight as to how the acculturation phase is facilitated by previous exposure to urban living, not merely urban living arrangements:

...The true countryman finds the city an inhospitable environment. He comes face to face with the 'townsman', with his 'shallowness', which may easily be a consequence of his being hardened to his fellow man. The bonds between the townsman and his fellow man are weaker than those in the old rural community, with its traditional ties. City man is reinforced in this attitude by the great mobility the city demands of him. Situations are constantly shifting, it is vital for the city dweller to be able to change quickly. This constant change, this adjustment to the new and quickly changing situations, has become second nature to the true 'townsman'.<sup>67</sup>

Consequently we hypothesize that:

V. If: The more similar the sending and receiving environments, the more similar will be the exposure to social influences and experiences.

And if: The more similar the exposure to social influences and experiences, the greater are the urban dweller's chances for integration.

Therefore: The more similar the sending and receiving environments, the greater are the urban dweller's chances for integration. The interchange migrant then should be more integrated than the non-interchange migrant.

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G. Beijer, Rural Migrants in an Urban Setting (The Hague, Martinus Nijhoff, 1963), p. 16. A. O. Haller, "The Occupational Achievement Process of Farm-Reared Youth in Urban Industrial Society," Rural Sociology, 25 (No. 3, 1960), p. 329 suggests how rural families cling to rural traditions in spite of technological advancements. The change in social conditions resulting from a change in location is therefore more difficult for those with less experience in coping with the move. This is confirmed by O. D. Duncan, "The Theory and Consequences of Mobility of Farm Population" in J. J. Spengler and O. D. Duncan (eds.), Population and Theory Policy, p. 438.

### Level of Economic Development

The social system in which urban integration takes place is moulded by the industrial system which in large part initiates and supports it. The normative pattern generated by the system reflects a series of expectations relative to particular classes of action and to the individuals performing roles in these action systems. Such norms and expectations underlie the movement of workers in a market, the distribution of particular types of labor, the availability or non-availability of jobs for particular classes of persons, and the allocation of rewards.

Consequently, the causation attached to stratification, time, and place of origin is altered or otherwise ameliorated by the level of economic development of the community. Economic forces create levels in job availability, policies of employers and government, level of business activity and the industrial structure of the labor market. In developing nations and depressed rural areas of developed countries for example, "push" factors would account for more migration than "pull" factors given the conditions on the farm as opposed to the unknown situation in the city, and motives for migration would be expressed less effectively.

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For a discussion of the impact of industry on the community see William H. Form and Delbert C. Miller, Industry, Labor and Community (New York, Harper and Brothers, 1960).

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A lucid description and evaluation of such normative patterns is provided in Sigmund Nosow, "Labor Distribution and the Normative System," Social Forces, 35 (October, 1956), pp. 25-33.

70

Moustuka, op. cit., p. v.

Those communities that are more economically developed are more likely to provide opportunities for assimilation than less well-developed communities. The more developed community will have more diversification in its industrial base and will spawn more secondary industry and therefore other opportunities for employment than less developed communities. By virtue of the comparative sizes of the industry (in value added by manufacture and number of employees) and the fact that more industries in developed communities are likely to be absentee-owned than in developing and stable communities, there will be fewer criteria for evaluation and exclusion and consequently more opportunities for integration into the more developed community. Consequently we hypothesize that:

VI. If: The higher the level of economic development, the greater are the opportunities for employment, interaction and participation in an urban setting.

And if: The greater are the opportunities for employment, interaction and participation in an urban setting, the greater are the urban dweller's chances for assimilation.

Therefore: The higher the level of economic development, the greater are the urban dweller's chances for integration.

Since the independent variables reflect each other to some extent, the task is to disentangle their influence. We would expect migrants to be more assimilated proportionately in the highly urbanized area as opposed to a developing community where both economic opportunity and organizational density are in the formative stages, with the stable community somewhere in between. Stratification factors would account for more of the variance as we proceed up the scale of economic development as the social complexity of the more highly developed community would generate more norms and expectations. Rural migrants would be

less disadvantaged in a developing community where locality-relevant functions operate in a more fluid labor situation. The time factor, duration of residence, should account for more of the variance in the community of lowest level of economic development as knowledge of opportunities and the ability to act on them is more flexible in a community with fewer criteria for evaluation and exclusion.

Now that the relationships between the independent variables and the dependent variables have been suggested, and the direction of such differences between the levels of economic development of the sample communities have been estimated, we turn to the strength of such relationships (differences in magnitude) within each community.

The communities differ not only in their level of economic development but also in terms of the underlying dimension reflected by density of organizations, occupational structure and so forth. We refer here to the varying exposure to urban-industrial values and the social structure required to support an occupationally based status-<sup>71</sup> assignment system. Less industrialized communities, therefore, would be less likely to display these concomitants and consequently their inhabitants would appear to be less assimilated based on those criteria. Further, communities do not exist in isolation and a certain diffusion of information and innovation inevitably takes place into the surrounding hinterland by virtue of the mass media and/or return

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For a discussion of urban, industrial values, the extent to which people of unequal occupational prestige regularly interact and the relationship of the two in communities of differing levels of economic development see William A. Faunce and M. Joseph Smucker, "Industrialization and Community Status Structure," American Sociological Review, 31 (June, 1966), pp. 390-9.

migrants. Such a procedure is facilitated in more industrially advanced areas where facilities for such diffusion are more readily available. Consequently we hypothesize that:

VII. If: As we proceed down the scale of economic development, communities and their hinterlands have less exposure to urban industrial values and the requisite social structure to support and transmit those values.

And if: Communities and their hinterlands with less exposure to urban industrial values and the requisite social structure to support and transmit those values, will display more marked differences in integration by virtue of the wide range of opportunity and knowledge afforded by high socio-economic position, longer duration of residence and more urban background.

Therefore: As we proceed down the scale of economic development, urban dwellers will be more differentiated on the basis of socio-economic position, duration of residence and nativity than urban dweller's in more highly developed communities.

Further:

VIII. If: Socio-economic position is (more) salient and legitimated in communities with urban industrial values and dependent upon the existence of a supportive social structure.

And if: Supportive social structures are more likely to be found in more industrialized communities.

Therefore: Socio-economic position is more salient and legitimated in more industrialized communities.

We expect then, that socio-economic variables will account for more of the variance in more economically developed communities.

### Summary

In this chapter we presented two analytic paradigms utilized in previous research to conceptualize the process of urban integration. Germani's three-phase paradigm was chosen for use in this research as it provides more opportunity to study the ameliorating and mitigating forces that might influence the urban dweller's eventual integration



than Shannon's two-step process. A discussion of each paradigm allowed for a presentation of the elements previously held to be associated with integration into an urban milieu.

Three general sources of variation were attributed to the selectivity of integration. Socio-economic status, nativity and duration of residence, the independent variables, were operationally defined and hypotheses were generated regarding their absolute and relative influence on the eventual integration of urban dwellers. It was also hypothesized that the process of integration would vary by level of economic development to reflect the different normative patterns generated in communities of different stages of industrialization.

Chapter III presents the methodology utilized in this research and discusses some methodological implications of cross-cultural research.

## CHAPTER III

### METHODOLOGY

Comparative research is complicated by the very nature of its intent, to compare two or more samples, theoretically relevant samples, on a series of items that are value free and the meaning of which is comparable in the different research sites. Concept operationalization<sup>1</sup> may not always lead to functionally equivalent meanings in different systems and this forces the deletion of certain questions or categories<sup>2</sup> of questions. Indicators of a concept which are most inter-correlated in comparative research are potentially the most fruitful and the use of open-ended questions, although more difficult to code, give more guarantee that the questions are eliciting responses regarding the concept of interest which a pre-coded question may not. Larger non-response rates to specific questions standardized in North American cultural contexts may result from forcing respondents to choose from non-applicable alternatives.

Given the nature of the research at hand, two requirements should be fulfilled in this chapter. First, a discussion of the

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The notion of functional equivalence is presented by H. D. J. Duijker, "Comparative Research in Social Science with Special Reference to Attitude Research," International Social Science Bulletin, 7 (No. 4, 1955), pp. 560-6.

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A discussion of why item deletion is necessary and what can be done to obtain more closely related data is presented later in this chapter.

comparative research design to demonstrate that the research sites and the nature of the samples therefrom adequately correspond to the nature of the problem presented in Chapters I and II. Second, discussion of the questions utilized to obtain information on relevant concepts is necessary to afford the reader an opportunity to discriminate between those questions that were comparable over the sample cities and those which were not. This is crucial information especially if disparate results are obtained by their use.

### Research Sites

Comparative research is facilitated if the appropriate data is partially or fully available in the form of existing data pools. Given the expense of survey research in general and the additional costs (and hazards) of carrying out survey research in other countries, the availability of comparable data from other research settings permits more comparative analysis than would otherwise be the case.

Such is the state of affairs in the present research. Although highly comparable data were available for two cities of different levels of economic development as a result of the author's own efforts, it was discovered that related data were available from a study in a developing nation. These data were then included in the analysis as well. Technical problems arising from the inclusion of the data are discussed later in this chapter.

The purpose here is to discuss the three research settings and provide information regarding the level of economic development in each city. This ensures that the analysis is representative of the community types with which we are interested in dealing.

Lansing, Michigan

Since the turn of the century, Lansing has been a major manufacturer of automobiles and automobile parts. Oldsmobile and other automobile-related industries employ the largest proportion of the industrial labor force of Lansing and its environs. Home-owned industrial enterprises, especially metalworking, make up another significant proportion of the city's industrial base.

The study in Lansing was carried out in the Spring of 1967 to determine aspirations, current socio-economic status, organizational participation, patterns of assimilation and perceptions of poverty. Seven census tracts in the city were chosen on the basis of their low income and education ranking as compared with the remainder of the city. The number of census tracts was reduced to three on the basis of the higher proportion of welfare caseloads, police and fire problems, poor health conditions and unsafe housing in these areas as indicated by a city housing survey. Respondents were selected from these areas by area probability sampling, using the city directory, and the sample was validated by comparison of relevant respondent characteristics with those reported for the population of the same areas in the 1960 census and the City of Lansing Housing Survey.

Twenty-six interviewers, all students in a graduate poverty seminar at Michigan State University, were each given ten interviews to complete at designated households in the sample areas. A limit of three callbacks was allowed for each address, the calls being made in the afternoon or evening in order to increase the likelihood of gaining an interview with the head of household. Thirty-seven addresses were either vacant homes or else no eligible respondent was even on the

premises -- these interviews were substituted in a random manner. Of<sup>3</sup>  
the 250 interviews carried out, 221 were usable.

Since the Lansing sample was restricted to three census tracts, additional data must be made available to demonstrate that the sample, on certain criteria, adequately reflects the distribution on those<sup>4</sup> criteria for the city as a whole. Moser<sup>4</sup> presents the standard formulae required to determine the accuracy of a sample estimate. The standard error of the mean is suitable criterion of the variability of the sample estimate and if the sample size equals the population, the standard error of the mean becomes zero.

The mean family income for the City of Lansing in 1960 was<sup>5</sup>  
\$7,196.00 . This amount lies within the 99% confidence levels of the range predicted from the sample mean. Some evidence then supports the<sup>6</sup>  
contention that the Lansing sample is representative.

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<sup>3</sup>  
The research director for this project was Professor Philip M. Marcus. Two M.A. theses have been completed using these data. See Robert M. McCann, Jr., "Poverty and Participation: Voluntary Association Affiliation in a Low-Income Population" (unpublished Master's thesis, Michigan State University, East Lansing, 1968) and Rollin M. Stoddard, "The Voluntary Organization and Poverty" (unpublished Master's thesis, Michigan State University, East Lansing, 1968). Kathryn F. McKinney is also preparing a Master's thesis using these data. A summary of findings is available in Earle L. Snider, "Community Needs Study: Preliminary Analysis of Marginals" (East Lansing, Michigan State University, November, 1968, Mimeographed).

<sup>4</sup>  
See C. A. Moser, Survey Methods in Social Investigation (New York, Heinman, 1958), pp. 58-72.

<sup>5</sup>  
As calculated from: U.S. Bureau of the Census, U.S. Census of the Population: 1960 (Washington, D.C., U.S. Government Printing Office), Population Statistics, Lansing, Michigan.

<sup>6</sup>  
 $\bar{x} = \$6,813.00. \quad \bar{x} \pm 2.6 \left( \frac{s}{\sqrt{n}} \right) = \$6,408.67 - \$7,217.33.$

Moose Jaw, Saskatchewan

World War II seriously dislocated this city's industry and the stigma that attached to Moose Jaw as a result, has prevented it from becoming more industrialized now. The closing down, slowing down or burning down of its industry during the war years plus the attraction of closely located larger centers is also responsible for the city failing to keep the industry it attracts. <sup>7</sup> A strong industrial development group manages to replace the industry that vacates.

During the Spring of 1968, the consulting firm with which the author was engaged carried out a community needs study in the city. The instrument used was comparable with the Lansing questionnaire. Interviewers were selected from graduate sociology students at the University of Saskatchewan (Regina campus). A total of 267 interviews were completed on an area sample basis throughout the city.

No comparison of sample and population means will be presented for Moose Jaw for two reasons. First, Moose Jaw is not tracted, therefore, no census data are available. Second, the random sample drawn was not restricted to certain areas of the city as was the case in Lansing.

Santiago, Chile

Chile had a population in 1966 of 9,000,000 persons. Its average annual growth rate is 2.4 percent. The Central third of the country where Santiago is located holds roughly two-thirds of the

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For a historical review of Moose Jaw's industry see "How Moose Jaw Battled Loss of Industry," The Financial Post, April 13, 1968, p. P-5.

country's population which is seventy percent urban. Greater Santiago, with a population of 2,459,400 at the end of 1965 is by far the largest city in Chile and accounts for a disproportionately large share of the nation's total purchasing power. The Province of Santiago is also the leading province.

The data utilized in this study from Santiago were collected in December, 1964, by students at the University of Chile who were trained at the Institute for Economic Planning at the University. The project was designed to study communication and migration in Chile. Two samples were drawn consisting of 160 migrants residing in the City of Santiago and 108 migrants residing in marginally residential areas or "callampas" of Santiago. The latter group were randomly selected from a registration of households in thirty different callampas areas, all of which are located on the periphery of Gran Santiago. In all cases, only heads of households were interviewed.

Inclusion of the callampas around Santiago in the sample is to ensure that the sample is representative. Schnore points out in his

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Agency for International Development, AID Economic Data Book: Latin America (Washington, D.C., December, 1967), p. 3.

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U.S. Department of Commerce, Overseas Business Reports, OBR 68-2 (Washington, D.C., January, 1968), p. 3.

10

These data were collected by Dr. F. B. Waisanen and Dr. G. Briones. A published paper based on these data is "Educational Aspirations, Modernization and Urban Integration," in Paul Meadows and Ephraim H. Mizruchi, Urbanism, Urbanization and Change: Comparative Perspectives (Reading, Mass., Addison-Wesley, 1969), pp. 252-264. I am indebted to both for their permission to utilize the data.

studies of Latin American cities that the growth pattern in these cities is the reverse of the socio-economic gradient (Burgess-type pattern) found in most North American cities. Thomlinson marshalls similar evidence. Berry and Rees provide further evidence of this trend and demonstrate variations in the pattern in scattered cities around the world.

The slum area of Lansing is more centrally located. In Moose Jaw, it is not identifiable geographically as being bounded by certain streets and avenues; it is dispersed throughout one-half of the city. Physical location of slum areas varies then but it is important to be cognizant of such differences and ensure that slum-like areas in all three samples are included for analysis.

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Leo F. Schnore, "On the Spatial Structure of Cities in the Two Americas," in Philip M. Hauser and Leo F. Schnore, The Study of Urbanization (John Wiley & Sons, New York, 1965), pp. 347-398.

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Ralph Thomlinson, Urban Structure: The Social and Spatial Structure of Cities (New York, Random House, 1969), pp. 162-179.

13

Brian J. L. Berry and Philip H. Rees, "The Factoral Ecology of Calcutta," American Journal of Sociology, 74, (March, 1969), pp. 445-491.

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Longer duration of residence and higher occupational ranks are found, proportionately, in all non-slum areas for all sample cities. Eliminating the callampas would distort the pattern for the Santiago sample, hence render it non-representative.



### The Samples Compared

Table 1 presents selected economic data to support the notion that the sample cities are of different levels of economic development. The justification for use of these criteria and examples of their use  
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are found elsewhere.

Santiago is not included in the table primarily because immediately comparative data were not made available. The author's attempts to gain the necessary information from contacts or agencies in Santiago were of no avail. However, comparable information is available by piecing together scattered reports on economic development in Latin America.

The Statistical Abstract of Latin America gives a 1965 population figure of 2,248,378 for Gran Santiago (includes the comunas of Barrancas, Conchali, La Cisterna, La Florida, La Granja, Los Condes, Muipú, Nunoa, Providencia, Quilicura, Quinta Normal, Renca, San  
16  
Bernardo, and San Miguel). During the last intercensal period  
17  
(1952-1960) the growth rate was 3.9 percent.

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See Donald J. Bogue, The Structure of the Metropolitan Community: A Study in Dominance and Subdominance (Ann Arbor, University of Michigan Press, 1949); and Otis Dudley Duncan et al, Metropolis and Region (Baltimore, John Hopkins Press, 1960).

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Latin American Center, Statistical Abstract of Latin America (University of California, Los Angeles, December, 1968), p. 62.

17

See Juan C. Elizaga, "A Study on Immigrations to Greater Santiago (Chile)," in Gerald Breeze (ed.), The City in Newly Developing Countries (New York, Prentice-Hall, Inc., 1969) p. 322.

TABLE 1.

## ECONOMIC DEVELOPMENT CRITERIA FOR LANSING AND MOOSE JAW

Criteria	Lansing*	Moose Jaw**
Population	107,807 (1960)	33,417 (1966)***
Population growth rate 1950-1960	17.0% (1950-60)	12.9% (1956-66)***
Total labor force	42,562	12,110 (1961)
retail trade	9,220 (21.7%)	1,761 (14.5%)
wholesale trade	3,161 ( 7.4%)	565 ( 4.7%)
services	2,769 ( 6.5%)	3,560 (19.1%)
manufacturing	24,007 (56.4%)	1,523 (12.6%)
Establishments		
retail stores	1,177	272
wholesale locations	284	65
service locations	776	149
manufacturing establishments	170	46
Sales		
retail	\$270,144,000	\$50,507,100
wholesale	\$329,875,000	\$32,522,900
service	\$ 29,910,000	\$ 6,209,900
manufacturing	--	\$48,530,700
Value added by manufacture	\$425,167,000	\$13,368,500

\*Lansing data compiled from City and County Data Book (U.S. Department of Commerce, Bureau of the Census), pp. 67-69.

\*\*Moose Jaw data compiled from Dominion Bureau of Statistics, Market Research Handbook - 1961 (Ottawa, The Queen's Printer, 1963).

\*\*\*Dominion Bureau of Statistics, Advance Bulletin-A5 (Ottawa, The Queen's Printer, 1967), p. 6.

Chile's economically active population in 1960 was 2,336,000 -- about half were engaged in agriculture and manufacturing. Table 2 shows the number of persons employed by economic sectors for Chile. While no information is available on the sales generated by the various economic sectors, Table 3 provides details on the contribution of each sector to the country's GNP.

Manufacturing is Chile's leading industry. Manufacturing output grew by 7.5% in 1960-64 and 6.5% in 1964-66; well exceeding overall growth.<sup>18</sup> In 1963 manufacturing industries (excluding artisan activities) produced goods worth \$1.1 billion of which 500 million represented value added. The most important industries include iron and steel, automotive vehicle assembly, paper and woodpulp, rubber, petroleum products and the traditional and long established textile, food-beverage, tobacco and leather goods industries.

One of the principle characteristics of manufacturing industries in Chile is their concentration into relatively large firms, which account for the bulk of output and employment. Thus, twelve firms having only 25% of the capital in the manufacturing sector accounted for 20% of the total output in 1963. Furthermore, only 3% of all manufacturing firms employed 44% of the total labor force in this sector. On the other hand, small industry accounted for 67% of all manufacturing units but employed only 16% of all workers in manufacturing.

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The data contained in this and the next two paragraphs summarizes information found in U.S. Department of Commerce, op. cit., pp. 1-ff.

TABLE 2.

## EMPLOYMENT BY ECONOMIC SECTOR IN CHILE, 1960

<u>Sector</u>	<u>Number of Employees</u>
Agriculture and related activities	701,000 (30.0%)
Mining and quarrying	93,000 ( 4.0%)
Manufacturing	444,000 (19.0%)
Construction	140,000 ( 6.0%)
Utilities	23,000 ( 1.0%)
Commerce, finance, real estate	257,000 (11.0%)
Transportation and communication	117,000 ( 5.0%)
Services, including government	<u>561,000</u> (24.0%)
TOTAL	2,336,000

Source: U.S. Department of Commerce, Overseas Business Reports, OBR 68-2, Washington, D.C., January, 1968, p. 22.

TABLE 3.

CONTRIBUTIONS BY ECONOMIC SECTORS TO GROSS NATIONAL  
PRODUCT OF CHILE

<u>Sector</u>	<u>Contribution to GNP*</u>
Agriculture and Related activities	1,902
Mining	1,909
Manufacture	4,871
Construction	976
Utilities	312
Transportation, storage, communication	836
Wholesale and retail trade	4,071
Banking, Insurance and real estate	387
Ownership of dwellings	664
Public Administration and defense	957
Services	<u>2,044</u>
TOTAL GNP	18,933*

\*In millions of escudos at 1965 market prices.

Source: U.S. Department of Commerce, Overseas Business Reports, Washington, D.C., January, 1968, OBR 68-2, p. 6.

Santiago's manufacturing industries are concentrated geographically. The provinces of Valparaiso, Santiago and Concepcion account for 69.7% of all manufacturing and employ 81% of all workers in manufacturing.

Table 4 provides the occupational distributions for the three sample cities. There is some variation between the samples which is reasonable given the varying levels of economic-industrial development. The distributions of occupations in the Lansing sample is fairly even, weighted towards the middle in Moose Jaw, and weighted towards the bottom in Santiago. The distribution for the industrialized city would have been more top-heavy except that industry in Lansing is primarily of the manufacturing variety. The distribution of occupations then approximates the distribution of industry.

### The Questions

The questions utilized in the three studies and the concepts they refer to are found in Appendix A. Generally speaking, the Lansing and Moose Jaw questions were comparable. In Santiago, while many of the questions are not identical, functional equivalence is obtained in many cases. Discrepancies do exist however and it is important that they be specified to avoid any unreasonable importance placed on the analysis of such items, especially since the relationship between those items over the three samples might be serendipitous at best.

The question of functional equivalence applies most to the Santiago questions. Three categories of functional equivalence can be delineated and by providing examples of each, the reader should be in a better position to evaluate later interpretations of the data.

TABLE 4.

## OCCUPATIONAL DISTRIBUTION FOR SAMPLE CITIES

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	<u>Lansing</u>	<u>n</u>
unskilled	16.7%	(37)
semi-skilled	20.4%	(45)
skilled, clerical and kindred	19.9%	(44)
proprietors, managers, officials, professionals	10.4%	(23)
unemployed, no response	<u>32.6%</u>	<u>(72)</u>
	100.0%	221

  

	<u>Moose Jaw</u>	
farm operators, unskilled, service workers	16.5%	(44)
semi-skilled	8.2%	(22)
clerical, skilled	21.7%	(58)
proprietors, managers, officials, professionals	17.2%	(46)
unemployed, no response	<u>36.4%</u>	<u>(97)</u>
	100.0%	267

  

	<u>Santiago</u>	
farm laborers, unskilled, domestic	8.6%	(23)
skilled, artisans	59.7%	(160)
clerical	8.9%	(24)
farmowners, businessmen, managerial,		
professionals	15.7%	(42)
unemployed, no response	<u>7.1</u>	<u>(19)</u>
	100.0%	268

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Some questions are first, naturally functionally equivalent as a result of the identical wording of the questions in the three instruments. The questions have the same point of reference and little or no manipulation or kneading of the codes were necessary to obtain that equivalence. Rationale for move, tenancy and employment status are examples of this type of equivalence. It is difficult to obtain such congruence on attitudinal items where problems of cultural content enter. This does not infer, however, that categories which are not naturally functionally equivalent are of no or limited utility.

A second technique for purposes of obtaining functional equivalence is by manipulation of the coding categories. That is, pre-coded data can be transformed to match another pool of data by deleting or combining categories. Such manipulation does not lead to contrived data -- the data are not distorted, merely the codes are shuffled to obtain congruence. The technique is especially useful where questions are similar but not identical yet identical codes applied. It is less credible when questions asked from different points of reference naturally yield different codes. For example, questions regarding the presence or absence of fruit and questions regarding the presence or absence of animals cannot meaningfully (or rationally) be interpreted to have similar points of reference and to manipulate the codes such that all respondents fall into either of two categories makes little comparative sense other than to represent the dichotomous distribution of the two analytically distinct traits.

A more appropriate use of the technique applies to a situation wherein similar or identical questions are coded differently. For example, a question on the extent of interaction can be compared with

a question on presence or absence of such interaction by coding or recoding the former on a presence or absence basis. The opposite procedure is impossible. Similarly, a question on extent of interaction can be compared with another question on extent of interaction if both codes are, or can be made, similar. A question coded never or rarely, sometimes, and often or very often is comparable to one coded once a week or few times a month, once a month, and few times a year or never. It should be noted that the latter code runs in the opposite direction of the former -- in the recoding the categories would be assigned numbers such that both codes run in the same direction. Such a routine procedure is applicable when the response to one question is coded positive to negative, and another question coded negative to positive. It is incumbent upon the researcher to establish some procedure which ensures he (and others who use his data) is aware which and how the coded and recoded categories have been regrouped.

This procedure was most useful in the present research. Without it, the Santiago data could not have been included in the analysis. Interaction with neighbors is an example of a concept which was regrouped to make the data in Santiago comparable with those from Lansing and Moose Jaw. The willingness to migrate concept is an example of a similar useage; here, an "agree-disagree" continuum was recoded to match the "yes-no" dichotomy utilized in Lansing and Moose Jaw.

A third category in a typology of functional equivalence is best described as strained. Here, similar questions are aimed at the same concept but invoke a different point of reference. This may be acceptable or not acceptable depending on the extent of the discrepancy



introduced but represents some solution to the problem of using disparate questions and answers.

It is entirely possible in the course of a multi-nation study that either mechanical difficulties (length of time allowed for interview), political interference (certain questions are not permitted) or researcher's error (question is phrased incorrectly) results in missing or poorly collected data. In some cases, statistical techniques are available which allow the researcher to analyze his data but with expressed caveats. It is also possible, however, to allow a certain permissiveness in establishing conceptual congruence as long as the distortion thereby accepted is measured and admitted.

In the present research, it was deemed advisable to have some measures of interaction other than integration into the community per se. A measure of occupational interest was available that reflected whether respondents preferred longer work hours for more pay or would prefer the time free for participation in other activities. While the form of the question was identical in Lansing and Moose Jaw, in Santiago a question regarding respondents' choice as to the relative importance of friends or money was included for comparison. Although the question is not identical to the one asked in Lansing and Moose Jaw, all three reflect opinion as to whether more work or other activity is preferable.

The cases of educational aspirations and willingness to migrate are other examples. In Lansing and Moose Jaw the point of reference is "a boy" and the respondent respectively; whereas, in Santiago, it is "son" in both cases. Any difference of interpretation is open to discussion but in any case, the dimension for analysis is tapped.

More strained comparisons are involved in the level of living scores. Although the intention was to standardize scales containing standard household amenities (plumbing) and certain cultural possessions (magazines), the number of scale items varied over the three samples. The Lansing scale contained fourteen items, Moose Jaw twenty-three and Santiago only four. The Santiago scale scores are prejudiced then not only by the smaller number of items included but also by the type of items -- no household amenities are involved. Although the percentage distribution of respondents' scale scores were placed in three groups as opposed to four groups in Lansing and Moose Jaw, extreme caution should be imposed in comparing Santiago to the other samples on this criteria. It is entirely possible that the lack of functional equivalence in this case takes level of living scale scores out of the "strained" category of functional equivalence altogether and are therefore not functionally equivalent. The two lie on different continua.

### Summary

In this chapter the research design was presented. A discussion of each research site as well as the data-gathering technique applied in each case was followed by pertinent comparative information on each community. A description of the questionnaires applied in each community demonstrated actual equivalence between the questions used in two of three cases (Lansing and Moose Jaw) and high functional equivalence in the questions employed in the third (Santiago). A typology of

functional equivalence was developed to aid other researchers using comparative data to establish some degree of confidence in the comparability of the data.

Chapter IV is the data analysis chapter. A discussion of the techniques utilized here as well as comments on developing comparative statistics will be presented.

## CHAPTER IV

### FINDINGS

Comparative social research and analysis is a more complex task than the investigation of similar phenomena in one community. Problems of question validity and reliability and maintainance of comparability therein are compounded when the researcher's interests take him to different and varying cultures. Aside from language problems and cultural differences, the procedural matters of research can be complicated by varying behavioral orientations in different<sup>1</sup> research sites.

Instrument development, then, inherently includes measuring concepts in a satisfactory linguistic style. Usually there are many definitions of any given concept and comparative research multiplies<sup>2</sup> the number of definitions and referents. Duijker notes that even simple items such as age can produce equivilence problems. Different social systems utilize different chronologies or it may be impolite in certain cultures to enquire about age. Consequently, crucial concepts

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As an example of the problems that red tape, data "hoarding" and unwillingness to engage in cooperative research generate see Stanley Rothman, "The Lamentable side of Researching in Chile," The American Behavioral Scientist, 8 (September, 1964), pp. 18-19.

2

See H. D. J. Duijker, "Comparative Research in Social Science with Special Reference to Attitude Research," International Social Science Bulletin, 7 (No. 4, 1955), pp. 560-66.

should not be chosen that are culture-specific. Smelser<sup>3</sup> suggests, for example, the futility in employing a concept like "civil servant" in underdeveloped countries as it is too embedded in bureaucratic processes which vary from one social context to another.

As an example of how the problems of comparative survey research apply to the task at hand, a discussion of the use of occupation as an independent variable should be fruitful. Although other variables involved are likewise subjected to the distortions of cross-cultural research, occupation is a suitable example of the theoretical problems involved and the pragmatic solutions employed to solve such problems.

The purpose originally was to measure occupational status. In surveying the literature to reach a decision on which status scale to employ, discrepancies in conceptual definitions and research design were encountered which shed doubt upon the validity of the findings.

4

Using the Inkeles and Rossi study, Tiryakian<sup>4</sup> reported a correlation of .96 between prestige rankings in the United States and the Philippines.<sup>5</sup> Inkeles and Rossi found high agreement for results of the application of their occupational scale in the United States, Germany, England, Japan, New Zealand and the U.S.S.R. It is unusual that studies of countries of differing levels of industrialization

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See Neil Smelser, "The Methodology of Comparative Analysis," (paper presented at the Cross Cultural Symposium, Indiana University, 1966), pp. 17-23.

4

See Edward A. Tiryakian, "The Prestige Evaluation of Occupations in an Underdeveloped Country: The Philippines," American Journal of Sociology, 63 (January, 1958), pp. 390-99.

5

See Alex Inkeles and Peter H. Rossi, "National Comparisons of Occupational Prestige," American Journal of Sociology, 61 (January, 1956), pp. 329-39.

should yield similar results. However, Tiryakian studied fewer and more rural communities; therefore, with fewer occupations involved, the correlation (.96) is inflated.

Equivalence problems appear also in the work of Carter and  
<sup>6</sup> Sepulveda, who reported a correlation of .93 between prestige rankings in Chile and the United States. The finding is jeopardized by the fact that occupational definitions were not equivalent nor were the number of occupations included in the analysis similar. Similar  
<sup>7</sup> methodological difficulties apply to Hutchinson's use of Hall and Jones' study of Britain which he applied in Brazil and obtained a correlation of .92.

One of the better comparative studies of occupational prestige  
<sup>8</sup> is Svalastoga's research in Denmark. Comparisons were made between the Danish data and those obtained in the 1947 NORC study. The reported correlation of .91 is valid since many basic aspects of both studies were comparable -- both studies included a relatively large number of occupations; both were based on five-point rating scales; and both studies utilized national samples of adults.

The hesitation in employing any such occupational status scale derives from a lack of knowledge as to why differences exist between countries or communities as demonstrated in the literature. Inkeles

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<sup>6</sup>

See Roy Carter and Orlando Sepulveda, "Occupational Prestige in Santiago, Chile," American Behavioral Scientist, 8 (September, 1964) pp. 20-24.

<sup>7</sup>

See Bertram Hutchinson, "The Social Grading of Occupations in Brazil," British Journal of Sociology, 8 (June, 1957), p. 179.

<sup>8</sup>

See Kaare Svalastoga, Prestige, Class and Mobility, (Copenhagen, Glydendal, 1959).

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and Rossi attempted an explanation in terms of levels of industrial development but the data from other underdeveloped countries presented here do not support their contention. A later attempt in terms of relative distribution of rewards in a social system (the more complex the work, the higher the reward in terms of monetary increment and prestige) is refuted by Hodge, Treiman and Rossi himself.<sup>10</sup>

If empirical evidence could be marshaled to indicate the stability of occupational prestige ratings, with equivalent categories, over subgroups within societies, over time in a country and over a variety of social systems, we would then face problems of occupational evaluations in which the distribution of occupational prestige can change over time resulting in shifts in the amount of prestige in an occupational system and the shape of its distribution over the labor force.<sup>11</sup>

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Haug and Sussman point out certain problems with the application of occupational prestige scales such as the NORC scale, North-Hatt

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Inkeles and Rossi, loc. cit.

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See Robert W. Hodge, Donald J. Treiman, and Peter H. Rossi, "Occupational Prestige," in Reinhard Bendix and Seymour Martin Lipset, Class, Status and Power, (New York, Macmillan Company, 1966,) pp. 309-321.

11

One attempt at a model to characterize prestige systems and stratification systems in general, see Peter H. Rossi and Paul M. Siegel, "The Prestige of Occupations and Changes in Social Stratification," (a paper presented at the annual meetings of the American Sociological Association, Chicago, Illinois, September, 1965).

12

Marie R. Haug and Marvin B. Sussman, "Social Class Measurement 11 - The Case of the Duncan SEI," (paper presented at the annual meetings of the American Sociological Association, Boston, Mass., August, 1960).

scale and Duncan's Socio-Economic Index. First, the entire scheme is based on calculations of the percentage of personal ratings which suggests that public idiosyncrasy rather than public opinion determines the value of the criterion variable. The views of a minority of deviants rather than the majority value consensus define an occupation's rank. Secondly, the use of percentages above dichotomy point for the predictor variables "masks" necessary and important distinctions within the values of the dichotomy. And perhaps the most serious caveat, "Treating socio-economic status as a continuous variable is not always methodologically possible or advisable, and the researcher must justify a procedure for stratifying his subjects into categories or classes."<sup>13</sup>

Given these difficulties plus the fact that in industrialized societies increasingly the class or status of a family is determined by more than the husband's occupation alone, any attempts at an occupational prestige scale or a combination of income, occupation and education to devise a status scale of another sort were disbanded. Table 5 provides further justification for such (in)action -- the independent variables are not wholly independent of each other and consequently any attempt to combine them would only produce a new variable whose causal interpretation would be meaningless.<sup>14</sup>

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<sup>13</sup>

Ibid., p. 10.

<sup>14</sup>

The low correlation between the independent variables in the Lansing sample arises because the two non-status variables, duration of residence and nativity, depress the overall correlation. Non-status, particularistic criteria are assumed to be less relevant in an industrializing community. Further, the Lansing sample just met the minimum criteria for consideration as a representative sample of the total city population.



TABLE 5.  
PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN INDEPENDENT VARIABLES  
FOR SAMPLE CITIES

	Income			Education			Occupation			Nativity			Duration of Residence		
	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c
Education	.258	.271	.551												
	p<.001	p<.001	p<.001												
Occupation	.202	.180	.558	.369	.194	.588									
	p<.01	p<.01	p<.001	p<.001	p<.01	p<.001									
Nativity	-.129	.020	-.276	-.075	-.174	-.300	.062	-.101	-.294						
	p<.05	p>.20	p<.001	p<.20	p<.01	p<.001	p>.20	p<.15	p<.001						
Duration of Residence	-.072	-.029	.194	-.186	-.128	.243	.026	.099	.258	.108	.022	-.196			
	p<.20	p>.20	p<.01	p<.01	p<.05	p<.001	p>.20	p<.15	p<.001	p<.10	p>.20	p<.001			
Percapita Income	.528	.452	.763	.266	.132	.466	.248	.122	.474	.034	-.210	-.182	-.028	.020	.232
	p<.001	p<.001	p<.001	p<.001	p<.05	p<.001	p<.01	p<.10	p<.001	p>.20	p<.01	p<.01	p>.20	p<.05	p<.001

Code: a Lansing  
b Moose Jaw  
c Santiago

Average Correlation: Lansing .107 n=221  
Moose Jaw .058 n=267  
Santiago .205 n=268

### Relationships Between Variables

As a first step in the analysis, and to reach a decision on accepting or rejecting the first six hypotheses, the relationships between the independent and the dependent variables are explored.

Table 6 presents these relationships for Lansing, Table 7 for Moose Jaw and Table 8 for Santiago.

The relationships are presented in terms of tau values, which is a variation from the perpetual use in the social sciences of the chi-square ( $\chi^2$ ) statistic. Rationale for this procedure are generally available but frequently misunderstood or bypassed completely in favor of the normative tool of inference, the chi-square. But the chi-square is not sensitive to the ordering of categories that is inherent in the nature of partially ordered or ordinal variables. Secondly, the use of chi-square as an inferential tool is less powerful against population hypotheses of monotonic correlation than would be a test designed with such hypotheses specifically in mind.

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15

Only the tau value and the level at which it is significant are presented. Detailed tables of percentage distributions are available upon request.

16

For a discussion of the method for computing and understanding tau values see Maurice G. Kendall, Rank Correlation Methods (N.Y., Hafner, 1955), Chapter 3. No table for interpreting tau values was available; consequently, the author prepared one for different significance values. It is found in Appendix C. The author is indebted to Julie Tubbs for performing the necessary computations who brought it upon herself by continually nagging the author regarding the difficulty of computing the denominator in each instance for the numerous tables.

17

Perfect monotonic correlation is represented by a situation in which, for two variables X and Y, the value of X increases as Y increases, and conversely, regardless of the rate of increase.

TABLE 6.

TAU VALUES FOR INDEPENDENT VARIABLES BY DEPENDENT VARIABLES: LANSING

Dependent Variables	Independent Variables					
	Education	Income	Occupation	Duration of Residence	Nativity	Percapita Income
a	.194 p<.001	.142 p<.01	.204 p<.001	-.002 p>.20	-.101 p<.10	-.013 p>.20
b	.204 p<.001	.038 p=.20	.086 p<.10	.054 p<.15	.160 p<.01	.022 p>.20
c	.248 p<.001	.301 p<.001	.222 p<.001	.020 p>.20	-.093 p<.05	.115 p>.01
d	.254 p<.001	.261 p<.001	.204 p<.001	-.059 p<.10	.028 p>.20	.111 p<.01
e	-.122 p<.01	-.017 p>.20	.045 p>.20	.142 p<.01	-.082 p<.10	-.049 p<.20
f	.054 p<.15	.118 p<.01	.169 p<.01	.015 p>.20	.091 p=.05	.097 p<.05
g	.041 p>.20	.143 p<.01	.046 p>.20	-.036 p>.20	-.005 p>.20	.248 p<.001
h	-.041 p>.20	-.050 p<.20	-.027 p>.20	.025 p>.20	-.016 p>.20	.049 p<.20
i	.079 p<.10	.095 p<.10	.100 p<.10	-.197 p<.001	-.170 p<.01	.066 p=.15
j	.061 p<.10	.038 p>.20	.140 p<.01	.001 p>.20	.033 p>.20	-.104 p<.05
k	.189 p<.001	-.021 p>.20	.058 p<.20	-.082 p<.10	.063 p<.15	.102 p<.05
l	.008 p>.20	.096 p<.10	.076 p<.20	.087 p<.10	-.041 p>.20	.036 p>.20
m	-.110 p<.01	-.104 p=.01	-.073 p<.10	.400 p<.001	-.084 p<.10	-.166 p<.001
n	.104 p<.05	.016 p>.20	-.008 p>.20	.119 p<.05	-.113 p<.05	.017 p>.20
o	-.102 p<.05	-.087 p<.05	-.097 p<.05	.084 p<.05	-.088 p<.10	-.150 p<.001
p	.137 p<.01	.066 p<.15	.127 p<.05	.261 p<.001	-.069 p<.15	.091 p=.05
q	-	-	-	-	-	-
r	.225 p<.001	.189 p<.001	.059 p<.15	-.084 p<.10	-.155 p<.01	-.063 p<.15
s	.029 p>.20	-.135 p<.01	-.057 p<.20	-.503 p<.001	.023 p>.20	-.052 p<.15
t	-.134 p<.20	-.133 p<.20	-.174 p<.15	-.142 p<.15	-.107 p>.20	-.524 p<.001
u	.164 p<.001	.341 p<.001	.000 ns	-.205 p<.01	-.053 p<.20	.251 p<.001
v	.033 p>.20	.109 p>.20	-.320 p<.05	.113 p>.20	.077 p>.20	-.178 p>.20

TABLE 6 (cont'd)

w	.122 p<.01	-.010 p>.20	.154 p<.01	.078 p<.05	-.026 p>.20	-.039 p<.20
x	.178 p<.001	.089 p<.01	.162 p<.01	.118 p<.01	-.001 p>.20	.131 p<.01

Code:

## Acculturation:

- a Job Aspirations
- b Educational Aspirations
- c Level of Living
- d Future Orientation
- e Occupational Interest
- f Satisfaction with Life

## Adjustment:

- g Rationale for Move
- h Positive Impression - City
- i Negative Impression - City
- j Attraction of Neighborhood
- k Satisfaction with Neighborhood
- l Number of Relatives in City
- m Presence of Relatives in City
- n Number of Friends in City
- o Presence of Friends in Neighborhood
- p Presence of Friends in City
- q Tenancy
- r Mobility Status
- s Number of Moves - Last 5 years
- t Willingness to Migrate
- u Employment Status
- v Literacy

## Participation:

- w Interaction with Neighbors
- x Extent Organizational Participation

TABLE 7.

TAU VALUES FOR INDEPENDENT VARIABLES BY DEPENDENT VARIABLES: NOOSE JAW

Dependent Variables	Independent Variables					Per capita Income
	Education	Income	Occupation	Duration of Residence	Nativity	
a	.170 p<.001	.225 p<.001	.073 p<.15	-.030 p>.20	.103 p<.10	.081 p<.10
b	.145 p<.001	.067 p<.10	.059 p<.15	-.054 p<.15	-.095 p<.05	.03 p>.20
c	-.027 p>.20	-.033 p>.20	-.092 p<.05	.001 p>.20	.018 p>.20	-.018 p>.20
d	.072 p<.10	.176 p<.001	-.001 p>.20	-.123 p<.01	-.055 p<.15	-.025 p>.20
e	.095 p<.05	.081 p<.10	.140 p<.05	.017 p>.20	.256 p<.001	-.003 p>.20
f	.040 p<.20	.193 p<.001	.080 p<.10	-.060 p<.10	.088 p<.05	.019 p>.20
g	-.094 p<.05	-.152 p<.001	-.019 p>.20	-.129 p<.01	.073 p<.10	-.069 p<.10
h	.068 p<.10	.022 p>.20	-.022 p>.20	.020 p>.20	-.021 p>.20	.065 p<.10
i	.011 p>.20	.180 p<.001	.082 p<.10	-.146 p<.01	-.009 p>.20	.103 p<.05
j	-.007 p>.20	.019 p>.20	.019 p>.20	-.038 p=.20	.060 p<.15	.055 p<.15
k	.059 p<.10	.175 p<.01	-.023 p>.20	-.115 p<.01	.013 p>.20	.031 p>.20
l	-.014 p>.20	.080 p<.05	.026 p>.20	.152 p<.001	.099 p<.05	-.040 p<.20
m	-.093 p<.05	.020 p>.20	.046 p<.20	.196 p<.001	.130 p<.01	.032 ns
n	-.056 p<.15	-.069 p<.10	.121 p<.05	.086 p<.05	.069 p<.15	.004 p>.20
o	-.064 p<.10	-.069 p<.10	-.121 p<.05	.032 p>.20	-.131 p<.01	.065 p<.10
p	-.003 p>.20	-.068 p<.10	.067 p<.15	.082 p<.10	.030 p>.20	-.033 p>.20
q	-.050 p<.15	.057 p<.15	.103 p<.05	.270 p<.001	.145 p<.001	.084 p<.05
r	.137 p<.01	.143 p<.001	.058 p<.15	-.140 p<.001	-.139 p<.001	.046 p<.20
s	.063 p<.10	.079 p<.01	-.072 p<.10	-.316 p<.001	-.052 p<.15	.078 p<.05
t	.353 p<.001	.443 p<.001	-.062 p>.20	-.222 p<.001	-.023 p>.20	-.029 p>.20
u	.228 p<.001	.543 p<.001	.000 ns	-.098 p<.05	.090 p<.05	.141 p>.001
v	.185 p<.05	.178 p<.05	.190 p<.10	.040 p>.20	-.302 p<.01	.134 p<.10

TABLE 7 (cont'd)

w	.064 p<.10	.073 p<.10	-.033 p>.20	.019 p>.20	.016 p>.20	.006 p>.20
x	.167 p<.001	.174 p<.001	-.004 p>.20	.128 p<.01	-.169 p<.001	.111 p<.01

Code:

## Acculturation:

- a Job Aspirations
- b Educational Aspirations
- c Level of Living
- d Future Orientation
- e Occupational Interest
- f Satisfaction with Life

## Adjustment:

- g Rationale for Move
- h Positive Impression - City
- i Negative Impression - City
- j Attraction of Neighborhood
- k Satisfaction with Neighborhood
- l Number of Relatives in City
- m Presence of Relatives in City
- n Number of Friends in City
- o Presence of Friends in Neighborhood
- p Presence of Friends in City
- q Tenancy
- r Mobility Status
- s Number of Moves - Last 5 years
- t Willingness to Migrate
- u Employment Status
- v Literacy

## Participation:

- w Interaction with Neighbors
- x Extent Organizational Participation

TABLE 8.

TAU VALUES FOR INDEPENDENT VARIABLES BY DEPENDENT VARIABLES: SANTIAGO

Dependent Variables	Independent Variables				
	Education	Income	Occupation	Duration of Residence	Nativity
a	.294 p<.001	.308 p<.001	.221 p<.001	.033 p>.20	-.289 p<.001
b	.338 p<.001	.371 p<.001	.317 p<.001	.221 p<.001	-.218 p<.001
c	.300 p<.001	.334 p<.001	.335 p<.001	.220 p<.001	-.250 p<.001
d	.256 p<.001	.192 p<.001	.289 p<.001	.040 p<.20	-.099 p<.05
e	-.324 p<.001	-.315 p<.001	-.361 p<.001	-.197 p<.001	.236 p<.001
f	.276 p<.001	.244 p<.001	.259 p<.001	.059 p<.10	-.089 p<.05
g	-.169 p<.001	-.081 p<.05	-.212 p<.001	-.199 p<.001	.222 p<.001
h	.122 p<.05	.090 p<.05	.095 p<.05	.057 p=.15	-.040 p>.20
i	.031 p>.20	.068 p<.20	.090 p<.10	-.063 p<.20	-.174 p<.01
j	.033 p>.20	.075 p<.10	-.063 p<.15	-.138 p<.01	.100 p<.05
k	-.032 p>.20	-.044 p<.20	-.053 p<.15	-.044 p<.20	.070 p<.10
l	.154 p<.001	.169 p<.001	.143 p<.001	.130 p<.001	-.176 p<.001
m	.030 p>.20	.016 p>.20	-.003 p>.20	.070 p<.10	-.047 p<.15
n	.247 p<.001	.175 p<.001	.270 p<.001	.063 p<.10	-.204 p<.001
o	-	-	-	-	-
p	-.054 p<.20	-.005 p>.20	.015 p>.20	-.166 p<.001	.023 p>.20
q	-.087 p<.05	.052 p<.15	-.019 p>.20	-.180 p<.001	.167 p<.001
r	.011 p>.20	.028 p>.20	.048 p<.15	-.158 p<.001	.027 p>.20
s	.037 p>.20	.004 p>.20	.011 p>.20	.019 p>.20	-.115 p<.01
t	.211 p<.001	.292 p<.001	.297 p<.001	.100 p<.05	-.209 p<.001
u	.015 p>.20	.026 p>.20	.084 p<.05	-.059 p<.10	-.002 p>.20
v	.000 ns	.139 p<.05	.046 p>.20	.144 p<.05	-.196 p<.01
					.214 p<.001
					.336 p<.001
					.321 p<.001
					.101 p<.01
					-.270 p<.001
					.156 p<.001
					-.049 p<.15
					.070 p<.10
					.102 p<.10
					-.029 p<.20
					-.054 p<.10
					.153 p<.001
					.025 p>.20
					.249 p<.001
					-.006 p>.20
					-.193 p<.001
					.022 p>.20
					-.017 p>.20
					.212 p<.01
					.032 p>.20
					.152 p<.05

TABLE 8 (cont'd)

w	.011 p>.20	.022 p>.20	.017 p>.20	-.080 p<.05	.018 p>.20	.029 p>.20
x	.749 p<.001	.386 p<.001	.433 p<.001	.218 p<.001	-.360 p<.001	.325 p<.001

Code:

Acculturation:	Adjustment:	Participation:
a Job Aspirations	g Rationale for Move	w Interaction with
b Educational Aspirations	h Positive Impression - City	Neighbors
c Level of Living	i Negative Impression - City	x Extent Organizational
d Future Orientation	j Attraction of Neighborhood	Participation
e Occupational Interest	k Satisfaction with Neighborhood	
f Satisfaction with Life	l Number of Relatives in City	
	m Presence of Relatives in City	
	n Number of Friends in City	
	o Presence of Friends in Neighborhood	
	p Presence of Friends in City	
	q Tenancy	
	r Mobility Status	
	s Number of Moves - Last 5 years	
	t Willingness to Migrate	
	u Employment Status	
	v Literacy	



It is for this very reason that chi-square may not reject a null hypothesis when monotonic correlation exists in the population -- a misleading state of affairs to say the least.

The purpose here is not to explore the relationship between each independent and each dependent variable but to provide information on how such relationships vary between levels of industrial development. Consequently, we will restrict this discussion to the dependent and independent variables as they relate within and among the three communities. It is important to draw no conclusions from this part of the analysis regarding the relative importance of the independent variables -- the purpose here is only to indicate which variables were involved in significant relationships. Estimates of the relative importance of the variables are discussed later.

Table 9 summarizes the number of tau's significant at the .05 level or less. From this table, it is apparent that nearly sixty percent of the acculturation variables account for significant relationships in all three communities. Adjustment variables contribute the least number of significant relations. These are important findings with reference to questionnaire design and attitude measurement in a cross-cultural perspective and support the notion that although satisfaction with community and neighborhood are positive factors in  
 18  
 adjustment, it reflects only an attitude toward the community as some sort of entity or unitary organism. The determinants of success

TABLE 9.  
DISTRIBUTION OF SIGNIFICANT RELATIONSHIPS (p < .05)  
OVER INDEPENDENT VARIABLES AND INTEGRATION  
CATEGORIES FOR ALL SAMPLES

Integration Category	Occupation			Income			Education			Duration of Residence			Nativity			Per capita Income		
	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c
Acculturation	4	1	6	4	3	6	5	3	6	1	1	3	3	3	6	3	0	6
Adjustment	4	3	6	6	9	6	7	6	6	7	11	9	3	7	9	8	3	5
Participation	2	0	1	1	1	1	2	1	1	2	1	2	0	1	1	1	1	1

Code: a Lansing n=221  
b Moose Jaw n=267  
c Santiago n=268

in larger society (educational and occupational aspirations) and measures of cultural integration (into larger secular society) are the more viable indicies of urban integration.

Glancing through Tables 6, 7 and 8 indicates however that a participation variable, extent of organizational participation accounted for more significant relationships (16) than any other dependent variable while the other participation variable, interaction with neighbors, accounted for very few (4). Within the category adjustment, none of the variables were extremely strong. The acculturation variables, while none of them alone accounted for a large number of significant relationships, all accounted for approximately an equal number (11).

The influence of organizational participation across all three communities supports <sup>19</sup>Erbe's notion that a major function of voluntary associations is to allow the individual an opportunity to control an important part of his environment. Organizational participation is obviously viewed as providing an opportunity for learning urban norms, <sup>20</sup>roles and values rather than limiting such opportunity. Hagedorn <sup>21</sup>Labowitz suggest that this outlet is available and readily utilized by isolated occupations which compensate for their lower status by

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<sup>19</sup>

See William Erbe, "Social Involvement and Political Activity: A Replication and Elaboration," American Sociological Review, 29 (April, 1964), pp. 198-215.

<sup>20</sup>

The negative viewpoint is argued by Lee G. Burchinal and Ward W. Bauder, "Adjustments to the New Institutional Society," in Kenneth C. W. Kammeier, Population Studies (Chicago, Rand McNally & Company, 1969), pp. 196-210.

<sup>21</sup>

See Robert Hagedorn and Sanford Labovitz, "An Analysis of Community and Professional Participation Among Occupations," Social Forces, 46 (June, 1967), pp. 483-91.

increased participation in communities. The comparatively small impact of neighborhood participation suggests that the community not the neighborhood is the relevant and meaningful point of reference when discussing urban integration.

Among the independent variables mean family monthly income accounts for, by far, the majority of significant relationships (46). It is followed by education and duration of residence (both with 37), nativity (33), occupation (27) and percapita monthly family income (18). Again, variation exists within each community. In Lansing, education accounts for fourteen significant relationships and the lowest, nativity, accounts for only six. In Moose Jaw, income and duration of residence account for the most (13 each) and occupation and percapita income contribute only four each. In Santiago, all independent variables appear to have equal influence, with nativity accounting for slightly more (16).

The salience of family income is not unexpected and confirms our suspicions that income contributes heavily to ability to express and act out desires for mobility or the accumulation of material wealth. More importantly, it suggests that urban integration reflects class-related behavior and recommends such a vantage point as the most profitable for studying and developing theories on urban integration.<sup>22</sup> The negative effect of incorporating family size into income

A similar recommendation regarding the utility of the stratification approach to the study of poverty is made in Peter H. Rossi and Zahava D. Blum, "Social Stratification and Poverty" (paper presented at the annual meetings of the Sociological Research Association, San Francisco, California, August, 1967).

categories suggests more that family size is irrelevant to present considerations rather than that family size has a negative effect.

That education contributes to most significant relationships in Lansing is not surprising as universalistic criteria for urban integration are more likely to find expression in more urban (industrial) areas. The more particularistic criteria, were least affective<sup>23</sup> here. Nosow's contention that it is not duration of residence alone but the structure of the labor market which helps to determine economic integration is most applicable in Lansing. Gibbard's<sup>24</sup> notion that education contributes to a rise in occupational and social levels helps to explain the overall influence of status and status-related variables in other sections of the tables. Those with more education are able to raise their socio-economic status. The more educated are able to appreciate the usefulness of and/or acquire most of the highly evaluated amenities or perform the highly-evaluated roles in society.

The pervasiveness of nativity in Santiago is explained by<sup>25</sup> Elizaga who studied immigrants to Santiago. He found evidence that not only was the size of the place of origin crucial as a conditioning

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23

See Sigmund Nosow, "Labor Distribution and the Normative System," Social Forces, 35 (October, 1956), p. 31.

24

See Harold A. Gibbard, "Poverty and Social Organization" in Leo Fishman (ed.), Poverty Amid Affluence (New Haven, Yale University Press, 1966), pp. 45-71.

25

See Juan C. Elizaga, "A Study of Immigrants to Greater Santiago (Chile)," Demography, 3 (No. 2, 1966), pp. 353-77. The influence of the size of the place of origin on the status level of first urban job is discussed by G. Boalt, "Social Mobility in Stockholm: A Pilot Investigation," Transactions of the Second World Congress of Sociology, II (London, International Sociological Association), pp. 67-73.

factor on immigrants but the concomitant level of economic development.

26

Moore demonstrated the existence of such a principle in Sweden.

Nativity plays, then, a more important role especially when information and ability are not readily or equally dispersed throughout the urban

27

areas and hinterlands of a country. Omari indicated that rural-reared migrants are slower to enter formal associations and took longer to adjust to them than urban migrants.

Amongst each group of dependent variables the independent variables accounted for a varying number of significant relationships. For the adjustment items, duration of residence accounts for twenty-seven while occupation accounts for only thirteen. For the acculturation items, education accounts for fourteen and duration of residence only five. Duration of residence contributed to five significant relationships with participation items, while nativity accounted for only two.

The relationship between duration of residence and urban inte-

28

gration variables is relatively well established. Time functions to increase the possibility for improved conditions by exposing a migrant to urban ways of life and allowing him to adopt himself to the

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26

Although this study is somewhat dated, it is of continual relevance because of the fruitful nature of the data employed. See Jane Moore, Cityward Migration: Swedish Data (Chicago, University of Chicago Press, 1938).

27

See Thompson P. Omari, "Factors Associated with Urban Adjustment of Rural Southern Negroes," Social Forces, 35 (February, 1956), pp. 47-53.

28

See for example Ted Teruo Jitodai, "Urban-Rural Background and Formal Group Memberships," Rural Sociology, 30 (March, 1965), pp. 75-83.

29

environment. Intensification of organizational participation is one  
 30  
 route. Babchuk and Booth have recently demonstrated that newcomers  
 are often less affiliated with groups than those who had resided in a  
 community for any length of time. Organizational participation increa-  
 sed as the migrant became established.

As our society becomes more credentially oriented, education  
 will play a more pervasive role in the structure of social and occupa-  
 tional relationships. That education was most crucial to the accultur-  
 31  
 ation category of integration then should come as no surprise -- what  
 is revealing is that the relationship held up over all three communities.  
 32  
 Simpson's prediction that either a worker enters the labor force at  
 a higher occupational level by virtue of his education or else he may  
 never reach a high level at all is foreboding given the lower education

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 29

See Elizaga, op. cit., p. 358 and John Gulick, Charles E. Bowerman and Kurt W. Back, "Newcomer Enculturation in the City: Attitudes and Participation," in F. Stuart Chapin and Shirley F. Weiss (eds.), Urban Growth Dynamics (New York, John Wiley and Sons, Inc., 1962), pp. 315-58.

30

See Nickolas Babchuk and Alan Booth, "Voluntary Association Membership: A Longitudinal Analysis," American Sociological Review, 34 (February, 1969), pp. 31-45.

31

It has been demonstrated that level of education is highly correlated with membership and intensity of participation in voluntary associations. See John Scott Jr., "Membership and Participation in Voluntary Associations," American Sociological Review, 22 (June, 1957), pp. 315-26.

32

See Richard L. Simpson, "Occupational Careers and Mobility," in F. Stuart Chapin, Jr. and Shirley F. Weiss (eds.), Urban Growth Dynamics (New York, John Wiley and Sons, 1962), pp. 400-20.

levels in non-North American countries. Educational sophistication<sup>33</sup> also provides protection against bureaucratic manipulation and is an aid in learning how to get services. Residence alone in a city is not sufficient to provoke or permit to fertilize an individualistic world view, aspirations or level of living as the data demonstrates -- duration of residence was the least responsible for significant relationships in the acculturation category.

In terms of the number of significant relationships for each category of integration, acculturation accounts for most in Santiago (33), least in Moose Jaw (11). The adjustment items work best in Santiago as well (41) but are not as effective in Lansing (35). Lansing was the site for most significant relationships with respect to participation items (8) while Moose Jaw provided the least opportunity (5).

These relationships express in numbers what Dubois expresses as effectively in words, "...man's potentialities can become expressed only to the extent that circumstances are favorable to their existential manifestations."<sup>34</sup> In Lansing where the degree and type of industrial mix fosters in variety and number, kin and associational based networks, participation in them is duly reflected. This holds true in Moose Jaw, a city with a stable pattern of development. In Santiago, with an expanding economy and concomitant expanding aspirations of its denizens, acculturation and adjustment items work best.

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33

See S. M. Miller et al, "Poverty, Inequality and Conflict," Annals, (September, 1967), p. 17.

34

Rene Jules Dubois, "Man Adapting: His Limitations and Potentialities," in William R. Ewald Jr. (ed.), Environment for Man: The Next Fifty Years (Bloomington, Indiana University Press, 1967), p. 19.



To review, acculturation items appeared to have worked the best overall but in Lansing and Moose Jaw, participation items contributed to more (proportionately) significant relationships. Generally, what was true of where the integration categories worked best also applied to the dependent variables accounting for more significant relationships in the three communities.

In terms of individual items, extent of organizational participation proved to be the most fruitful item. Its partner in the participation category, interaction with neighbors, proved to be one of the least worthwhile items of all.

Regarding the independent variables, income worked the best overall. There were variations, however: in Lansing education was the stronger independent variable and in Santiago nativity accounted for most significant relationships.

If it is acceptable to reject a null hypothesis if a majority of the relationships involved are significant as specified levels, then we accept hypotheses I, II, and IV which stated that education, income and duration of residence would be significantly related to integration variables, and reject hypotheses III and V dealing with occupation and nativity. The addition of percapita family income to reflect family size and income simultaneously was not profitable -- it entered into only 18 or 25 per cent of all possible significant relationships with dependent variables.

The independent variables and the percentage of significant relationships they entered into were: education - 51%; income - 64%; occupation - 38%; duration of residence - 51%; and, nativity - 46%.

### Strength of Relationships

The next task is to demonstrate whether or not the relationships we have just described vary in intensity from city to city. What is required is a descriptive statistic to apply to the contingency tables in which variables are partially ordered at least. Somer's D is the appropriate statistic since we are interested in measuring  
 36  
 monotonic correlation.

Percentage differences make some sense but become somewhat ambiguous when tables become larger than two by two. With more than one pertinent percentage difference to compare, the analyst can emphasize those differences that confirm his predispositions. The use of the contingency coefficient suffers the disadvantages of the chi-square as discussed earlier. Somer's D takes into account both ordering and percentage differences and considers tied pairs which, for example, gamma does not.

Tables 10 through 15 present the values of Somer's D separately for each independent variable. This should allow the reader to compare more directly the D values across the samples, holding constant the independent variables.

Upon examining the tables, it becomes apparent that too few of the D values assume the hypothesized downwards relationship from Lansing to Santiago. It occurred in only 30 of 144 or 22 per cent of

the cases. In 37 out of 144 or 26 per cent of the cases, the relationships proceed in the opposite direction! Fifty-five or thirty-eight per cent of the cases follow a "U-type" distribution while the remaining twenty-two (14%) resemble the inverted-U relationship.

No clear pattern of relationships reveals itself for any of the independent variables. The adjustment category accounted for the largest proportion of relationships in the intended direction (27 out of 96 or 28%). Whereas no clear pattern appeared in the participation category, twenty-two out of a possible thirty-six or sixty-one per cent of the dependent variables in the acculturation category followed the U-shaped distribution.

This state of affairs offers two insights: first, there are differences among the categories of integration; and, secondly, a different explanation for the type of relationship over cities for the acculturation variables is required. On the first, it comes as little surprise since one of the original arguments presented for pursuing this line of enquiry was to demonstrate that integration was a process and referred to more than the act of submerging one's identity into the urban milieu. The tables demonstrate this fact.

The second requires more discussion. What is there about acculturation and the items included in that category for analysis that results in the different pattern? Previous discussion suggested that the concepts were similar across the three samples so the difference must lie in the setting in which the questions were asked; that is, the pattern results from something operating differently in the three cities.

TABLE 10.

VALUE OF SOMER'S D FOR ALL DEPENDENT VARIABLES  
AND CITIES BY EDUCATION

Dependent Variables	Sample Cities		
	Lansing	Moose Jaw	Santiago
Acculturation:			
Job Aspirations	.139	.159	.384
Educational Aspirations	.172	.125	.338
Level of Living	.277	-.031	.465
Future Orientation	.215	.062	.293
Occupational Interest	-.102	.081	-.381
Satisfaction with Life	.045	.034	-.320
Adjustment:			
Rationale for Move	.045	-.106	-.261
Positive Impression - City	-.045	.078	.202
Negative Impression - City	.090	.012	.268
Attraction of Neighborhood	.052	-.006	.045
Satisfaction with Neighborhood	.160	.051	-.038
Number of Relatives in City	.007	-.016	.237
Presence of Relatives in City	-.092	-.081	.037
Number of Friends in City	.115	-.061	.324
Presence of Friends in Neigh.	-.086	-.055	--
Presence of Friends in City	.119	-.003	-.068
Tenancy	--	-.044	-.097
Mobility Status	.185	.118	.013
Number of Moves - Last 5 yrs.	.033	.073	.057
Willingness to Migrate	-.104	.297	.242
Employment Status	.137	.197	.017
Literacy	-.167	.687	.000
Participation:			
Interaction with Neighbors	.136	-.030	.018
Extent Organizational Participation	.181	.186	.925

TABLE 11.

VALUE OF SOMER'S D FOR ALL DEPENDENT VARIABLES AND CITIES  
BY MEAN MONTHLY FAMILY INCOME

Dependent Variables	Sample Cities		
	Lansing	Moose Jaw	Santiago
Acculturation:			
Job Aspirations	.090	.168	.321
Educational Aspirations	.026	.046	.304
Level of Living	.300	-.033	.365
Future Orientation	.175	.122	.156
Occupational Interest	-.012	.057	-.260
Satisfaction with Life	.080	.134	.199
Adjustment:			
Rationale for Move	.128	-.141	-.084
Positive Impression - City	-.045	.020	.104
Negative Impression - City	.085	.168	.107
Attraction of Neighborhood	.026	.013	.063
Satisfaction with Neighborhood	-.015	.122	-.036
Number of Relatives in City	.074	.080	.169
Presence of Relatives in City	-.070	.014	.013
Number of Friends in City	.016	-.066	.190
Presence of Friends in Neigh.	-.058	-.048	--
Presence of Friends in City	-.045	-.047	-.005
Tenancy	--	.039	-.043
Mobility Status	.127	.099	.023
Number of Moves - Last 5 yrs.	-.121	.073	.004
Willingness to Migrate	-.090	.304	.236
Employment Status	.230	.374	.022
Literacy	.080	.131	.156
Participation:			
Interaction with Neighbors	-.009	.067	.025
Extent Organizational Participation	.081	.174	.392

TABLE 12.

VALUE OF SOMER'S D FOR ALL DEPENDENT VARIABLES AND CITIES  
BY OCCUPATION

Dependent Variables	Sample Cities		
	Lansing	Moose Jaw	Santiago
Acculturation:			
Job Aspirations	.132	.047	.053
Educational Aspirations	.058	.041	.294
Level of Living	.221	-.192	.413
Future Orientation	.138	-.001	.267
Occupational Interest	.031	.097	-.338
Satisfaction with Life	.115	.055	.238
Adjustment:			
Rationale for Move	.042	-.018	-.261
Positive Impression - City	-.025	-.020	.123
Negative Impression - City	.091	.076	.103
Attraction of Neighborhood	.095	.013	-.064
Satisfaction with Neighborhood	.039	-.016	-.049
Number of Relatives in City	-.062	.026	.175
Presence of Relatives in City	-.050	.032	-.003
Number of Friends in City	-.008	.115	.315
Presence of Friends in Neigh.	-.066	-.083	--
Presence of Friends in City	.087	.046	.015
Tenancy	--	.071	-.017
Mobility Status	.040	.040	.045
Number of Moves - Last 5 yrs.	-.051	-.066	.014
Willingness to Migrate	-.127	-.048	.273
Employment Status	.000	.000	.078
Literacy	-.250	.129	.082
Participation:			
Interaction with Neighbors	.139	.074	.020
Extent Organizational Participation	.152	.004	.470

TABLE 13.

VALUE OF SOMER'S D FOR ALL DEPENDENT VARIABLES AND CITIES  
BY DURATION OF RESIDENCE

Dependent Variables	Sample Cities		
	Lansing	Moose Jaw	Santiago
Acculturation:			
Job Aspirations	-.002	-.087	.036
Educational Aspirations	.021	-.048	.154
Level of Living	.021	.001	.205
Future Orientation	-.041	-.109	.028
Occupational Interest	-.098	.014	-.138
Satisfaction with Life	.010	-.053	.041
Adjustment:			
Rationale for Move	-.038	-.165	-.185
Positive Impression - City	.024	-.027	.053
Negative Impression - City	-.192	-.202	-.110
Attraction of Neighborhood	.001	-.033	-.096
Satisfaction with Neighborhood	-.056	-.101	-.031
Number of Relatives in City	.099	.204	.099
Presence of Relatives in City	.274	.177	.049
Number of Friends in City	.121	.110	.066
Presence of Friends in Neigh.	.057	.029	--
Presence of Friends in City	.172	.070	-.117
Tenancy	--	.239	-.125
Mobility Status	-.058	-.123	-.110
Number of Moves - Last 5 yrs.	-.460	-.374	.017
Willingness to Migrate	-.119	-.221	.070
Employment Status	-.140	-.087	-.041
Literacy	.122	.057	.106
Participation:			
Interaction with Neighbors	.071	.022	.121
Extent Organizational Participation	.121	.170	.226

TABLE 14.

VALUE OF SOMER'S D FOR ALL DEPENDENT VARIABLES  
AND CITIES BY NATIVITY

Dependent Variables	Sample Cities		
	Lansing	Moose Jaw	Santiago
<b>Acculturation:</b>			
Job Aspirations	-.274	.111	-.289
Educational Aspirations	.223	-.088	-.220
Level of Living	-.237	.019	-.252
Future Orientation	.044	-.056	-.100
Occupational Interest	-.144	.262	.238
Satisfaction with Life	.145	.090	-.088
<b>Adjustment:</b>			
Rationale for Move	-.016	.079	.224
Positive Impression - City	-.039	-.023	-.040
Negative Impression - City	-.428	-.010	-.181
Attraction of Neighborhood	.038	.038	.100
Satisfaction with Neighborhood	.083	.013	.019
Number of Relatives in City	-.125	.105	-.178
Presence of Relatives in City	-.132	.119	-.032
Number of Friends in City	-.283	.073	-.206
Presence of Friends in Neigh.	-.117	-.120	--
Presence of Friends in City	-.095	.024	-.015
Tenancy	--	.135	.159
Mobility Status	-.237	-.141	.025
Number of Moves - Last 5 yrs.	.060	-.056	-.116
Willingness to Migrate	-.182	-.024	-.199
Employment Status	-.075	.086	-.002
Literacy	.077	-.231	-.133
<b>Participation:</b>			
Interaction with Neighbors	.067	.017	.018
Extent Organizational Participation	-.002	-.181	-.368



TABLE 15.

VALUE OF SOMER'S D FOR ALL DEPENDENT VARIABLES AND CITIES  
BY PERCAPITA MONTHLY FAMILY INCOME

Dependent Variables	Sample Cities		
	Lansing	Moose Jaw	Santiago
Acculturation:			
Job Aspirations	-.014	.081	.225
Educational Aspirations	.017	.024	-.262
Level of Living	.117	-.018	.302
Future Orientation	.085	-.019	.078
Occupational Interest	-.037	-.002	-.211
Satisfaction with Life	.074	.015	.121
Adjustment:			
Rationale for Move	.233	-.067	-.048
Positive Impression - City	.042	.056	.061
Negative Impression - City	.058	.093	.099
Attraction of Neighborhood	.079	.042	-.023
Satisfaction with Neighborhood	.078	.024	-.042
Number of Relatives in City	.036	-.041	.148
Presence of Relatives in City	-.126	.024	.020
Number of Friends in City	.018	.004	.257
Presence of Friends in Neigh.	-.114	.050	--
Presence of Friends in City	.069	-.025	-.005
Tenancy	--	.064	-.149
Mobility Status	-.048	.036	.017
Number of Moves - Last 5 yrs.	-.050	.053	-.015
Willingness to Migrate	-.399	-.022	.165
Employment Status	.190	.108	.025
Literacy	-.147	.107	.139
Participation:			
Interaction with Neighbors	-.037	.006	.027
Extent Organizational Participation	.132	.113	.384

Gale has a similar problem in explaining industrial adaptation of automobile workers in Argentina and the United States. He concluded that the process is not linear but rather curvilinear:

In a traditional or pre-industrial society, the worker faces massive problems of adjustment and his adaptation to the industrial system is lowest. A supporting factor is that in pre-industrial societies, industrial development may be located in rural areas, and involve extraction of raw materials. In an early industrial society, we should expect a greater degree of adaptation as workers become socialized to life in the city and become integrated in a growing industrial labor force. Positive evaluation of industrial work in early-industrial societies may override those negative factors which lead to low worker adaptation in advanced industrial societies. In the latter, work aspirations shift to non-industrial sectors of employment, and the degree of relative adaptation to industry decreases.<sup>38</sup>

In the case of Santiago and Lansing, both have growing industrial labor forces and expanding opportunities. This, in time, leads to expanded positive world views and aspirations, if not for themselves, then for their children and the latter's generation. There are, then, certain similarities in communities which are undergoing industrialization and those communities which have already benefited from industrialization. The ingredients of the acculturation category are all imbedded in such development: consequently, their aspirations would be high. In Moose Jaw, however, with a stable (if not declining) economy and an out-migration of its youth, aspirations for the next

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See Richard Philip Gale, "Industrial Man in Argentina and the United States: A Comparative Study of Automobile Workers" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1968). His curvilinear model of industrial adaptation is presented on pages 23-25 of his dissertation.

38

Ibid., p. 24.

generation in Moose Jaw would be lower. The "U" shape of the distribution with respect to acculturation items then seems appropriate.

Regardless, the null hypothesis of no difference overall among the three samples must be accepted and this constitutes a rejection of hypothesis VI. Some knowledge has been gained however as to the variation not only in the integration process but as it is acted out at different levels of economic development.

#### Magnitude of Differences in Categories of (Dependent) Variables

The purpose of hypothesis VII was to establish if the magnitude of the differences in the categories of dependent variables decreased from the higher level of economic development (Lansing) to the developing community (Santiago). A Mann-Whitney U Test was chosen as the appropriate statistical test since it is one of the most powerful non-parametric tests, and is appropriate when the measurement is weaker than interval scaling and avoids the assumptions that the use of a  
39  
parametric test would infer.

Table 16 presents the U values and the levels of significance for each dependent variable. For all but seven of twenty-four variables, the magnitude of the differences between the samples (taken two at a time) are significant. In only one of the seven non-significant sets, was two of the set non-significant. That is, in the other six

TABLE 16.

MANN-WHITNEY U TEST FOR DEPENDENT VARIABLES  
BETWEEN SAMPLE CITIES

Dependent Variables	Comparison of Samples				
	a-b	p(one-tail)	b-c	p(one-tail)	a-c p(one-tail)
Acculturation:					
Job Aspirations	10,858.5	<.05	9,212.0	<.001	8,066.5 <.001
Educational Aspirations	27,357.0	<.20	26,756.0	<.001	21,466.0 <.001
Level of Living	28,111.5	>.20	26,555.0	<.001	21,494.0 <.001
Future Orientation	25,055.0	<.01	31,654.5	<.10	22,695.0 <.001
Occupational Interest	16,914.5	>.20	20,522.0	<.01	21,628.5 <.001
Satisfaction with Life	24,879.5	<.01	29,482.5	<.01	28,240.0 >.20
Adjustment:					
Rationale for Move	13,031.0	<.001	27,088.5	>.20	16,439.0 <.001
Positive Impression - City	13,744.5	<.01	9,108.0	<.001	8,130.5 <.001
Negative Impression - City	9,390.0	<.01	5,330.5	<.001	5,171.5 <.01
Attraction of Neighborhood	22,964.5	<.10	10,967.5	<.001	9,888.5 <.001
Satisfaction with Neighborhood	22,104.5	<.05	22,715.0	<.001	20,865.5 <.001
Number of Relatives in City	7,190.0	<.001	2,355.0	<.001	9,392.5 <.001
Presence of Relatives in City	23,602.0	<.001	9,726.0	<.001	11,367.0 <.001
Number of Friends in City	12,547.0	<.001	21,312.0	<.001	19,053.0 <.15
Presence of Friends in Neigh.	26,383.0	<.01	---	---	---
Presence of Friends in City	13,148.5	<.01	18,406.0	>.20	14,257.0 <.001
Tenancy	---	---	30,441.0	<.05	---
Mobility Status	20,631.0	<.001	26,581.5	<.05	16,465.5 <.001
Number of Moves	18,836.0	<.001	3,931.0	<.001	12,923.0 <.001
Willingness to Migrate	941.5	<.05	8,054.5	>.15	3,321.5 <.001
Employment Status	26,267.0	<.10	31,919.0	<.05	28,639.5 >.20
Literacy	521.0	>.20	1,954.0	<.20	677.5 >.20

TABLE 16 (cont'd)

Participation:						
Interaction with Neighbors	21,648.0	<.001	30,724.0	<.001	26,779.5	<.05
Extent Organizational Participation	7,738.0	<.10	16,658.0	<.001	8,816.0	<.001

Code: a Lansing  
b Moose Jaw  
c Santiago

at least two of the three pairs for the dependent variables were significantly different. The null hypothesis of no difference between the samples is therefore rejected and the alternate hypothesis, hypothesis IX, is accepted.

The results here modify our mixed emotions derived from analysis of the Somer's D values. Our spirits are elevated somewhat by the knowledge that the magnitude of the differences between samples on the dependent variables are satisfactorily different. The problem lies, then, not in the dependent variables themselves but in the nature of their association with the independent variables across the three samples. Regression analysis should help clarify the issue and the relationships.

#### Regression Analysis

The recent interest in comparative research in sociology has gone ahead without the development and/or use of relevant statistical techniques. A systematic procedure for comparing information for different population groupings in order to discover whether a given event, configuration, or behavior is typical or not is the required technique.

Up to this point we have provided measures of central tendency and degree of dispersion (away from mean values) to indicate what the general pattern in the data is and how well the different communities conform to it. Data for different communities have been summarized in such a way that where a typical pattern exists, it becomes evident. The average extent to which communities deviate from the typical pattern is also known.

Most analysis of comparative research unfortunately stops at this point. The total variation between the areas presents itself for discussion but is rarely a subject for evaluation. Attempting to account for as much of the intercommunity variation as possible, using factors which have theoretical relevance, is accomplished through multiple regression analysis.

A major characteristic of explanations and findings arrived at by the multiple regression approach is that the researcher is meaningfully aware how nearly completely he has been able to account for the phenomenon which he is attempting to explain. The goals of validity and completeness are both encompassed by such a technique -- the complete explanation (in terms of accounting for all of the variation) can be conceived as valid if the variables involved have theoretical or long-run basis.

Such a procedure is a positive departure from the use of aggregative statistics for this purpose. Totals for groups or areas used as the basis for computing rates and arriving at generalizations have descriptive value in revealing general trends but have limited utility for arriving at a multiple-variable explanation of group phenomena. If the analyst wishes to convey results of a distributive nature, then a distributive statistical technique is necessary and justified.

The notion of "explanation" as utilized in regression analysis merits discussion. A category of events is "explained" statistically if the total variation among the set is accounted for in terms of other (independent) variables. A statistical explanation is not necessarily a scientific one. Meaningful and reliable predictions of a given event

can be made only upon the basis of scientific explanations. A given set of variables may not always maintain a stable or predictable relationship to a given set of events nor can it be determined definitely by a single research study.

With the introduction of a large number of variables, it is possible to account for a large amount of the variation. Such an accounting, however, provides only a tentative explanation until each of the variables involved has been given a theoretical meaning.<sup>40</sup> If the variation between samples can be accounted for in terms of theoretically relevant variables, then the inter-sample differences may be said to be tentatively explained. If only a part of the variance is explained by such variables, and the balance remains unexplained or is accounted for by other variables which cannot be given an explicit theoretical meaning or were not included in the analysis, the tentative explanation can only be a partial one. An explanation becomes less tentative as it is found to be valid for other samples and later studies.

In general, it is assumed that the behavior observed for a dependent variable is accounted for in terms of the independent variables. From a statistical viewpoint, no implication of causation or direction of cause or effect is involved nor should it be inferred. All inferences of this nature should be derived from a conceptual or theoretical interpretation of the statistical findings.

Ascribing a theoretical meaning generally consists of stating a hypothesis about how the variables are interrelated and the process by which a change in one effects a change in another.



A least squares routine was used to generate the regression statistics in this section. McNemar<sup>41</sup> and Guttman<sup>42</sup> consider this technique to yield the best possible estimates. Least squares is a linear regression routine, the term "linear" emphasizing that only problems which are linear in the coefficients (or problems which may be acceptably converted to problems which are linear in the coefficients) may be calculated; however, problems may be non-linear in the dependent variables.

The best estimate is obtained by the best method of prediction, and, the best method of prediction is that which, if applied to all members of the population selected in random order, will yield the least amount of error for the population as a whole.<sup>43</sup> The sum of the squares of the errors of estimate are a minimum using the least squares routine.

Before we proceed further a discussion of the statistics utilized in this section of the analysis is appropriate. The purpose is two-fold: first, to explain the terms to those less familiar with regression analysis; and, secondly, to explain the application of the

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For a most useful discussion of regression analysis see Quinn McNemar, Psychological Statistics (New York, John Wiley & Sons, 1949), Chapter 8.

<sup>42</sup>

See Louis Guttman, "The Qualitative Prediction of a Quantitative Variable," in Paul Horst (ed.), The Prediction of Personal Adjustment, Bulletin 48 (New York, Social Science Research Council, 1941), pp. 265-311. A useful related article is Robert A. Gordon, "Issues in Multiple Regression," American Journal of Sociology, 73 (March, 1968), pp. 592-616.

<sup>43</sup>

Ibid., p. 264.

statistics to this project for those more familiar with their use.

The F-test for overall regression between a dependent variable and the independent variable is to test the hypothesis that the entire group of independent variables do not account for any variation in the dependent variable over that accounted for by the mean of the dependent variable. In the tables that follow the F value and its associated significance level are presented for the entire group of independent variables and for each independent variable separately, both for each dependent variable. The latter F-test is referred to as FB and tests if an independent variable does not account for any variation in the dependent variable above that accounted for by the remainder of the independent variables and the mean of the dependent variable.

The multiple correlation coefficient ( $R$ ) and its square, the coefficient of determination ( $R^2$ ) refer to the proportion of the sum of the deviations from the mean of the dependent variable accounted for by the independent variable(s). It is interpreted in terms of amount of reduction in the error of estimate. In regression terms, the correlation coefficient is a measure of success in estimating the dependent variable ( $Y$ ) by the use of a regression equation.

The success of the multiple variable estimating equation in accounting for the variation in  $Y$  may be summarized by  $R$  or preferably by  $R^2$ . These are merely algebraic relationships within the sample and do not necessarily imply that the researcher is attempting to infer a correlation parameter for a population.

That is a fundamental distinction. In correlation analysis all variables must be free to vary with each other, but in a strictly regression analysis only the dependent variable is free to vary.

Independent variables may be selected in any purposive (theoretical) manner. When this is done, however, all inferences must be unidirectional from the independent to the dependent variable. In regression terms, the square of the correlation coefficient ( $R^2$ ) is an estimate of the proportion of the variance in Y that is accounted for by the regression of Y on one or more independent variables. Obviously then, the researcher gains more insight from the analysis of this  $R^2$  than the square of a product-moment correlation for example.

The partial correlation coefficient reflects the holding constant of one (independent) variable. The correlation between 1 and 2 ( $r_{12}$ ) and the correlation between 1 and 2 with 3 held constant ( $r_{12.3}$ ) can yield very different numbers -- the difference between the two correlations is due to the heterogeneity of the third variable. If the third variable is unrelated to 1 and 2, the partial correlation will equal  $r_{12}$ . If either  $r_{13}$  or  $r_{23}$  is negative and  $r_{12}$  positive, partialling out the third variable will raise the correlation  $r_{12}$ . The partial correlation  $r_{12.3}$  then tells us the degree of correlation between 1 and 2 which would exist provided variation in 3 were controlled. But if it cannot be claimed that 3 produces variation in 1 and 2, the interpretation of the  $r_{12.3}$  is far from clear.

The  $R^2$  delete refers to the  $R^2$  which would have been obtained if the independent variable it refers to were to be deleted from the least square equation and the equation recalculated. In regression terms, it is the proportion of the sum of the squared deviations from

the mean of the independent variable which can be accounted for by all the independent variables except the one at hand. The  $R^2$  delete value of the independent variable which is much less than the  $R^2$  value for the original equation indicates that that independent variable contributes little in that equation.

The beta weights are normalized weights and indicate the contribution of each independent variable in accounting for the variation in the dependent variable above that accounted for by its mean. Any attempt to use the absolute value of beta weights as indicators of the proportion of variance in the dependent variable accounted for the independent variable at hand however is pointless since the beta weights undoubtedly reflect different units of measurement and hence are not directly comparable in any absolute sense. Consequently, in demonstrating the relative impact of each independent variable, the beta weights are ranked.

This procedure is justified since beta weights are units of standard measure, deviations from their mean divided by their standard deviations. They convert all variables to the same unit of measurement (standard deviations). Where the variables are normally distributed, the standard deviation units may be interpreted with direct reference to the normal curve. Important summary measures are therefore easily obtained. The nature of the analysis is also more explicit -- the explanation of the variance in Y at a particular time, is done in terms of the variation in a set of independent variables as observed at the same time.

Tables 17 through 40 summarize the findings of the regression analysis separately for each dependent variable over the three samples.

TABLE 17.  
REGRESSION ANALYSIS FOR DEPENDENT VARIABLE JOB ASPIRATIONS

	Lansing F=5.64 p>.20 R=.124 R <sup>2</sup> =.016	Moose Jaw F=1.199 p>.20 R=.164 R <sup>2</sup> =.027	Santiago F=3.521 p<.01 R=.274 R <sup>2</sup> =.075
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weight (rank)	-.100 (2)	.022 (5)	.008 (6)
FB	.385 p>.20	.026 p>.20	.003 p>.20
partial correlation coefficient	-.042	.010	.003
R <sup>2</sup> delete	.014	.027	.075
<u>Education</u>			
beta weight (rank)	.008 (6)	-.049 (3)	.088 (3)
FB	.012 p>.20	.584 p>.20	2.151 p<.15
partial correlation coefficient	.008	-.047	.090
R <sup>2</sup> delete	.016	.025	.067
<u>Occupation</u>			
beta weight (rank)	.111 (1)	.101 (1)	.013 (5)
FB	2.525 p<.15	2.282 p<.15	.038 p>.20
partial correlation coefficient	.108	.093	.012
R <sup>2</sup> delete	.004	.018	.075
<u>Nativity</u>			
beta weight (rank)	.032 (5)	-.036 (4)	-.166 (2)
FB	.148 p>.20	.268 p>.20	6.930 p<.01
partial correlation coefficient	.026	-.032	-.161
R <sup>2</sup> delete	.015	.026	.050
<u>Duration of Residence</u>			
beta weight (rank)	-.050 (4)	.019 (6)	.017 (4)
FB	.338 p>.20	.082 p>.20	.078 p>.20
partial correlation coefficient	-.040	.018	.017
R <sup>2</sup> delete	.014	.027	.075
<u>Percapita Income</u>			
beta weight (rank)	.074 (3)	.074 (2)	.169 (1)
FB	.213 p>.20	.274 p>.20	1.306 p>.20
partial correlation coefficient	.031	.032	.070
R <sup>2</sup> delete	.015	.026	.070

TABLE 18.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE EDUCATIONAL ASPIRATIONS

	Lansing F=4.298 p<.001 R=.328 R <sup>2</sup> =.108	Moose Jaw F=1.245 p>.20 R=.167 R <sup>2</sup> =.028	Santiago F=2.814 p=.01 R=.246 R <sup>2</sup> =.061
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weight (rank)	.033 (6)	-.034 (5.5)	.005 (5)
FB	.047 p>.20	.061 p>.20	.001 p>.20
partial correlation coefficient	.015	-.015	.002
R <sup>2</sup> delete	.107	.028	.061
<u>Education</u>			
beta weight (rank)	.287 (1)	-.046 (3)	-.040 (4)
FB	17.356 p<.001	.501 p>.20	.435 p>.20
partial correlation coefficient	.273	-.044	-.041
R <sup>2</sup> delete	.035	.026	.059
<u>Occupation</u>			
beta weight (rank)	.175 (2)	.139 (1)	.134 (2)
FB	1.923 p<.01	4.269 p<.05	4.131 p<.05
partial correlation coefficient	.177	.127	.125
R <sup>2</sup> delete	.078	.012	.046
<u>Nativity</u>			
beta weight (rank)	-.064 (3)	-.034 (5.5)	.048 (3)
FB	.041 p>.20	.246 p>.20	.563 p>.20
partial correlation coefficient	-.055	-.031	.046
R <sup>2</sup> delete	.105	.027	.059
<u>Duration of Residence</u>			
beta weight (rank)	.047 (4)	-.039 (4)	.186 (1)
FB	.337 p>.20	.332 p>.20	8.880 p<.01
partial correlation coefficient	.040	-.036	.181
R <sup>2</sup> delete	.106	.027	.029
<u>Percapita Income</u>			
beta weight (rank)	-.043 (5)	.051 (2)	-.000 (6)
FB	.079 p>.20	.132 p>.20	.000 p>.20
partial correlation coefficient	-.019	.022	-.000
R <sup>2</sup> delete	.107	.027	.061

TABLE 19.  
REGRESSION ANALYSIS FOR DEPENDENT VARIABLE LEVEL OF LIVING

	Lansing F=12.272 p <.001 R=.506 R <sup>2</sup> =.256	Moose Jaw F=.413 p>.20 R=.097 R <sup>2</sup> =.010	Santiago F=6.900 p<.001 R=.370 R <sup>2</sup> =.137
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weight (rank)	.398 (2)	-.055 (3)	.398 (1)
FB	8.030 p<.01	.154 p>.20	7.147 p<.01
partial correlation coefficient	.190	-.024	.163
R <sup>2</sup> delete	.228	.009	.113
<u>Education</u>			
beta weight (rank)	.433 (1)	-.085 (1)	-.060 (5)
FB	47.440 p<.001	1.718 p<.20	1.068 p>.20
partial correlation coefficient	.426	-.081	-.064
R <sup>2</sup> delete	.091	.003	.133
<u>Occupation</u>			
beta weight (rank)	-.059 (4)	-.054 (4)	.042 (6)
FB	.927 p>.20	.634 p>.20	.432 p>.20
partial correlation coefficient	-.066	-.049	.041
R <sup>2</sup> delete	.253	.007	.135
<u>Nativity</u>			
beta weight (rank)	-.024 (6)	.006 (6)	-.153 (4)
FB	.104 p>.20	.008 p>.20	6.344 p=.01
partial correlation coefficient	-.022	.005	-.154
R <sup>2</sup> delete	.255	.009	.116
<u>Duration of Residence</u>			
beta weight (rank)	.030 (5)	-.007 (5)	.162 (3)
FB	.164 p>.20	.010 p>.20	7.324 p<.01
partial correlation coefficient	.028	-.006	.165
R <sup>2</sup> delete	.255	.009	.113
<u>Percapita Income</u>			
beta weight (rank)	-.303 (3)	.056 (2)	-.276 (2)
FB	4.738 p<.05	.154 p>.20	3.722 p=.05
partial correlation coefficient	-.147	.024	-.118
R <sup>2</sup> delete	.240	.009	.125

TABLE 20.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE FUTURE ORIENTATION

	Lansing F=2.815 p=.01 R=.270 R <sup>2</sup> =.073	Moose Jaw F=1.322 p>.20 R=.172 R <sup>2</sup> =.030	Santiago F=2.027 p<.10 R=.211 R <sup>2</sup> =.044
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weight (rank)	.079 (3)	.159 (1)	.053 (3)
FB	.254 p>.20	1.321 p>.20	.116 p>.20
partial correlation coefficient	.034	.071	.021
R <sup>2</sup> delete	.072	.025	.044
<u>Education</u>			
beta weight (rank)	.269 (1)	-.070 (3)	.178 (1)
FB	14.800 p<.001	1.190 p>.20	8.548 p<.01
partial correlation coefficient	.254	-.068	.178
R <sup>2</sup> delete	.009	.025	.013
<u>Occupation</u>			
beta weight (rank)	.057 (4)	-.000 (6)	-.006 (6)
FB	.696 p>.20	.000 p>.20	.007 p>.20
partial correlation coefficient	.057	-.000	-.005
R <sup>2</sup> delete	.070	.030	.044
<u>Nativeity</u>			
beta weight (rank)	.009 (5)	-.059 (4)	.055 (2)
FB	.013 p>.20	.737 p>.20	.737 p>.20
partial correlation coefficient	.008	-.053	.053
R <sup>2</sup> delete	.073	.027	.042
<u>Duration of Residence</u>			
beta weight (rank)	.000 (6)	-.087 (2)	-.045 (4)
FB	.000 p>.20	1.670 p<.20	.519 p>.20
partial correlation coefficient	.000	-.080	-.044
R <sup>2</sup> delete	.073	.023	.042
<u>Percapita Income</u>			
beta weight (rank)	-.115 (2)	-.054 (5)	.034 (5)
FB	.551 p>.20	.146 p>.20	.052 p>.20
partial correlation coefficient	-.051	-.024	-.014
R <sup>2</sup> delete	.071	.029	-.044



TABLE 21.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE OCCUPATIONAL INTEREST

	Lansing F=3.22 p<.001 F=.288 R <sup>2</sup> =.083	Moose Jaw F=5.908 p<.001 R=.346 R <sup>2</sup> =.120	Santiago F=2.343 p<.05 R=.226 R <sup>2</sup> =.051
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weight (rank)	-.391 (1)	-.320 (2)	.051 (5)
FB	6.310 p=.01	5.895 p<.01	.108 p>.20
partial correlation coefficient	-.169	-.149	.020
R <sup>2</sup> delete	.056	.100	.051
<u>Education</u>			
beta weight (rank)	.114 (4)	-.119 (4)	.001 (6)
FB	2.682 p=.10	3.808 p<.05	.000 p>.20
partial correlation coefficient	.111	-.120	.001
R <sup>2</sup> delete	.071	.107	.051
<u>Occupation</u>			
beta weight (rank)	.200 (3)	.133 (3)	.129 (3)
FB	8.742 p<.01	4.373 p<.05	3.780 p=.05
partial correlation coefficient	.198	.129	.119
R <sup>2</sup> delete	.045	.105	.037
<u>Nativity</u>			
beta weight (rank)	-.024 (6)	.052 (5)	.132 (2)
FB	.092 p>.20	.638 p>.20	4.297 p<.05
partial correlation coefficient	-.021	.049	.127
R <sup>2</sup> delete	.082	.118	.035
<u>Duration of Residence</u>			
beta weight (rank)	-.048 (5)	.032 (6)	-.144 (1)
FB	.344 p>.20	.248 p>.20	5.292 p<.05
partial correlation coefficient	-.040	.031	-.141
R <sup>2</sup> delete	.081	.119	.032
<u>Percapita Income</u>			
beta weight (rank)	.370 (2)	.397 (1)	-.073 (4)
FB	5.729 p=.01	8.703 p<.01	.237 p>.20
partial correlation coefficient	.161	.180	-.030
R <sup>2</sup> delete	.058	.090	.050

TABLE 22.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE SATISFACTION WITH LIFE

	Lansing	Moose Jaw	Santiago
Overall Regression	F=4.340 p<.001	F=1.88 p<.10	F=2.034 p<.10
Multiple Correlation Coefficients	R=.329 R <sup>2</sup> =.108	R=.204 R <sup>2</sup> =.042	R=.211 R <sup>2</sup> =.045
Independent Variables			
Income			
beta weights (rank)	-.214 (2)	.142 (1)	.177 (1)
FB	1.936 p<.20	1.061 p>.20	1.274 p>.20
partial correlation coefficient	-.095	.064	.070
R <sup>2</sup> delete	.100	.638	.040
Education			
beta weights (rank)	.280 (1)	-.118 (2)	.171 (2)
FB	16.574 p<.001	3.387 p<.10	7.896 p<.01
partial correlation coefficient	.268	-.113	.171
R <sup>2</sup> delete	.039	.029	.016
Occupation			
beta weights (rank)	.126 (6)	.012 (4)	.023 (6)
FB	3.574 p<.15	.035 p>.20	.118 p>.20
partial correlation coefficient	.128	.012	.021
R <sup>2</sup> delete	.094	.042	.044
Nativity			
beta weight (rank)	-.168 (4)	.007 (6)	.028 (5)
FB	4.380 p<.05	.011 p>.20	.189 p>.20
partial correlation coefficient	-.141	.006	.027
R <sup>2</sup> delete	.090	.042	.044
Duration of Residence			
beta weight (rank)	.156 (5)	-.110 (3)	-.069 (4)
FB	3.703 p=.05	2.697 p<.10	1.205 p>.20
partial correlation coefficient	.130	-.101	-.068
R <sup>2</sup> delete	.093	.032	.040
Percapita Income			
beta weight (rank)	.184 (3)	-.008 (5)	-.106 (3)
FB	1.459 p>.20	.004 p>.20	.493 p>.20
partial correlation coefficient	.082	-.004	-.043
R <sup>2</sup> delete	.102	.042	.043

TABLE 23.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE RATIONALE FOR MOVE

	Lansing F=25.547 p<.001 R=.646 R <sup>2</sup> =.417	Moose Jaw F=17.384 p<.001 R=.535 R <sup>2</sup> =.286	Santiago F=1.279 p>.20 R=.169 R <sup>2</sup> =.029
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.101 (3)	.156 (3)	-.213 (2)
FB	.664 p>.20	1.740 p<.20	1.817 p<.20
partial correlation coefficient	.056	.082	-.083
R <sup>2</sup> delete	.416	.281	.022
<u>Education</u>			
beta weights (rank)	.074 (4)	-.002 (6)	-.092 (3)
FB	1.765 p<.20	.001 p>.20	2.270 p<.15
partial correlation coefficient	.090	-.002	-.093
R <sup>2</sup> delete	.412	.286	.020
<u>Occupation</u>			
beta weights (rank)	.019 (6)	-.099 (4)	-.055 (5)
FB	.123 p>.20	2.979 p<.10	.667 p>.20
partial correlation coefficient	.024	-.106	-.050
R <sup>2</sup> delete	.417	.278	.026
<u>Nativity</u>			
beta weights (rank)	.601 (1)	.171 (2)	.065 (4)
FB	86.248 p<.001	8.411 p<.01	1.029 p>.20
partial correlation coefficient	.536	.177	.063
R <sup>2</sup> delete	.182	.263	.025
<u>Duration of Residence</u>			
beta weights (rank)	.052 (5)	.434 (1)	.026 (6)
FB	.725 p>.20	56.288 p<.001	.166 p>.20
partial correlation coefficient	.058	.422	.025
R <sup>2</sup> delete	.415	.131	.028
<u>Percapita Income</u>			
beta weights (rank)	-.179 (2)	-.012 (5)	.225 (1)
FB	2.120 p<.15	.969 p>.20	2.198 p<.15
partial correlation coefficient	-.099	-.061	.091
R <sup>2</sup> delete	.412	.284	.020

TABLE 24.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE POSITIVE IMPRESSION-CITY

	Lansing F=42.054, p<.001 R=.736 R <sup>2</sup> =.541	Moose Jaw F=12.075, p<.001 R=.467 R <sup>2</sup> =.218	Santiago F=468 p>.20 R=.103 R <sup>2</sup> =.011
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.088 (3)	-.093 (4)	-.126 (2)
FB	.635 p>.20	.557 p>.20	.626 p>.20
partial correlation coefficient	.054	-.046	-.049
R <sup>2</sup> delete	.540	.216	.008
<u>Education</u>			
beta weights (rank)	.012 (6)	.042 (6)	-.052 (3)
FB	.060 p>.20	.535 p>.20	.693 p>.20
partial correlation coefficient	.017	.045	-.051
R <sup>2</sup> delete	.541	.216	.008
<u>Occupation</u>			
beta weights (rank)	.064 (5)	-.173 (2)	-.042 (4)
FB	1.817 p<.20	8.286 p<.05	.385 p>.20
partial correlation coefficient	.092	-.176	-.038
R <sup>2</sup> delete	.537	.193	-.009
<u>Nativity</u>			
beta weights (rank)	.589 (1)	.139 (3)	-.006 (6)
FB	105.156 p<.001	5.125 p<.05	.010 p>.20
partial correlation coefficient	.574	.139	-.006
R <sup>2</sup> delete	.316	.203	.010
<u>Duration of Residence</u>			
beta weights (rank)	.188 (2)	.382 (1)	-.023 (5)
FB	10.466 p=.001	39.798 p<.001	.126 p>.20
partial correlation coefficient	.215	.364	-.022
R <sup>2</sup> delete	.519	.098	.010
<u>Percapita Income</u>			
beta weights (rank)	-.070 (4)	.081 (5)	.177 (1)
FB	.412 p>.20	.533 p<.05	1.339 p>.20
partial correlation coefficient	-.044	.039	.071
R <sup>2</sup> delete	.540	.217	.006

TABLE 25.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE NEGATIVE IMPRESSION-CITY

	Lansing F=13.798 p<.001 R=.528 R <sup>2</sup> =.279	Moose Jaw F=6.181 p<.001 R=.353 R <sup>2</sup> =.125	Santiago F=43.738 p<.001 R=.708 R <sup>2</sup> =.501
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.076 (4)	-.061 (5)	.077 (6)
FB	.300 p>.20	.231 p>.20	.461 p>.20
partial correlation coefficient	.037	-.029	.042
R <sup>2</sup> delete	.278	.124	.501
<u>Education</u>			
beta weights (rank)	.074 (5)	.057 (6)	-.131 (3)
FB	.144 p>.20	.873 p>.20	8.917 p<.01
partial correlation coefficient	.082	.058	-.182
R <sup>2</sup> delete	.274	.122	.484
<u>Occupation</u>			
beta weights (rank)	-.005 (6)	-.094 (3)	.164 (2)
FB	.006 p>.20	2.175 p<.15	11.642 p=.001
partial correlation coefficient	-.005	-.091	.207
R <sup>2</sup> delete	.278	.118	.479
<u>Nativity</u>			
beta weights (rank)	.418 (1)	.186 (2)	-.078 (5)
FB	33.766 p<.001	8.197 p<.01	2.839 p<.10
partial correlation coefficient	.369	.175	-.104
R <sup>2</sup> delete	.165	.097	.496
<u>Duration of Residence</u>			
beta weights (rank)	.149 (2)	.230 (1)	.619 (1)
FB	4.204 p<.05	12.879 p=.001	185.688 p<.001
partial correlation coefficient	.139	.271	.645
R <sup>2</sup> delete	.265	.081	.147
<u>Percapita Income</u>			
beta weights (rank)	-.099 (3)	.093 (4)	-.098 (4)
FB	.519 p>.20	.480 p>.20	.816 p>.20
partial correlation coefficient	-.049	.043	-.056
R <sup>2</sup> delete	.277	.123	.500

TABLE 26.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE ATTRACTION OF NEIGHBORHOOD

	Lansing	Moose Jaw	Santiago
Overall Regression	F=2.452 p<.05	F=1.88 p>.20	F=4.765 p<.001
Multiple Correlation Coefficients	R=.254 R <sup>2</sup> =.064	R=.163 R <sup>2</sup> =.027	R=.314 R <sup>2</sup> =.099
Independent Variables			
<u>Income</u>			
beta weights (rank)	-.047 (5)	.038 (4)	.223 (2)
FB	.089 p>.20	.059 p>.20	2.145 p<.15
partial correlation coefficient	-.020	.015	.090
R <sup>2</sup> delete	.064	.026	.091
<u>Education</u>			
beta weights (rank)	-.073 (4)	.092 (1)	.084 (4)
FB	1.064 p>.20	2.068 p<.15	2.026 p=.15
partial correlation coefficient	-.070	.089	.088
R <sup>2</sup> delete	.060	.019	.092
<u>Occupation</u>			
beta weights (rank)	.233 (1)	-.079 (2)	-.014 (6)
FB	11.671 p=.001	1.390 p>.20	.044 p>.20
partial correlation coefficient	.227	-.073	-.013
R <sup>2</sup> delete	.013	.021	.098
<u>Nativity</u>			
beta weights (rank)	.034 (6)	-.072 (3)	-.022 (5)
FB	.173 p>.20	1.083 p>.20	.121 p>.20
partial correlation coefficient	.028	-.064	-.021
R <sup>2</sup> delete	.064	.023	.098
<u>Duration of Residence</u>			
beta weights (rank)	-.078 (3)	.037 (5)	.270 (1)
FB	.880 p>.20	.302 p>.20	19.633 p<.001
partial correlation coefficient	-.064	.034	.264
R <sup>2</sup> delete	.060	.026	.031
<u>Percapita Income</u>			
beta weights (rank)	.103 (2)	.033 (6)	-.166 (3)
FB	.435 p>.20	.054 p>.20	1.280 p>.20
partial correlation coefficient	.045	.014	-.070
R <sup>2</sup> delete	.062	.026	.094

TABLE 27.  
REGRESSION ANALYSIS FOR DEPENDENT VARIABLE SATISFACTION WITH NEIGHBORHOOD

	Lansing F=1.673 p<.15 R=.211 R <sup>2</sup> =.05	Moose Jaw F=.619 p>.20 R=.119 R <sup>2</sup> =.014	Santiago F=1.797 p=.01 R=.199 R <sup>2</sup> =.040
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	-.184 (2)	-.059 (3)	-.044 (4)
FB	1.338 p>.20	.177 p>.20	.079 p>.20
partial correlation coefficient	-.079	-.026	-.017
R <sup>2</sup> delete	.039	.013	.039
<u>Education</u>			
beta weights (rank)	.192 (1)	-.082 (1)	-.001 (6)
FB	7.306 p<.001	1.621 p<.20	.000 p>.20
partial correlation coefficient	.182	-.079	-.001
R <sup>2</sup> delete	.012	.008	.040
<u>Occupation</u>			
beta weights (rank)	.029 (5)	.005 (6)	-.148 (1)
FB	0.179 p>.20	.006 p>.20	4.903 p<.05
partial correlation coefficient	.029	.005	-.136
R <sup>2</sup> delete	.044	.014	.022
<u>Nativity</u>			
beta weights (rank)	.014 (6)	.061 (2)	.028 (5)
FB	.864 p>.029	.772 p>.20	.186 p>.20
partial correlation coefficient	.017	.054	.027
R <sup>2</sup> delete	.045	.011	.039
<u>Duration of Residence</u>			
beta weights (rank)	-.075 (4)	-.042 (4)	-.108 (2)
FB	.798 p>.20	.373 p>.20	2.938 p<.10
partial correlation coefficient	-.061	-.038	-.106
R <sup>2</sup> delete	.041	.013	.029
<u>Per capita Income</u>			
beta weights (rank)	.151 (3)	.021 (5)	.081 (3)
FB	.924 p>.20	.021 p>.20	.286 p>.20
partial correlation coefficient	.066	.009	.033
R <sup>2</sup> delete	.041	.014	.039

TABLE 28.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE NUMBER OF RELATIVES IN CITY

	Lansing	Moose Jaw	Santiago
Overall Regression	F=2.90 p<.01 R=.27 R <sup>2</sup> =.07	F=1.56 p<.20 R=.186 R <sup>2</sup> =.035	F=1.210 p>.20 R=.164 R <sup>2</sup> =.027
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.048 (5)	.188 (1)	.135 (1)
FB	.096 p>.20	1.851 p<.20	.733 p>.20
partial correlation coefficient	.021	.084	.053
R <sup>2</sup> delete	.075	.028	.024
<u>Education</u>			
beta weights (rank)	.106 (2)	-.039 (6)	-.015 (6)
FB	2.273 p<.15	.372 p>.20	.063 p>.20
partial correlation coefficient	.102	-.038	-.016
R <sup>2</sup> delete	.065	.033	.027
<u>Occupation</u>			
beta weights (rank)	.000 (6)	-.059 (4)	.105 (2)
FB	.000 p>.20	.775 p>.20	2.390 p<.15
partial correlation coefficient	-.001	-.054	.095
R <sup>2</sup> delete	.075	.032	.018
<u>Nativity</u>			
beta weights (rank)	-.094 (3)	-.040 (5)	.044 (3)
FB	1.343 p>.20	.350 p>.56	.466 p>.20
partial correlation coefficient	-.079	.037	.042
R <sup>2</sup> delete	.069	.033	.025
<u>Duration of Residence</u>			
beta weights (rank)	-.166 (1)	.120 (3)	-.024 (5)
FB	4.010 p<.05	3.180 p<.10	.143 p>.20
partial correlation coefficient	-.136	.110	-.023
R <sup>2</sup> delete	.058	.023	.026
<u>Percapita Income</u>			
beta weights (rank)	.055 (4)	-.133 (2)	-.042 (4)
FB	.126 p>.20	.887 p>.20	.075 p>.20
partial correlation coefficient	.024	-.058	-.017
R <sup>2</sup> delete	.075	.031	.027



TABLE 29.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE PRESENCE OF RELATIVES IN CITY

Overall Regression Multiple Correlation Coefficients Independent Variables	Lansing F=2.201 p<.05 R=.241 R <sup>2</sup> =.058	Moose Jaw F=2.308 p<.10 R=.212 R <sup>2</sup> =.045	Santiago F=5.694 p<.001 R=.340 R <sup>2</sup> =.116
<u>Income</u>			
beta weights (rank)	-.032 (4)	.237 (1)	.196 (2)
FB	.040 p>.20	2.978 p<.10	1.699 p<.20
partial correlation coefficient	-.014	.106	.080
R <sup>2</sup> delete	.058	.034	.110
<u>Education</u>			
beta weights (rank)	.233 (1)	.077 (2)	.053 (5)
FB	10.910 p=.001	1.461 p>.20	.823 p>.20
partial correlation coefficient	.220	.075	.056
R <sup>2</sup> delete	.010	.040	.113
<u>Occupation</u>			
beta weights (rank)	.079 (2)	-.024 (5)	-.062 (4)
FB	1.343 p>.20	.129 p>.20	.924 p>.20
partial correlation coefficient	.079	-.022	-.059
R <sup>2</sup> delete	.052	.044	.113
<u>Nativity</u>			
beta weights (rank)	.001 (6)	-.033 (4)	.004 (6)
FB	.000 p>.20	.236 p>.20	.010 p>.20
partial correlation coefficient	.001	-.030	.004
R <sup>2</sup> delete	.058	.044	.116
<u>Duration of Residence</u>			
beta weights (rank)	.033 (3)	.023 (6)	.322 (1)
FB	.158 p>.20	.121 p>.20	28.318 p<.001
partial correlation coefficient	.027	.022	.313
R <sup>2</sup> delete	.057	.044	.020
<u>Percapita Income</u>			
beta weights (rank)	.008 (5)	-.060 (3)	-.144 (3)
FB	.003 p>.20	.184 p>.20	.981 p>.20
partial correlation coefficient	.003	-.026	-.061
R <sup>2</sup> delete	.058	.044	.112

TABLE 30.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE NUMBER OF FRIENDS IN CITY

	Lansing F=1.36 p>.20 R=.19 R <sup>2</sup> =.04	Moose Jaw F=3.184 p<.01 R=.262 R <sup>2</sup> =.068	Santiago F=.846 p>.20 R=.138 R <sup>2</sup> =.019
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	-.137 (2)	-.013 (6)	-.269 (1)
FB	.733 p>.20	.009 p>.20	2.879 p<.10
partial correlation coefficient	-.058	-.006	-.104
R <sup>2</sup> delete	.033	.068	.008
<u>Education</u>			
beta weights (rank)	.087 (5)	-.166 (1)	.032 (5)
FB	1.491 p>.20	6.952 p<.01	.266 p>.20
partial correlation coefficient	.083	-.161	.032
R <sup>2</sup> delete	.030	.044	.018
<u>Occupation</u>			
beta weights (rank)	-.157 (1)	.137 (2)	.056 (4)
FB	5.154 p<.05	4.360 p<.05	.682 p>.20
partial correlation coefficient	-.153	.128	.051
R <sup>2</sup> delete	.013	.053	.016
<u>Nativity</u>			
beta weights (rank)	-.034 (6)	.045 (3)	-.098 (3)
FB	.165 p>.20	.450 p>.20	2.314 p<.15
partial correlation coefficient	-.028	.042	-.094
R <sup>2</sup> delete	.036	.067	-.010
<u>Duration of Residence</u>			
beta weights (rank)	.122 (3)	.023 (5)	.018 (6)
FB	2.100 p<.15	.125 p>.20	.077 p>.20
partial correlation coefficient	.099	.022	.017
R <sup>2</sup> delete	.027	.068	.019
<u>Percapita Income</u>			
beta weights (rank)	.105 (4)	.040 (4)	.243 (2)
FB	.439 p>.20	.084 p>.20	2.526 p<.10
partial correlation coefficient	.045	.018	.098
R <sup>2</sup> delete	.035	.068	.010

TABLE 31.  
REGRESSION ANALYSIS FOR DEPENDENT VARIABLE PRESENCE OF FRIENDS IN NEIGHBORHOOD

	Lansing F=1.801 P=.10 R=.219 R <sup>2</sup> =.048	Moose Jaw F=2.846 P=.01 R=.248 R <sup>2</sup> =.062	Santiago
Overall Regression Multiple Correlation Coefficients Independent Variables			
<u>Income</u> beta weights (rank) FB partial correlation coefficient R <sup>2</sup> delete	.030 (5) 0.036 p>.20 .013 .048	.082 (4) .367 p>.20 .038 .060	
<u>Education</u> beta weights (rank) FB partial correlation coefficient R <sup>2</sup> delete	-.004 (6) .003 p>.20 -.004 .048	-.120 (2) 3.602 p<.10 -.117 .049	NO DATA AVAILABLE
<u>Occupation</u> beta weights (rank) FB partial correlation coefficient R <sup>2</sup> delete	.072 (4) 1.104 p>.20 .072 .043	.106 (1) 2.601 p<.15 .100 .052	
<u>Nativity</u> beta weights (rank) FB partial correlation coefficient R <sup>2</sup> delete	-.180 (1) 4.743 p<.05 -.147 .027	-.018 (5) .069 p>.20 -.016 .061	
<u>Duration of Residence</u> beta weights (rank) FB partial correlation coefficient R <sup>2</sup> delete	.178 (2) 4.485 p<.05 .143 .028	-.001 (6) .000 p>.20 -.001 .062	
<u>Percapita Income</u> beta weights (rank) FB partial correlation coefficient R <sup>2</sup> delete	-.162 (3) 1.064 p>.20 -.070 .043	.084 (3) .368 p>.20 .038 .060	

TABLE 32.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE PRESENCE OF FRIENDS IN CITY

	Lansing F=1.831 p<.10 R=.221 R <sup>2</sup> =.049	Moose Jaw F=1.217 p>.20 R=.165 R <sup>2</sup> =.027	Santiago F=6.342 p<.001 R=.357 R <sup>2</sup> =.127
<u>Overall Regression</u>			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.040 (5)	-.146 (1)	.203 (2)
FB	.063 p>.20	1.113 p>.20	1.843 p<.20
partial correlation coefficient	.017	-.065	.084
R <sup>2</sup> delete	.048	.023	.121
<u>Education</u>			
beta weights (rank)	-.006 (6)	-.058 (5)	.049 (5)
FB	.009 p>.20	.807 p>.20	.719 p>.20
partial correlation coefficient	-.006	-.056	.052
R <sup>2</sup> delete	.049	.024	.125
<u>Occupation</u>			
beta weights (rank)	.083 (3)	.062 (4)	-.082 (4)
FB	1.460 p>.20	.866 p>.20	1.683 p<.20
partial correlation coefficient	.082	.058	-.080
R <sup>2</sup> delete	.042	.024	.121
<u>Nativity</u>			
beta weights (rank)	-.196 (2)	.076 (3)	.004 (6)
FB	5.628 p<.05	1.230 p>.20	.005 p>.20
partial correlation coefficient	-.160	.069	.004
R <sup>2</sup> delete	.023	.023	.127
<u>Duration of Residence</u>			
beta weights (rank)	.229 (1)	-.009 (6)	.339 (1)
FB	7.453 p<.01	.018 p>.20	31.854 p<.001
partial correlation coefficient	.183	-.008	.330
R <sup>2</sup> delete	.016	.027	.021
<u>Percapita Income</u>			
beta weights (rank)	-.082 (4)	.132 (2)	-.150 (3)
FB	.274 p>.20	.868 p>.20	1.081 p>.20
partial correlation coefficient	-.036	.058	-.064
R <sup>2</sup> delete	.048	.024	.124

TABLE 33.  
REGRESSION ANALYSIS FOR DEPENDENT VARIABLE TENANCY

	Lansing	Moose Jaw	Santiago
Overall Regression		F=2.364 p<.05 R=.227 R <sup>2</sup> =.052	F=3.172 p<.01 R=.261 R <sup>2</sup> =.068
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)		.137 (2)	.169 (2)
FB		.024 p>.20	1.191 p>.20
partial correlation coefficient		-.010	.067
R <sup>2</sup> delete		.052	.064
<u>Education</u>			
beta weights (rank)		.064 (6)	.049 (4)
FB		.048 p>.20	.678 p>.20
partial correlation coefficient		-.014	.051
R <sup>2</sup> delete		.052	.066
<u>Occupation</u>			
beta weights (rank)		.066 (5)	-.016 (5)
FB		4.567 p<.05	.058 p>.20
partial correlation coefficient		.131	-.015
R <sup>2</sup> delete		.035	.068
<u>Nativeity</u>			
beta weights (rank)		.068 (3)	.004 (6)
FB		3.508 p>.10	.004 p>.20
partial correlation coefficient		-.115	.004
R <sup>2</sup> delete		.039	.068
<u>Duration of Residence</u>			
beta weights (rank)		.067 (4)	-.253 (1)
FB		4.825 p>.20	16.547 p<.001
partial correlation coefficient		.135	-.244
R <sup>2</sup> delete		.034	.007
<u>Per capita Income</u>			
beta weights (rank)		.140 (1)	-.120 (3)
FB		.380 p>.20	.645 p>.20
partial correlation coefficient		.038	-.050
R <sup>2</sup> delete		.050	.066

NO DATA AVAILABLE

TABLE 34.  
REGRESSION ANALYSIS FOR DEPENDENT VARIABLE MOBILITY STATUS

	Lansing F=1.03 p>.20 R=.168 R <sup>2</sup> =.028	Moose Jaw F=1.298 p>.20 R=.171 R <sup>2</sup> =.029	Santiago F=4.33 p<.001 R=.301 R <sup>2</sup> =.091
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.107 (2)	-.121 (2)	-.024 (6)
FB	.444 p>.20	.767 p>.20	.025 p>.20
partial correlation coefficient	.046	-.054	-.010
R <sup>2</sup> delete	.026	.026	.090
<u>Education</u>			
beta weights (rank)	-.078 (3)	.085 (3)	.064 (5)
FB	1.174 p>.20	1.787 p<.20	1.178 p>.20
partial correlation coefficient	-.074	.083	.067
R <sup>2</sup> delete	.023	.022	.086
<u>Occupation</u>			
beta weights (rank)	-.073 (4)	-.061 (5)	-.143 (3)
FB	1.104 p>.20	.826 p>.20	4.848 p<.05
partial correlation coefficient	-.072	-.056	-.135
R <sup>2</sup> delete	.023	.026	.074
<u>Nativity</u>			
beta weights (rank)	-.126 (1)	.064 (4)	-.142 (4)
FB	2.269 p<.15	.876 p>.20	5.203 p<.05
partial correlation coefficient	-.102	.058	-.140
R <sup>2</sup> delete	.018	.026	.072
<u>Duration of Residence</u>			
beta weights (rank)	.024 (6)	.038 (6)	.190 (1)
FB	.081 p>.20	.320 p>.20	9.548 p<.01
partial correlation coefficient	.019	.035	.188
R <sup>2</sup> delete	.028	.028	.057
<u>Percapita Income</u>			
beta weights (rank)	-.028 (5)	.235 (1)	.159 (2)
FB	.032 p>.20	2.768 p<.10	1.175 p>.20
partial correlation coefficient	-.012	.103	.067
R <sup>2</sup> delete	.028	.019	.086

TABLE 35.

REGRESSION ANALYSIS FOR DEPENDENT VARIABLE NUMBER OF MOVES - LAST 5 YEARS

	Lansing F=6.27 p<.001 R=.387 R <sup>2</sup> =.150	Moose Jaw F=14.521 p<.001 R=.501 R <sup>2</sup> =.251	Santiago F=2.892 p=.01 R=.250 R <sup>2</sup> =.062
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	-.191 (2)	.076 (5)	.425 (1)
FB	1.618 p>.20	.396 p>.20	7.504 p<.001
partial correlation coefficient	-.087	.039	.167
R <sup>2</sup> delete	.143	.250	.035
<u>Education</u>			
beta weights (rank)	.007 (6)	.124 (2)	-.020 (5)
FB	.011 p>.20	4.838 p<.05	.112 p>.20
partial correlation coefficient	.007	.135	-.021
R <sup>2</sup> delete	.149	.237	.062
<u>Occupation</u>			
beta weights (rank)	-.036 (5)	-.014 (6)	-.016 (6)
FB	.314 p>.20	.060 p>.20	.058 p>.20
partial correlation coefficient	-.038	-.015	-.015
R <sup>2</sup> delete	.148	.250	.062
<u>Nativeity</u>			
beta weights (rank)	-.109 (3)	.082 (4)	-.024 (4)
FB	1.951 p<.20	1.848 p<.20	.143 p>.20
partial correlation coefficient	-.095	.084	-.024
R <sup>2</sup> delete	.141	.246	.062
<u>Duration of Residence</u>			
beta weights (rank)	-.261 (1)	-.498 (1)	-.173 (3)
FB	10.840 p=.001	70.565 p<.001	7.705 p<.01
partial correlation coefficient	-.220	-.462	-.169
R <sup>2</sup> delete	.106	.047	.034
<u>Percapita Income</u>			
beta weights (rank)	.072 (4)	-.117 (3)	-.256 (2)
FB	.235 p>.20	.890 p>.20	2.936 p<.10
partial correlation coefficient	.033	-.058	-.105
R <sup>2</sup> delete	.148	.248	.052

TABLE 36.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE WILLINGNESS TO MIGRATE

	Lansing	Moose Jaw	Santiago
Overall Regression	F=1.288 p>.20 R=.187 R <sup>2</sup> =.035	F=3.179 p<.01 R=.261 R <sup>2</sup> =.068	F=1.681 p<.15 R=.192 R <sup>2</sup> =.037
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.246 (2)	.285 (1)	-.163 (2)
FB	2.370 p<.15	4.415 p<.05	1.077 p>.20
partial correlation coefficient	.105	.129	-.064
R <sup>2</sup> delete	.024	.053	.033
<u>Education</u>			
beta weights (rank)	.056 (4.5)	-.005 (6)	.037 (6)
FB	.613 p>.20	.007 p>.20	.361 p>.20
partial correlation coefficient	.053	-.005	.037
R <sup>2</sup> delete	.032	.068	.036
<u>Occupation</u>			
beta weights (rank)	.056 (4.5)	-.142 (3)	-.055 (5)
FB	.665 p>.20	4.659 p<.05	.684 p>.20
partial correlation coefficient	.055	-.133	-.051
R <sup>2</sup> delete	.032	.052	.035
<u>Nativity</u>			
beta weights (rank)	-.015 (6)	-.109 (4)	.094 (3)
FB	.031 p>.20	2.632 p<.10	2.146 p<.15
partial correlation coefficient	-.012	-.100	.090
R <sup>2</sup> delete	.035	.059	.029
<u>Duration of Residence</u>			
beta weights (rank)	-.124 (3)	.021 (5)	-.061 (4)
FB	2.147 p<.15	.102 p>.20	.941 p>.20
partial correlation coefficient	-.100	.020	-.060
R <sup>2</sup> delete	.025	.068	.034
<u>Percapita Income</u>			
beta weights (rank)	-.292 (1)	-.256 (2)	.264 (1)
FB	3.386 p<.10	3.403 p<.10	3.042 p<.10
partial correlation coefficient	-.125	-.114	.107
R <sup>2</sup> delete	.020	.056	.026



TABLE 37.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE EMPLOYMENT STATUS

	Lansing F=6.845 p<.001 R=.401 R <sup>2</sup> =.161	Moose Jaw F=3.934 P=.001 R=.288 R <sup>2</sup> =.083	Santiago F=11.011 p<.001 R=.449 R <sup>2</sup> =.202
Overall Regression			
Multiple Correlation Coefficients			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.003 (6)	-.005 (6)	.051 (4)
FB	.000 p>.20	.002 p>.20	.128 p>.20
partial correlation coefficient	.001	-.002	.022
R <sup>2</sup> delete	.161	.083	.202
<u>Education</u>			
beta weights (rank)	.103 (3)	.017 (5)	-.024 (5)
FB	2.408 p<.15	.074 p>.20	.187 p>.20
partial correlation coefficient	.105	.017	-.027
R <sup>2</sup> delete	.151	.083	.201
<u>Occupation</u>			
beta weights (rank)	-.322 (1)	-.268 (1)	-.294 (2)
FB	24.811 p<.001	16.944 p<.001	23.260 p<.001
partial correlation coefficient	-.322	-.247	-.286
R <sup>2</sup> delete	.064	-.024	.131
<u>Nativity</u>			
beta weights (rank)	-.006 (5)	-.040 (4)	-.059 (3)
FB	.007 p>.20	.368 p>.20	1.019 p>.20
partial correlation coefficient	-.006	-.038	-.062
R <sup>2</sup> delete	.161	.082	.199
<u>Duration of Residence</u>			
beta weights (rank)	.089 (4)	.060 (3)	.006 (6)
FB	1.281 p>.20	.834 p>.20	.012 p>.20
partial correlation coefficient	.077	.056	.007
R <sup>2</sup> delete	.156	.080	.202
<u>Percapita Income</u>			
beta weights (rank)	.212 (2)	.151 (2)	-.307 (1)
FB	2.050 p<.15	1.208 p>.20	4.969 p<.05
partial correlation coefficient	.098	.068	-.137
R <sup>2</sup> delete	.152	.079	.187

TABLE 38.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE LITERACY

	Lansing	Moose Jaw	Santiago
Overall Regression	F=.096 p<.001 R=.430 R <sup>2</sup> =.185	F=14.155 p<.001 R=.496 R <sup>2</sup> =.246	F=11.804 p<.001 R=.462 R <sup>2</sup> =.213
Multiple Correlation Coefficient			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.383 (3)	.209 (3)	-.092 (5)
FB	6.810 p<.01	2.922 p<.10	.418 p>.20
partial correlation coefficient	.176	.105	-.040
R <sup>2</sup> delete	.159	.238	.212
<u>Education</u>			
beta weights (rank)	.390 (2)	.391 (1)	.341 (1)
FB	35.195 p<.001	47.550 p<.001	38.228 p<.001
partial correlation coefficient	.376	.393	.357
R <sup>2</sup> delete	.051	.108	.098
<u>Occupation</u>			
beta weights (rank)	-.028 (6)	-.159 (4)	.008 (6)
FB	.189 p>.20	7.201 p<.01	.019 p>.20
partial correlation coefficient	-.030	-.164	.009
R <sup>2</sup> delete	.184	.225	.213
<u>Nativity</u>			
beta weights (rank)	-.074 (4)	.025 (5)	-.220 (3)
FB	.924 p>.20	.176 p>.20	14.468 p<.001
partial correlation coefficient	-.066	.026	-.229
R <sup>2</sup> delete	.181	.246	.169
<u>Duration of Residence</u>			
beta weights (rank)	.067 (5)	-.015 (6)	.154 (4)
FB	.749 p>.20	.060 p>.20	7.314 p<.01
partial correlation coefficient	.059	-.015	.165
R <sup>2</sup> delete	.182	.246	.191
<u>Percapita Income</u>			
beta weights (rank)	-.512 (1)	-.241 (2)	.223 (2)
FB	12.325 p=.001	3.733 p<.05	2.679 p<.10
partial correlation coefficient	-.233	-.119	.101
R <sup>2</sup> delete	.138	.235	.205

TABLE 39.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE INTERACTION WITH NEIGHBORS

	Lansing F=2.15 p<.05 R=.240 R <sup>2</sup> =.06	Moose Jaw F=.435 p>.20 R=.099 R <sup>2</sup> =.010	Santiago F=1.300 p>.20 R=.170 R <sup>2</sup> =.029
<u>Overall Regression</u>			
Multiple Correlation Coefficient			
Independent Variables			
<u>Income</u>			
beta weights (rank)	.053 (6)	.122 (1)	.057 (2)
FB	.115 p>.20	.767 p>.20	.131 p>.20
partial correlation coefficient	.023	.054	.022
R <sup>2</sup> delete	.056	.007	.028
<u>Education</u>			
beta weights (rank)	.181 (1)	.014 (6)	-.023 (5)
FB	6.543 p<.01	.047 p>.20	.137 p>.20
partial correlation coefficient	.172	-.013	-.023
R <sup>2</sup> delete	.028	.010	.028
<u>Occupation</u>			
beta weights (rank)	.137 (2)	.034 (5)	-.001 (6)
FB	3.986 p<.05	.245 p>.20	.000 p>.20
partial correlation coefficient	.135	.031	-.001
R <sup>2</sup> delete	.039	.009	.029
<u>Nativity</u>			
beta weights (rank)	-.117 (4)	-.082 (3)	.030 (4)
FB	2.033 p<.20	1.413 p>.20	.217 p>.20
partial correlation coefficient	-.097	-.074	.029
R <sup>2</sup> delete	.048	.004	.028
<u>Duration of Residence</u>			
beta weights (rank)	.134 (3)	.051 (4)	-.155 (1)
FB	2.581 p<.15	.552 p>.20	5.960 p<.05
partial correlation coefficient	.109	.046	-.149
R <sup>2</sup> delete	.045	.008	.007
<u>Percapita Income</u>			
beta weights (rank)	-.107 (5)	-.086 (2)	.041 (3)
FB	.465 p>.20	.364 p>.20	.072 p>.20
partial correlation coefficient	.046	-.037	.017
R <sup>2</sup> delete	.055	.008	.029

TABLE 40.

## REGRESSION ANALYSIS FOR DEPENDENT VARIABLE EXTENT ORGANIZATIONAL PARTICIPATION

	Lansing F=1.582 $p > .15$ R=.206 $R^2 = .042$	Moose Jaw F=5.597 $p < .001$ R=.338 $R^2 = .114$	Santiago F=886.378 $p < .001$ R=.976 $R^2 = .953$
Overall Regression			
Multiple Correlation Coefficient			
Independent Variables			
<u>Income</u>			
beta weights (rank)	-.038 (4)	.098 (5)	-.068 (3)
FB	.056 $p > .20$	.545 $p > .20$	3.821 $p < .05$
partial correlation coefficient	-.016	.046	-.120
$R^2$ delete	.042	.112	.952
<u>Education</u>			
beta weights (rank)	.199 (1)	.127 (4)	.979 (1)
FB	7.820 $p < .01$	4.306 $p < .05$	5294.681 $p < .001$
partial correlation coefficient	.188	.128	.976
$R^2$ delete	.007	.100	.004
<u>Occupation</u>			
beta weights (rank)	-.045 (3)	-.130 (3)	.007 (6)
FB	.424 $p > .20$	4.149 $p < .05$	.205 $p > .20$
partial correlation coefficient	-.044	-.125	.028
$R^2$ delete	.040	.100	.953
<u>Nativity</u>			
beta weights (rank)	-.026 (5)	-.189 (2)	-.038 (4)
FB	.099 $p > .20$	8.353 $p < .01$	7.118 $p < .01$
partial correlation coefficient	-.022	-.176	-.163
$R^2$ delete	.042	.086	.952
<u>Duration of Residence</u>			
beta weights (rank)	.105 (2)	.254 (1)	.023 (5)
FB	1.572 $p > .20$	15.484 $p < .001$	2.794 $p < .10$
partial correlation coefficient	.085	.237	.103
$R^2$ delete	.035	.062	.953
<u>Percapita Income</u>			
beta weights (rank)	-.015 (6)	-.067 (6)	.073 (2)
FB	.009 $p > .20$	.246 $p > .20$	4.744 $p < .05$
partial correlation coefficient	-.006	-.030	.134
$R^2$ delete	.042	.114	.952

The reader is invited to examine the tables for the variables in which he has an interest. For our purposes, the task is to discuss the relative influence of the independent variables.

In comparing the extreme positions of the independent variables as they ranked for each dependent variable,<sup>45</sup> income had more high ranks (32) than any other independent variable followed by percapita family income (29), duration of residence (23), education (22), occupation (18) and nativity (14). Generally, those independent variables with more high ranks had fewer low ranks.<sup>46</sup> This is a reasonable expectation. These distributions also held for each sample except in Lansing where education is more important as would be expected in a highly industrialized community. The distributions also hold<sup>47</sup> for each category of integration variables.

The constant relationship between the independent variables over city and category of integration facilitates the task of accounting for differences. That the status variables did not decrease in the amount of variance explained from Lansing to Santiago is contrary to expectations. The fact that all samples are from urban areas of some degree

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An independent variable is ranked high in influence if its beta weight has a 1 or 2 rank; low if its rank is 5 or 6.

46

Education (28), nativity (28), occupation (26), duration of residence (22), income (20) and percapita family income (14).

47

The distribution of high and low ranks over all categories and cities is significant ( $X^2 = 18.44$ , d.f. = 5,  $p < .01$ ). For cities, only the distribution for Santiago is significant ( $X^2 = 21.13$ , d.f. = 5,  $p < .001$ ). The only integration category with a significant distribution of high and low ranks is adjustment ( $X^2 = 17.19$ , d.f. = 5,  $p < .01$ ).

of past, present or guaranteed future economic development suggests that a similar exposure to urban industrial values is inherent in all three communities. Since all three are likewise influenced by a social structure supporting an occupationally-based social system the opportunity for wide differentiation on status criteria is restricted. If the Santiago sample had been replaced by one drawn from a peasant village, the results may have more closely paralleled Faunce and Smucker's.<sup>48</sup>

It is interesting to note that the independent variable that accounted for most of the significant relationships in the tau analysis -- income -- also accounts for more of the variance over all dependent variables in the regression analysis. This is not true for the relative strength of the other two independent variables (occupation and duration of residence) found to be associated with the dependent variables. This supports our claim that both forms of analysis are essential to understanding integration, especially in a comparative sense.

Tables 41 through 64 present the beta weights for each independent variable and the multiple correlation coefficient and coefficient of determination for each dependent variable over the three samples for the original regression equation and four other equations each one, as indicated, reducing the variance of the independent variable(s) involved to zero. Such a procedure affords the investigator an opportunity

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William A. Faunce and M. Joseph Smucker, "Industrialization and Community Status Structure," American Sociological Review, 31 (June, 1966), pp. 390-9.

TABLE 41.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE JOB ASPIRATIONS

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	-.100	.000	-.027	-.099	-.106	
Education	.008	.000	.000	.011	.013	
Occupation	.111	.000	.000	.113	.106	
Nativity	.032	.038	.040	.000	.004	
Duration of Residence	-.050	-.035	-.033	-.031	.000	
Percapita Income	.074	-.005	.000	.072	.074	
Mul. Cor. Coef. - R <sup>2</sup>	.125	.034	.043	.122	.118	
	.016	.001	.002	.015	.014	
MOOSE JAW						
Beta Weights for:						
Income	.022	.000	.086	.026	.024	
Education	-.049	.000	.000	-.044	-.048	
Occupation	.101	.000	.000	.100	.103	
Nativity	-.036	-.019	-.011	.000	-.028	
Duration of Residence	.019	.023	.023	.005	.000	
Percapita Income	.074	.117	.000	.070	.073	
Mul. Cor. Coef. - R <sup>2</sup>	.164	.120	.090	.161	.163	
	.027	.014	.008	.026	.027	
SANTIAGO						
Beta Weights for:						
Income	.008	.000	.174	.104	.014	
Education	.088	.000	.000	.078	.087	
Occupation	.013	.000	.000	.021	.014	
Nativity	-.166	-.163	-.147	.000	-.168	
Duration of Residence	.017	.012	.010	.040	.000	
Percapita Income	.159	.182	.000	.091	.168	
Mul. Cor. Coef. - R <sup>2</sup>	.274	.259	.251	.224	.273	
	.075	.067	.063	.050	.075	

TABLE 42.

## COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE EDUCATIONAL ASPIRATIONS

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.033	.000	.094	.030	.039	
Education	.287	.000	.000	.281	.281	
Occupation	.175	.000	.000	.172	.180	
Nativity	-.064	.017	-.019	.000	.038	
Duration of Residence	.047	.034	.033	.010	.000	
Percapita Income	-.043	.088	.000	-.040	-.043	
Mul. Cor. Coef. - R <sup>2</sup>	.328	.095	.100	.324	.326	
	.107	.009	.010	.105	.106	
MOOSE JAW						
Beta Weights for:						
Income	-.034	.000	.009	-.030	-.039	
Education	-.046	.000	.000	-.040	-.048	
Occupation	.139	.000	.000	.138	.136	
Nativity	-.034	-.012	-.008	.000	-.050	
Duration of Residence	-.039	-.034	-.032	-.052	.000	
Percapita Income	.051	.050	.000	.047	.054	
Mul. Cor. Coef. - R <sup>2</sup>	.167	.062	.037	.164	.163	
	.028	.004	.001	.027	.027	
SANTIAGO						
Beta Weights for:						
Income	.005	.000	.054	-.023	.040	
Education	-.040	.000	.000	-.037	-.053	
Occupation	.134	.000	.000	.132	.148	
Nativity	.048	.032	.038	.000	.021	
Duration of Residence	.186	.200	.198	.179	.000	
Percapita Income	-.001	.047	.000	.022	-.009	
Mul. Cor. Coef. - R <sup>2</sup>	.246	.209	.211	.242	.170	
	.061	.044	.044	.059	.029	



TABLE 43.  
COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE LEVEL OF LIVING

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.398	.000	.263	.396	.401	
Education	.433	.000	.000	.430	.430	
Occupation	-.059	.000	.000	-.060	-.056	
Nativity	-.024	.034	.027	.000	-.007	
Duration of Residence	.030	-.034	.043	.016	.000	
Percapita Income	-.303	.180	.000	-.302	-.303	
Mul. Cor. Coef. - R <sup>2</sup>	.506	.181	.262	.506	.505	
	.256	.033	.069	.256	.255	
MOOSE JAW						
Beta Weights for:						
Income	-.055	.000	-.002	-.055	-.056	
Education	-.085	.000	.000	-.086	-.085	
Occupation	-.054	.000	.000	-.054	-.054	
Nativity	.006	.022	.022	.000	.003	
Duration of Residence	-.007	-.015	-.014	-.004	.000	
Percapita Income	.056	.010	.000	.057	.057	
Mul. Cor. Coef. - R <sup>2</sup>	.097	.024	.021	.097	.097	
	.010	.006	.000	.009	.009	
SANTIAGO						
Beta Weights for:						
Income	.398	.000	.155	.486	.429	
Education	-.060	.000	.000	-.069	-.071	
Occupation	.042	.000	.000	.049	.054	
Nativity	-.153	-.201	-.182	.000	-.176	
Duration of Residence	.162	.184	.171	.183	.000	
Percapita Income	-.276	.093	.000	-.348	-.283	
Mul. Cor. Coef. - R <sup>2</sup>	.370	.325	.346	.340	.336	
	.137	.106	.120	.116	.113	

TABLE 44.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE FUTURE ORIENTATION

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.079	.000	.064	.079		.079
Education	.270	.000	.000	.271		.270
Occupation	.057	.000	.000	.057		.057
Nativity	.009	.048	.046	.000		.009
Duration of Residence	.000	-.029	-.032	.005		.000
Percapita Income	-.115	.041	.000	-.116		-.115
Mul. Cor. Coef. - R <sup>2</sup>	.270	.058	.075	.270		.270
	.073	.003	.006	.073		.073
MOOSE JAW						
Beta Weights for:						
Income	.159	.000	.114	.165		.148
Education	-.070	.000	.000	-.061		-.074
Occupation	.000	.000	.000	-.002		-.007
Nativity	.059	-.053	-.048	.000		-.095
Duration of Residence	.087	-.087	-.090	-.111		.000
Percapita Income	.054	.095	.000	-.061		-.048
Mul. Cor. Coef. - R <sup>2</sup>	.172	.145	.158	.164		.153
	.030	.021	.025	.027		.023
SANTIAGO						
Beta Weights for:						
Income	.053	.000	.090	.022		.045
Education	.178	.000	.000	.181		.181
Occupation	-.006	.000	.000	.008		-.009
Nativity	.055	.058	.068	.000		.061
Duration of Residence	-.045	-.056	-.059	-.053		.000
Percapita Income	.034	.083	.000	.060		.036
Mul. Cor. Coef. - R <sup>2</sup>	.211	.111	.115	.204		.206
	.044	.012	.013	.042		.043

TABLE 45.  
COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE OCCUPATIONAL INTEREST

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	-.391	.000	-.013	-.392	-.397	
Education	.114	.000	.000	.112	.119	
Occupation	.200	.000	.000	.199	.195	
Nativity	-.024	-.005	-.001	.000	-.052	
Duration of Residence	-.048	-.040	.031	-.062	.000	
Percapita Income	.370	.069	.000	.371	.370	
Mul. Cor. Coef. - $R^2$	.288	.076	.036	.287	.285	
	.083	.006	.001	.082	.081	
MOOSE JAW						
Beta Weights for:						
Income	-.320	.000	.029	-.325	-.316	
Education	-.119	.000	.000	-.128	-.113	
Occupation	.134	.000	.000	.135	.136	
Nativity	.052	.104	.114	.000	.056	
Duration of Residence	.032	.027	.032	.053	.000	
Percapita Income	.397	.154	.000	.404	.395	
Mul. Cor. Coef. - $R^2$	.346	.202	.135	.343	.345	
	.120	.041	.018	.118	.119	
SANTIAGO						
Beta Weights for:						
Income	.051	.000	.034	-.025	.024	
Education	.001	.000	.000	.009	.011	
Occupation	.129	.000	.000	.123	.118	
Nativity	.132	.114	.119	.000	.152	
Duration of Residence	-.144	-.132	-.135	-.162	.000	
Percapita Income	-.073	.016	.000	-.010	-.066	
Mul. Cor. Coef. - $R^2$	.226	.188	.190	.188	.178	
	.051	.035	.034	.036	.032	

TABLE 46.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE SATISFACTION WITH LIFE

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	-.214	.000	.048	-.221	-.195	
Education	.280	.000	.000	.265	.264	
Occupation	.126	.000	.000	.118	.142	
Nativity	-.168	-.128	-.128	.000	-.080	
Duration of Residence	.156	.132	.136	.060	.000	
Percapita Income	.184	.086	.000	.192	.183	
Mul. Cor. Coef. - $R^2$	.329	.150	.132	.300	.305	
	.108	.022	.017	.090	.093	
MOOSE JAW						
Beta Weights for:						
Income	.142	.000	.137	.141	.128	
Education	-.118	.000	.000	-.119	-.122	
Occupation	.012	.000	.000	.013	.004	
Nativity	.007	.024	.032	.000	-.038	
Duration of Residence	-.110	-.112	-.114	-.107	.000	
Percapita Income	-.008	.134	.000	-.008	-.001	
Mul. Cor. Coef. - $R^2$	.204	.164	.167	.204	.178	
	.042	.027	.028	.042	.032	
SANTIAGO						
Beta Weights for:						
Income	.177	.000	.094	.161	.164	
Education	.171	.000	.000	.173	.176	
Occupation	.023	.000	.000	.022	.018	
Nativity	.028	.016	.027	.000	.037	
Duration of Residence	-.069	-.073	-.080	-.073	.000	
Percapita Income	-.106	.063	.000	-.093	-.103	
Mul. Cor. Coef. - $R^2$	.211	.091	.112	.210	.201	
	.045	.008	.013	.044	.040	

TABLE 47.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE RATIONALE FOR MOVE

LANSING						
	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Beta Weights for:						
Income	.101	.000	-.036	.128	.108	
Education	.074	.000	.000	.128	.068	
Occupation	.019	.000	.000	.048	.025	
Nativity	.601	.613	.613	.000	.633	
Duration of Residence	.056	.050	.046	.402	.000	
Percapita Income	-.179	-.064	.000	-.208	-.180	
Mul. Cor. Coef. - R <sup>2</sup>	.646 .417	.640 .410	.638 .407	.427 .182	.644 .415	
MOOSE JAW						
Beta Weights for:						
Income	.156	.000	.054	.138	.209	
Education	-.001	.000	.000	-.028	.015	
Occupation	-.099	.000	.000	-.095	-.067	
Nativity	.171	.155	.154	.000	.351	
Duration of Residence	.434	.432	.429	.503	.000	
Percapita Income	-.119	.002	.000	-.098	-.151	
Mul. Cor. Coef. - R <sup>2</sup>	.535 .286	.516 .266	.519 .269	.513 .263	-.363 .132	
SANTIAGO						
Beta Weights for:						
Income	-.213	.000	-.028	-.251	-.208	
Education	-.094	.000	.000	-.089	-.094	
Occupation	-.055	.000	.000	-.058	-.053	
Nativity	.065	.088	.082	.000	.062	
Duration of Residence	.026	.020	.027	.017	.000	
Percapita Income	.225	.015	.000	.256	.224	
Mul. Cor. Coef. - R <sup>2</sup>	.169 .029	.087 .008	.091 .008	.157 .025	.167 .028	

TABLE 48.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE POSITIVE IMPRESSION - CITY

LANSING						
	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Beta Weights for:						
Income	.088	.000	.030	.114	.109	
Education	.012	.000	.000	.066	-.007	
Occupation	.064	.000	.000	.093	.084	
Nativity	.589	.596	.595	.000	.695	
Duration of Residence	.188	.198	.197	.528	.000	
Percapita Income	-.070	.018	.000	-.099	-.072	
Mul. Cor. Coef. - R	.736	.732	.732	.562	.720	
R <sup>2</sup>	.541	.536	.537	.316	.518	
MOOSE JAW						
Beta Weights for:						
Income	-.093	.000	-.019	-.107	-.047	
Education	.042	.000	.000	.020	.057	
Occupation	-.173	.000	.000	-.170	-.145	
Nativity	.139	.122	.120	.000	.298	
Duration of Residence	.382	.372	.372	.438	.000	
Percapita Income	.081	-.035	.000	.098	.053	
Mul. Cor. Coef. - R	.467	.435	.434	.450	.313	
R <sup>2</sup>	.218	.190	.189	.202	.098	
SANTIAGO						
Beta Weights for:						
Income	-.126	.000	.020	-.122	-.130	
Education	-.052	.000	.000	-.052	-.050	
Occupation	-.042	.000	.000	-.042	-.044	
Nativity	-.006	.008	.008	.000	-.003	
Duration of Residence	-.023	-.027	-.023	-.022	.000	
Percapita Income	.177	.050	.000	.174	.178	
Mul. Cor. Coef. - R	.103	.053	.029	.103	.101	
R <sup>2</sup>	.011	.003	.001	.011	.010	

TABLE 49.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE NEGATIVE IMPRESSION - CITY

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.076	.000	.010	.094		.093
Education	.074	.000	.000	.112		.059
Occupation	-.005	.000	.000	.015		.011
Nativity	.418	.429	.426	.000		.503
Duration of Residence	.150	.140	.137	.391		.000
Percapita Income	-.099	-.008	.000	-.119		-.100
Mul. Cor. Coef. - $R^2$	.528	.522	.521	.406		.515
	.279	.272	.272	.165		.265
MOOSE JAW						
Beta Weights for:						
Income	-.061	.000	.021	-.080		-.033
Education	.057	.000	.000	.028		.066
Occupation	-.094	.000	.000	-.089		-.076
Nativity	.186	.171	.172	.000		.282
Duration of Residence	.230	.226	.225	.395		.000
Percapita Income	.093	.016	.000	.116		.076
Mul. Cor. Coef. - $R^2$	.353	.337	.337	.312		.286
	.125	.114	.114	.097		.082
SANTIAGO						
Beta Weights for:						
Income	.077	.000	.044	.122		.144
Education	-.131	.000	.000	-.136		-.175
Occupation	.164	.000	.000	.168		.211
Nativity	-.078	-.108	-.102	.000		-.165
Duration of Residence	.619	.645	.641	.630		.000
Percapita Income	.098	.022	.000	-.135		-.126
Mul. Cor. Coef. - $R^2$	.708	.678	.678	.704		.383
	.501	.459	.461	.500		.147

TABLE 50.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE ATTRACTION OF NEIGHBORHOOD

LANSING						
	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Beta Weights for:						
Income	-.047	.000	.030	-.045	-.056	
Education	-.073	.000	.000	-.070	-.065	
Occupation	.233	.000	.000	.235	.225	
Nativity	.034	.038	.039	.000	-.010	
Duration of Residence	-.078	-.032	-.029	-.058	.000	
Percapita Income	.103	.058	.000	.101	.104	
Mul. Cor. Coef. - $R^2$	.254	.066	.044	.252	.246	
	.064	.004	.002	.064	.060	
MOOSE JAW						
Beta Weights for:						
Income	.034	.000	.062	.041	.038	
Education	.092	.000	.000	.104	.094	
Occupation	-.079	.000	.000	-.081	-.076	
Nativity	-.072	-.098	-.096	.000	-.056	
Duration of Residence	.037	.038	.035	.008	.000	
Percapita Income	.033	.037	.000	.024	.030	
Mul. Cor. Coef. - $R^2$	.163	.094	.106	.150	.160	
	.027	.009	.011	.023	.026	
SANTIAGO						
Beta Weights for:						
Income	.223	.000	.067	.235	.274	
Education	.084	.000	.000	.083	.065	
Occupation	-.014	.000	.000	-.012	.007	
Nativity	-.022	.039	-.030	.000	-.060	
Duration of Residence	.271	.272	.265	.274	.000	
Percapita Income	-.166	.031	.000	-.176	-.178	
Mul. Cor. Coef. - $R^2$	.314	.289	.294	.314	.176	
	.099	.083	.087	.098	.031	



TABLE 51.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE SATISFACTION WITH NEIGHBORHOOD

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	-.184	.000	.017	-.183	-.193	
Education	.192	.000	.000	.193	.200	
Occupation	.029	.000	.000	.030	.021	
Nativity	.014	.037	.038	.000	-.028	
Duration of Residence	-.075	-.101	.098	-.067	.000	
Percapita Income	.152	.046	.000	.151	.152	
Mul. Cor. Coef. - $R^2$	.212	.092	.082	.211	.203	
	.045	.008	.007	.045	.041	
MOOSE JAW						
Beta Weights for:						
Income	-.059	.000	-.038	-.065	-.064	
Education	-.082	.000	.000	-.092	-.084	
Occupation	.005	.000	.000	.007	.002	
Nativity	.061	.081	.080	.000	.043	
Duration of Residence	-.042	-.046	-.045	-.017	.000	
Percapita Income	.021	-.019	.000	.028	.024	
Mul. Cor. Coef. - $R^2$	.119	.076	.083	.106	.113	
	.014	.006	.007	.011	.013	
SANTIAGO						
Beta Weights for:						
Income	-.044	.000	-.026	-.060	-.065	
Education	-.001	.000	.000	.001	.007	
Occupation	-.148	.000	.000	-.149	-.156	
Nativity	.028	.046	.042	.000	.043	
Duration of Residence	-.108	-.122	-.118	-.112	.000	
Percapita Income	.081	-.007	.000	.094	.086	
Mul. Cor. Coef. - $R^2$	.199	.140	.142	.198	.170	
	.040	.020	.020	.039	.029	

TABLE 52.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE NUMBER OF RELATIVES IN CITY

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.048	.000	.133	.044	.029	
Education	.106	.000	.000	.097	.122	
Occupation	-.001	.000	.000	-.005	-.018	
Nativity	-.094	.080	.082	.000	-.187	
Duration of Residence	-.166	-.180	.181	-.220	.000	
Percapita Income	.055	.130	.000	.060	.056	
Mul. Cor. Coef. - $R^2$	.274	.253	.254	.264	.241	
	.075	.064	.067	.069	.058	
MOOSE JAW						
Beta Weights for:						
Income	.188	.000	.074	.184	.202	
Education	-.039	.000	.000	-.045	-.034	
Occupation	-.059	.000	.000	-.058	-.050	
Nativity	.040	.034	.035	.030	.090	
Duration of Residence	.120	.119	.116	.136	.000	
Percapita Income	-.133	.028	.000	-.128	-.142	
Mul. Cor. Coef. - $R^2$	.186	.142	.156	.182	.151	
	.035	.020	.025	.033	.023	
SANTIAGO						
Beta Weights for:						
Income	.135	.000	.136	.110	.131	
Education	-.015	.000	.000	-.013	-.014	
Occupation	.104	.000	.000	.102	.102	
Nativity	.044	.020	.034	.000	.047	
Duration of Residence	-.024	-.009	-.016	-.030	.000	
Percapita Income	-.042	.113	.000	-.021	-.040	
Mul. Cor. Coef. - $R^2$	.164	.113	.132	.159	.163	
	.027	.013	.014	.025	.026	

TABLE 53.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE PRESENCE OF RELATIVES IN CITY

	LANSING				
	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.
Beta Weights for:					
Income	-.032	.000	.054	-.031	-.028
Education	.233	.000	.000	.234	.230
Occupation	.079	.000	.000	.079	.083
Nativity	.001	.034	.034	.000	.019
Duration of Residence	.033	.011	.011	.034	.000
Percapita Income	.008	.056	.000	.003	.008
Mul. Cor. Coef. - R	.241	.074	.072	.241	.240
R <sup>2</sup>	.058	.006	.005	.058	.057

	MOOSE JAW				
Beta Weights for:					
Income	.237	.000	.182	.068	.240
Education	.077	.000	.000	.112	.078
Occupation	-.024	.000	.000	-.012	-.022
Nativity	-.033	-.063	.055	.000	-.023
Duration of Residence	.023	.031	.025	-.465	.000
Percapita Income	-.060	.134	.000	-.107	-.062
Mul. Cor. Coef. - R	.212	.143	.189	.496	.211
R <sup>2</sup>	.045	.020	.036	.246	.044

	SANTIAGO				
Beta Weights for:					
Income	.196	.000	.041	.194	.257
Education	.053	.000	.000	.053	.030
Occupation	-.062	.000	.000	-.062	-.038
Nativity	.004	.008	.002	.000	-.042
Duration of Residence	.322	.320	.315	.322	.000
Percapita Income	-.144	.013	.000	-.142	-.153
Mul. Cor. Coef. - R	.340	.324	.326	.340	.141
R <sup>2</sup>	.116	.105	.106	.116	.090

TABLE 54.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE NUMBER OF FRIENDS IN CITY

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	-.137	.000	-.017	-.138	-.122	
Education	.087	.000	.000	.084	.074	
Occupation	-.157	.000	.000	-.159	-.145	
Nativity	-.034	-.035	-.034	.000	.035	
Duration of Residence	.122	.083	.084	.103	.000	
Percapita Income	.105	-.005	.000	.107	.104	
Mul. Cor. Coef. - $R^2$	.192	.068	.070	.190	.165	
	.037	.005	.004	.036	.027	
MOOSE JAW						
Beta Weights for:						
Income	-.013	.000	.024	-.017	-.010	
Education	-.166	.000	.000	-.173	-.165	
Occupation	.137	.000	.000	.138	.139	
Nativity	.045	.090	.095	.000	.055	
Duration of Residence	.023	.023	.025	.041	.000	
Percapita Income	.040	.074	.000	.046	.039	
Mul. Cor. Coef. - $R^2$	.262	.131	.112	.258	.261	
	.068	.017	.012	.067	.068	
SANTIAGO						
Beta Weights for:						
Income	-.269	.000	-.021	-.212	-.266	
Education	.032	.000	.000	.026	.030	
Occupation	.056	.000	.000	.061	.057	
Nativity	-.098	-.074	.079	.000	-.101	
Duration of Residence	.018	.010	.017	.031	.000	
Percapita Income	.243	.020	.000	.196	.242	
Mul. Cor. Coef. - $R^2$	.138	.082	.082	.102	.137	
	.019	.007	.007	.010	.019	

TABLE 55.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE PRESENCE OF FRIENDS IN NEIGHBORHOOD

LANSING						
	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Beta Weights for:						
Income	.030	.000	-.116	.022	.051	
Education	-.004	.000	.000	-.021	-.022	
Occupation	.072	.000	.000	.064	.091	
Nativity	-.180	-.176	-.175	.000	-.081	
Duration of Residence	.178	.190	.189	.074	.000	
Percapita Income	-.162	-.130	.000	-.154	-.164	
Mul. Cor. Coef. - $R^2$	.219	.208	.199	.164	.168	
	.048	.043	.040	.027	.028	
MOOSE JAW						
Beta Weights for:						
Income	.082	.000	.158	.084	.082	
Education	-.120	.000	.000	-.117	-.120	
Occupation	.106	.000	.000	.106	.106	
Nativity	-.018	.010	.022	.000	-.018	
Duration of Residence	-.001	.001	.000	-.008	.000	
Percapita Income	.084	.191	.000	.082	.084	
Mul. Cor. Coef. - $R^2$	.248	.192	.160	.248	.248	
	.062	.037	.026	.062	.062	
SANTIAGO						
Beta Weights for:						
Income						
Education						
Occupation						
Nativity						
Duration of Residence						
Percapita Income						
Mul. Cor. Coef. - $R^2$						

NO DATA AVAILABLE

TABLE 56.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE PRESENCE OF FRIENDS IN CITY

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.040	.000	-.034	.031	.066	
Education	-.007	.000	.000	-.024	-.030	
Occupation	.083	.000	.000	.074	.107	
Nativity	-.196	-.191	-.191	.000	-.068	
Duration of Residence	.229	.223	.243	.116	.000	
Percapita Income	-.082	-.042	.000	-.073	-.084	
Mul. Cor. Coef. - $R^2$	.221	.205	.204	.154	.125	
	.049	.042	.042	.024	.016	
MOOSE JAW						
Beta Weights for:						
Income	-.146	.000	-.030	-.154	-.147	
Education	-.058	.000	.000	-.070	-.058	
Occupation	.062	.000	.000	.064	.062	
Nativity	.076	.100	.102	.000	.072	
Duration of Residence	-.009	-.011	-.008	.022	.000	
Percapita Income	.132	.021	.000	.141	.133	
Mul. Cor. Coef. - $R^2$	.165	.100	.103	.150	.165	
	.027	.010	.010	.023	.027	
SANTIAGO						
Beta Weights for:						
Income	.203	.000	.034	.201	.268	
Education	.049	.000	.000	.050	.025	
Occupation	-.083	.000	.000	-.083	-.057	
Nativity	.004	-.006	.001	.000	-.043	
Duration of Residence	.339	.336	.331	.339	.000	
Percapita Income	-.149	.006	.000	-.148	.165	
Mul. Cor. Coef. - $R^2$	.357	.339	.340	.357	.144	
	.127	.115	.116	.127	.021	

TABLE 57.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE TENANCY

LANSING						
ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.		
		NO DATA AVAILABLE				
MOOSE JAW						
-.021	.000	.051	-.008	-.004		
-.014	.000	.000	.006	-.008		
.142	.000	.000	.138	.152		
-.127	-.112	-.106	.000	-.066		
.146	.153	.154	.095	.000		
.086	.092	.000	.070	.075		
.227	.175	.158	.197	.185		
.052	.031	.025	.039	.034		
SANTIAGO						
.169	.000	.054	.166	.121		
.049	.000	.000	.050	.067		
-.016	.000	.000	-.016	-.035		
.004	-.009	-.002	.000	.040		
-.253	-.251	-.257	-.253	.000		
-.120	.027	.000	-.118	-.108		
.261	.247	.251	.261	.094		
.068	.061	.063	.068	.009		

TABLE 58.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE MOBILITY STATUS

LANSING						
	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Beta Weights for:						
Income	.107	.000	.053	.101	.110	
Education	-.078	.000	.000	-.089	-.080	
Occupation	-.073	.000	.000	-.079	-.071	
Nativity	-.126	-.138	-.140	.000	-.112	
Duration of Residence	.024	.026	.024	-.048	.000	
Percapita Income	-.028	.038	.000	-.022	-.028	
Mul. Cor. Coef. - $R^2$	.168	.128	.132	.133	.166	
	.028	.016	.018	.018	.028	
MOOSE JAW						
Beta Weights for:						
Income	-.121	.000	.084	-.128	-.117	
Education	.086	.000	.000	.076	.087	
Occupation	-.061	.000	.000	-.059	-.058	
Nativity	.064	.048	.055	.000	.080	
Duration of Residence	.038	.036	.036	.064	.000	
Percapita Income	.235	.107	.000	.243	.233	
Mul. Cor. Coef. - $R^2$	.171	.134	.117	.161	.167	
	.029	.018	.014	.026	.028	
SANTIAGO						
Beta Weights for:						
Income	-.024	.000	.071	.058	.012	
Education	.064	.000	.000	.056	.051	
Occupation	-.143	.000	.000	-.136	-.129	
Nativity	-.142	-.123	-.117	.000	-.169	
Duration of Residence	.189	.172	.174	.209	.000	
Percapita Income	.159	.092	.000	.092	.151	
Mul. Cor. Coef. - $R^2$	.301	.262	.255	.269	.239	
	.091	.068	.065	.072	.057	



TABLE 59.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE NUMBER OF MOVES - LAST 5 YEARS

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	-.191	.000	-.124	-.195	-.221	
Education	.007	.000	.000	-.003	.038	
Occupation	-.036	.000	.000	-.042	-.064	
Nativity	-.109	-.119	-.111	.000	-.256	
Duration of Residence	-.261	-.271	-.268	-.324	.000	
Percapita Income	.072	-.100	.000	.077	.074	
Mul. Cor. Coef. - R <sup>2</sup>	.387	.377	.384	.376	.326	
	.150	.142	.148	.142	.107	
MOOSE JAW						
Beta Weights for:						
Income	.076	.000	-.030	-.196	.017	
Education	.124	.000	.000	-.003	.104	
Occupation	-.014	.000	.000	-.042	-.051	
Nativity	.082	.052	.047	.000	-.125	
Duration of Residence	-.498	-.491	-.493	-.324	.000	
Percapita Income	-.117	-.069	.000	.077	-.081	
Mul. Cor. Coef. - R <sup>2</sup>	.501	.482	.478	.376	.218	
	.251	.232	.228	.142	.048	
SANTIAGO						
Beta Weights for:						
Income	.425	.000	.181	.439	.392	
Education	-.020	.000	.000	-.022	-.008	
Occupation	-.016	.000	.000	-.014	-.029	
Nativity	-.024	-.067	-.046	.000	.000	
Duration of Residence	-.173	-.157	-.170	-.170	.000	
Percapita Income	-.256	.120	.000	-.267	-.248	
Mul. Cor. Coef. - R <sup>2</sup>	.250	.187	.227	.249	.186	
	.062	.035	.052	.062	.035	

TABLE 60.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE WILLINGNESS TO MIGRATE

LANSING						
	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Beta Weights for:						
Income	.246	.000	.002	.245	.232	
Education	.056	.000	.000	.055	.069	
Occupation	.056	.000	.000	.056	.044	
Nativity	-.015	.000	-.002	.000	-.084	
Duration of Residence	-.124	-.119	-.124	-.132	.000	
Percapita Income	-.292	-.049	.000	-.291	-.291	
Mul. Cor. Coef. - $R^2$	.187 .035	.134 .018	.125 .016	.186 .035	.159 .025	
MOOSE JAW						
Beta Weights for:						
Income	.285	.000	.064	.296	.287	
Education	-.005	.000	.000	.012	-.004	
Occupation	-.142	.000	.000	-.145	-.140	
Nativity	-.109	-.134	-.137	.000	-.100	
Duration of Residence	.021	.019	.014	-.023	.000	
Percapita Income	-.256	-.028	.000	-.269	-.257	
Mul. Cor. Coef. - $R^2$	.261 .068	.133 .018	.145 .021	.243 .059	.261 .068	
SANTIAGO						
Beta Weights for:						
Income	-.163	.000	.062	-.218	-.175	
Education	.036	.000	.000	.042	.041	
Occupation	-.055	.000	.000	-.060	-.060	
Nativity	.094	.118	.121	.000	.102	
Duration of Residence	-.061	-.074	-.070	-.074	.000	
Percapita Income	.264	.100	.000	.308	.266	
Mul. Cor. Coef. - $R^2$	.193 .037	.168 .028	.148 .022	.171 .029	.184 .034	

TABLE 61.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE EMPLOYMENT STATUS

LANSING						
	ORIGINAL	INC., EDUC.	PERCAP., EDUC.	OCC., EDUC.	NATIVITY	DUR. OF RES.
Beta Weights for:						
Income	.003	.000		.213	.003	.013
Education	.104	.000		.000	.103	.094
Occupation	-.322	.000		.000	-.322	-.312
Nativity	-.006	-.013		-.016	.000	.043
Duration of Residence	.089	.024		.022	.085	.000
Percapita Income	.212	.219		.000	.212	.211
Mul. Cor. Coef. - $R^2$	.401	.222		.221	.401	.395
	.161	.049		.048	.161	.156
MOOSE JAW						
Beta Weights for:						
Income	-.005	.000		.132	-.001	.002
Education	.017	.000		.000	.023	.019
Occupation	-.268	.000		.000	-.269	-.264
Nativity	-.040	-.065		-.059	.000	-.016
Duration of Residence	.060	.046		.042	.044	.000
Percapita Income	.151	.100		.000	.146	.147
Mul. Cor. Coef. - $R^2$	.288	.116		.145	.286	.283
	.083	.013		.021	.082	.080
SANTIAGO						
Beta Weights for:						
Income	.051	.000		-.348	.085	.052
Education	-.024	.000		.000	-.028	-.024
Occupation	-.294	.000		.000	-.291	-.294
Nativity	-.059	-.038		-.071	.000	-.060
Duration of Residence	.006	-.015		-.009	.014	.000
Percapita Income	-.307	-.358		.000	-.335	-.307
Mul. Cor. Coef. - $R^2$	.449	.359		.344	.446	.449
	.202	.129		.118	.199	.202

TABLE 62.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHT FOR DEPENDENT VARIABLE LITERACY

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.383	.000	.046	.380	.391	
Education	.390	.000	.000	.383	.383	
Occupation	-.028	.000	.000	-.031	-.021	
Nativity	-.074	-.020	-.024	.000	-.036	
Duration of Residence	.067	.014	-.002	.025	.000	
Percapita Income	-.512	-.052	.000	-.508	-.512	
Mul. Cor. Coef. - $R^2$	.430	.055	.050	.426	.427	
	.185	.003	.002	.182	.182	
MOOSE JAW						
Beta Weights for:						
Income	.208	.000	-.011	.206	.207	
Education	.391	.000	.000	.386	.390	
Occupation	-.158	.000	.000	-.158	-.160	
Nativity	.025	-.077	-.086	.000	.019	
Duration of Residence	-.014	-.001	-.007	-.004	.000	
Percapita Income	-.241	-.136	.000	-.238	-.240	
Mul. Cor. Coef. - $R^2$	.496	.162	.090	.496	.496	
	.246	.026	.008	.246	.246	
SANTIAGO						
Beta Weights for:						
Income	-.092	.000	.133	.035	.063	
Education	.341	.000	.000	.329	.330	
Occupation	.008	.000	.000	.019	.020	
Nativity	-.220	-.195	.184	.000	-.242	
Duration of Residence	.154	.128	.128	.184	.000	
Percapita Income	.224	.150	.000	.119	.217	
Mul. Cor. Coef. - $R^2$	.462	.313	.304	.412	.438	
	.213	.098	.093	.170	.191	

TABLE 63.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE INTERACTION WITH NEIGHBORS

LANSING						
Beta Weights for:	ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.	
Income	.053	.000	.020	.048	.069	
Education	.180	.000	.000	.170	.167	
Occupation	.137	.000	.000	.131	.151	
Nativity	-.117	-.086	-.036	.000	-.042	
Duration of Residence	.134	.130	.128	.066	.000	
Percapita Income	-.107	.097	.000	-.101	-.108	
Mul. Cor. Coef. - $R^2$	.239	.107	.109	.219	.214	
	.057	.012	.012	.048	.046	
MOOSE JAW						
Beta Weights for:						
Income	.122	.000	.046	.131	.128	
Education	-.014	.000	.000	-.001	-.012	
Occupation	.034	.000	.000	.031	.037	
Nativity	-.082	-.083	-.082	.000	-.061	
Duration of Residence	.051	.055	.053	.018	.000	
Percapita Income	-.086	.029	.000	-.096	-.090	
Mul. Cor. Coef. - $R^2$	.100	.083	.090	.068	.089	
	.010	.007	.008	.005	.008	
SANTIAGO						
Beta Weights for:						
Income	.057	.000	.094	.040	.028	
Education	-.023	.000	.000	-.021	-.012	
Occupation	-.001	.000	.000	-.003	-.013	
Nativity	.030	.023	.032	.000	.052	
Duration of Residence	-.155	-.151	-.154	-.159	.000	
Percapita Income	.041	.091	.000	.055	.048	
Mul. Cor. Coef. - $R^2$	.170	.168	.168	.168	.083	
	.029	.028	.028	.028	.007	

TABLE 64.

COMPARISON OF ORIGINAL AND RESTRICTED BETA WEIGHTS FOR DEPENDENT VARIABLE EXTENT ORGANIZATIONAL PARTICIPATION

LANSING						
ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.		
Beta Weights for:						
Income	.000	.012	-.039	-.026		
Education	.000	.000	.197	.188		
Occupation	.000	.000	-.046	-.034		
Nativity	-.004	-.005	.000	.033		
Duration of Residence	.069	.068	.090	.000		
Percapita Income	.007	.000	-.014	-.016		
Mul. Cor. Coef. - $R^2$	.068 .005	.069 .005	.205 .042	.188 .035		
	.042					
MOOSE JAW						
ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.		
Beta Weights for:						
Income	.000	.038	.118	.128		
Education	.000	.000	.157	.137		
Occupation	.000	.000	-.136	-.112		
Nativity	-.231	-.232	.000	-.084		
Duration of Residence	.254	.251	.178	.000		
Percapita Income	-.020	.000	-.090	-.086		
Mul. Cor. Coef. - $R^2$	.264 .070	.266 .071	.293 .086	.248 .062		
	.114					
SANTIAGO						
ORIGINAL	INC., OCC., EDUC.	PERCAP., OCC., EDUC.	NATIVITY	DUR. OF RES.		
Beta Weights for:						
Income	.000	.041	-.046	.188		
Education	.000	.000	.978	-.081		
Occupation	.000	.000	.009	.137		
Nativity	.016	.021	.000	.000		
Duration of Residence	-.047	-.050	.028	-.034		
Percapita Income	.030	.000	.055	-.011		
Mul. Cor. Coef. - $R^2$	.056 .003	.062 .004	.976 .952	.271 .074		
	.976 .953					

to examine the relative influence of the remaining independent variables as if they were the only variables allowed to vary within the regression equation. For example, in each table, the variance of income, occupation and education are restricted to zero and the reader may then compare the magnitude of those beta weights with the original beta weights for the unrestricted variables. If the new absolute beta values are smaller than the original values, the variables whose variance were restricted to zero are important to the original regression equation. A similar logic applies to comparison of  $R$  and  $R^2$  values.

Comparing the beta and  $R^2$  values over the three samples for each dependent variable it becomes obvious that the status variables (income, occupation and education or percapita income, occupation and education) were the heaviest contributors to the variance over all samples, more so than nativity or duration of residence. These relationships do not alter between levels of economic development, that is, the status variables remain the most important.

Between levels of economic development, the amount of variance explained by the status variables does not decrease for most dependent variables. With the adjustment variables, for example, the direction is one of an increase from Lansing to Santiago. The majority of cases are non-directional, and tend to decrease from Lansing to Moose Jaw but increase from Moose Jaw to Santiago. This reflects the picture for all or any category of integration variables. Therefore, we accept the null hypothesis of no difference between levels of economic development and reject hypothesis VIII. The "U" distribution discovered in the analysis of the Somer's D values appeared here again for similar reasons.

Summary

In this chapter the results of the analysis were presented. As a first step, an attempt was made to determine what independent and dependent variables were related and if any variation existed over levels of economic development. Generally, the acculturation variables contributed to the largest number of significant relationships over all cities while adjustment variables contributed least. Universalistic criteria were salient in more industrialized areas whereas particularistic criteria were prominent in the industrializing area. Participation variables found expression in communities with the requisite social structure to support and transmit urban industrial values.

The strength of the relationships above did not decrease from the most industrialized community to the industrializing community. Differences do exist, however, in the magnitude of the relationship between independent and dependent variables over the three communities.

Regression analysis demonstrated that status variables contributed most of the variance in all three communities. This is understandable since all three communities are to some extent industrialized.

Support is given to a multi-phase approach to urban integration. Justification is made for the development of an integration scale.



## CHAPTER V

### SUMMARY AND CONCLUSIONS

The purpose of this research was to examine the process of integration in urban environments of different levels of economic development. Germani's three-phase analytic paradigm (acculturation, adjustment, and participation) was chosen as the appropriate theoretical conceptualization as it provided more opportunity to study the ameliorating and mitigating forces that might influence the urban dweller's eventual integration than Shannons' two-step process of cultural integration and economic absorption. Three general sources of variation were attributed to the selectivity of integration and another interest was to determine which was the most appropriate.

The operational implications of the research are best described by summarizing the results of the analysis. Differences between the phases of integration were sufficiently large in extent and variety to merit the use of a wider theoretical perspective such as Germani's. Acculturation variables contributed to the largest number of significant relationships over all sample cities while adjustment variables contributed least. Determinants of success in larger society and measures of cultural integration are more viable indices of urban integration than adjustment or participation variables. The former allow the urban dweller to establish control over his environment.

While differences between communities in terms of the relative strength of dependent and independent variables existed, a pattern

began to emerge. Universalistic criteria (such as education) were more salient than particularistic criteria (such as nativity) in the more industrialized community. In the industrializing community, particularistic criteria were more pertinent. This trend also applied to categories of integration -- participation variables found expression in communities where exposure to urban industrial values and the requisite social structure to support and transmit those values exists. This has implications for a theory of modernity which shall be pursued later in this chapter.

It was anticipated that the strength of the relationships between the independent and the dependent variables would decrease from higher to lower levels of industrialization. This was not the case, primarily because the industrializing community sufficiently resembles the industrialized community which resulted in a series of U-shaped distributions. Further analysis demonstrated that differences did exist between the communities regarding the magnitude of the differences among the categories of the dependent variables; this suggests that inter-community differences do exist then, although the direction of those differences was not always in the intended direction.

The regression analysis did not provide evidence that status variables accounted for less of the variance in the less industrialized communities. This was the case because the communities were all, to some extent, industrialized.

This summary of the findings supports the position that the process of integration cannot be summarized in two or three variables as Shannon suggests. By including for analysis many pertinent variables in Germani's three-phase conceptualization, meaningful conclusions are

reached with respect to the nuances of the integration process itself and how it operates differently in different communities. The process of scale construction to reflect these differences is not facilitated by this knowledge but any attempt at such a scale would be more informed by the fact that such differences do in fact exist.

A major justification for undertaking this research was the opinion that duration of residence alone is not the sufficient criterion on which to be judged integrated into a community. From the foregoing, it obviously cannot. This has implications for the recent wave of interest in modernity and/or the process of modernization previously referred to in the discipline as social change.

Feldman and Hurn provide an acceptable definition of modernization: "Modernization refers to those social changes that generate institutions and organizations like those found in advanced industrial societies."<sup>1</sup> This definition is no panacea but it adequately reflects the framework upon which others add what they consider to be the crucial institutions or processes by which modernization comes into being.<sup>2</sup>

Although there is general agreement that modernization involves an experience of social change, that is, "people must change their personality and/or their occupation and/or their values and/or their

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<sup>1</sup> Arnold S. Feldman and Christopher Hurn, "The Experience of Modernization," Sociometry, 29 (December, 1966), p. 378.

<sup>2</sup> See for example D. Lerner, The Passing of Traditional Society (Glencoe, Illinois, Free Press, 1958), pp. 43-74 or B. Hoselitz and W. Moore, Industrialization and Society (New York, UNESCO, 1963).

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loyalties," less agreement exists regarding the identification of causal mechanisms in the environment which facilitate the process. A major trend of thought is that the life situation of people is determined by the social milieu in which they live. As has been argued here, this is not a common process at every level of economic development. As we proceed up the scale of economic development economic roles become more specialized and more bureaucratically coordinated. Values  
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become more universalistic and diffuse.

A major conclusion Feldman and Hurn arrive at, however, is that education is not related to modernization. They argue that the change that modernizing mobility brings on is largely cognitive.

...The mobile has his own experience on which to base his optimism of aspiration. Thus his personal history is the basis upon which he feels his children can improve their lives. But this same history also attests to the relative unimportance of education for experiencing this mobility.<sup>5</sup>

An opposing position is voiced by Briones and Waisenan, who argue that education modifies social position, particularly through the

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Feldman and Hurn, op. cit., p. 379.

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Two major proponents of this philosophy whose theory is labeled "the industrial man" hypothesis are Alex Inkeles, "Industrial Man: The Relationship of Status to Experience, Perception and Value," American Journal of Sociology, 66 (July, 1960), pp. 1-31 and Clark Kerr, et al., Industrialism and Industrial Man (New York, Oxford University Press, 1964).

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Feldman and Hurn, op. cit., p. 394.

process of social mobility. Education fosters perception of the forms and possibilities for continuing studies and those who are less educated are well integrated to urban culture have a greater self-limitation for change in social status than do more integrated (educated) individuals. A "rupture" with traditional belief systems is said to occur somewhere between the fifth year of elementary and the second year of secondary school. This aspirational "take-off" is preparatory to a more modern or urban outlook and an increased awareness of opportunity results. Undoubtedly then, education plays some role in creating and presenting "knowledge of what is possible -- an everwidening knowledge of ever new possibilities -- and the technique of implementing these -- this is modernity."<sup>7</sup>

Inkeles provides further support for the primacy of education in the modernization process:

Education has often been identified as perhaps the most important of the influences moving men away from traditionalism towards modernity in developing countries. Our evidence does not challenge this well established conclusion. Both in zero-order correlation and in the more complex multivariate regression analysis, the amount of formal schooling a man had emerges as the single most powerful variable in determining his score on our measures. On the average, for every additional year a man spent in school he gains somewhere between two and three additional points on a scale of modernity scored from 0 to 100.<sup>8</sup>

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See Guillermo Briones and F. B. Waisenan, "Educational Aspirations, Modernization and Urban Integration" in Paul Meadows and Ephraim H. Mizuchi (eds.) Urbanism, Urbanization, and Change: Comparative Perspectives (Reading, Mass., Addison-Wesley Publishing Company, 1969), pp. 252-64. A similar point is made by Herbert H. Hyman, "The Value Systems of Different Classes," in Reinhard Bendix and Seymour M. Lipsett, Class, Status and Power (Glencoe, Free Press, 1953), pp. 426-7.

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W. Cantwell Smith, Modernization of a Traditional Society (Bombay, Asia Publishing House, 1965), p. 20.

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See Alex Inkeles, "Making Men Modern: On the Causes and Consequences of Individual Change in Six Developing Countries," (paper presented at the AAAS meetings, Dallas, Texas, December, 1968), p. 7.

The evidence presented here supports the second contention, that is, that education is a prime moving force in modernization and urban integration. Education, it may be recalled, was the independent variable responsible for more significant relationships in the acculturation category than any other independent variable. This universalistic criterion held over all levels of economic development.

Implications can be drawn from this research then as to how modernity operates. With education as the pre-condition to acculturation, when acculturation operates in an area of expanding and existing opportunity (work, better living conditions) adjustment and participation follow. As our data demonstrate, participation was the stronger category only in Lansing where such expanded opportunities present themselves.<sup>9</sup> Education is, then, not only a precondition to acculturation but the process of integration (and modernity) itself.

From the results here, it is difficult to suggest that either acculturation, adjustment or participation are sufficient alone to represent the process of integration. Each category was differentially important over the three communities. It is also difficult and unwise to suggest that any single dependent variable be taken as representative of each category and applied with success over levels of economic development. Only extent of organizational participation was comparatively useful here in this regard.

In Lansing also, education entered into more significant relationships than any other independent variable whereas in Santiago, nativity accounted for most significant relationships.

Given then that variations between levels of economic development exist and that we have been able to isolate stages in which integration takes place, we endorse Germani's<sup>10</sup> multi-phase (stage) approach suggested earlier. Education gives rise to acculturation which, when allowed to operate in an opportunity structure which permits aspirations etc. to be realized, adjustment and participation take place. Consequently, the acculturation category stood out in Santiago where the opportunities are restricted. In Lansing participation items were strongest where such behavior was acceptable and possible. Further, in Lansing a universalistic criterion (education) was involved in more significant relationships whereas in Santiago, nativity, a particularistic criterion worked best.

This suggests that research be directed at the innovators and controllers of knowledge and information and those responsible for its diffusion. The uneducated, migrants and low-income urban environs face similar problems of adjustment and participation in urban life and merit first consideration. Any analysis of the transition process would profit by reference to and analysis of "gatekeepers" -- those persons or organizations which channel valuable information into the city and its hinterland and who can maintain class differences. The realization that the labor market is a social system suggests such differences in fact exist.

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See Gino Germani, "Migration and Acculturation," in Philip M. Hauser (ed.), Handbook for Social Research in Urban Areas (New York, UNESCO, 1965), pp. 159-78.

Rossi and Blum point out two factors which impede the diffusion<sup>11</sup> of behavioral and attitudinal patterns across class levels and are suitable starting points for research. Firstly, is the differential exposure to mass media and educational experiences. Those of higher socio-economic status read, listen and view more than those of lower socio-economic status and are exposed to materials of greater complexity<sup>12</sup> and difficulty. It is not unlikely that material relevant to all forms of urban integration are then, by choice or force of circumstance, available and/or grasped mainly by the more highly educated.

A second mechanism maintaining class differences is differential association. Work groups, neighborhood groups and special interest groups, etc. are all supportive structures for the integration process; indeed, they may become surrogates for the community in which such participation takes place.<sup>13</sup> Abu-Lughod<sup>14</sup> and Epstein are two of many researchers who refer to the phenomenon.

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Peter H. Rossi and Zahava D. Blum, "Social Stratification and Poverty" (paper presented at the annual meetings of the Sociological Research Association, San Francisco, California, August, 1967), pp. 99-106.

12

See Bernard R. Berelson and Morris Janowitz (eds.), Reader in Public Opinion and Communication (New York, The Free Press of Glencoe, 1966).

13

See Janet Abu-Lughod, "Migrant Adjustment to City Life: The Egyptian Case," American Journal of Sociology, 67 (July, 1961), pp. 22-32.

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Epstein discusses an extreme form of such association, urban tribalism. See A. L. Epstein, "Urbanization and Social Change in Africa," Current Anthropology, 8 (No. 4, 1967), pp. 275-96.



The size of the present research scheme suggests some meaningful shorthand be evolved. A necessary next step in research of this sort then is the development of an integration scale containing items which discriminate between communities of different cultural and urban contexts. Shannon and Shannon suggest that the construction of such scales usually measure variations in the host society fairly well, "but are constructed in such a manner that migrants are so skewed toward one end of the scale that changes among them tend to remain relatively imperceptible."<sup>15</sup> The sub-cultural bias introduced by the utilization of an instrument based on items selected from the larger culture, with the goal of discerning behavioral or attitudinal modification in the migrant as a consequence of contact with the larger culture, usually presents little variation among the migrant groups as they are stacked at one end of the continuum. Items of culture or dress are fair examples.<sup>16</sup> Standardizing scales which describe only the middle class in both modern and modernizing societies are likewise invalid.<sup>17</sup>

<sup>18</sup> Landecker's call for such scales over fifteen years ago went

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See Lyle W. Shannon and Magdaline Shannon, "The Assimilation of Migrants to Cities," in Leo F. Schnore and Harry Fagin (eds.), Urban Research and Policy Planning, Volume 1 (Beverly Hills, California, Sage Publications Inc., 1967), p. 54.

<sup>16</sup>

Richard Dewey, "The Rural-Urban Continuum: Real But Relatively Unimportant," American Journal of Sociology, 66 (July, 1960), pp. 60-6 suggests that such an emphasis has misled and thereby deteriorated much of the theorizing regarding the rural-urban continuum.

<sup>17</sup>

Feldman and Hurn, op. cit., p. 395.

<sup>18</sup>

See Werner S. Landecker, "Types of Integration and Their Measurement," American Journal of Sociology, 56 (January, 1951), pp. 332-40.

relatively unnoticed. Angell's previous indexes referred only to communities and were inapplicable to groups within those communities. Variations can and do exist within a community and it is important that any scale be able to reflect such differences.

With the advent of the interest in modernity, scholars have redirected their attentions towards this need. Smith and Inkeles' O M (overall modernity) scale was standardized on attitudinal items only on a sample of 5,500 persons from six developing nations and has been implemented widely in its short form since then. Although Smith and Inkeles developed their scale through item-to-item correlation analysis, a Guttman technique may be more appropriate, especially where the items can be dichotomized. Leik and Matthews suggest a developmental scale which is more appropriate when an ordered longitudinal process is involved.

Researching social systems which are unlike present certain difficulties. Because of the greater degree of variance to explain, and the more diverse cultures chosen for analysis and comparison, the more compounded are the problems of testing one's theory. The numerous

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See Robert C. Angell, "The Social Integration of American Cities of More than 100,000 Population," American Sociological Review, 12 (1947), pp. 335-ff.

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David Horton Smith and Alex Inkeles, "The O M Scale: A Comparative Socio-Psychological Measure of Individual Modernity," Sociometry, 29 (December, 1966), pp. 353-77.

21

See Robert K. Leik and Merlyn Matthews, "A Scale for Developmental Processes," American Sociological Review, 33 (February, 1968), pp. 62-75.

variables included for analysis here complicates the matter further. Avoidance of a situation wherein the differences between social units could be a function of the proposed explanatory variables or if the differences were a function of other variables was avoided by the use of multiple regression analysis. It permits a rough but highly comparative analysis to be made, in which large numbers of variables may be treated simultaneously. The use of such a technique was found most useful here and is recommended for use in other comparative analyses.

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## **APPENDICES**

APPENDIX A.

CONCEPTS INVOLVED IN THE STUDY AND FORM OF APPROPRIATE QUESTIONS  
IN THE QUESTIONNAIRES FOR THE THREE SAMPLE CITIES

Concept	Lansing	Moose Jaw	Santiago
<u>Acculturation:</u> Job Aspirations	What job would you like your oldest son to have?	What job would you like your oldest son to have?	Occupation desired for sons.
Educational Aspirations	In general, how much education do you think a boy should have nowadays?	In general, how much education do you think a boy should have nowadays?	How many years of school do you want your children to finish?
Level of Living	Based on respondent's Guttman scale score on 14 items.	Based on respondent's Guttman scale score on 23 items.	Based on respondent's Guttman scale score on 4 items.
Future Orientation	Are you the kind of person that plans his life ahead all the time, or do you live from day to day?	Are you the kind of person that plans his life ahead all the time, or do you live from day to day?	Everybody is born with a fixed destiny and nothing is gained by fighting it.
Occupational Interest	Would you prefer to work more hours a week if you could get paid for it?	Would you prefer to work more hours a week if you could get paid for it?	Importance of earning money versus losing friends.
Satisfaction with Life	Have you usually felt pretty sure your life would work out the way you wanted it to?	Have you usually felt pretty sure your life would work out the way you wanted it to?	Planning only makes a person unhappy because plans hardly ever work out anyway.

## APPENDIX A (cont'd)

Adjustment:

Rationale for Move	What was the main reason you moved to this city?	What was the main reason you moved to this city?	Principal reason for coming to Santiago.
Positive Impression of City	What did you like most about this city when you first moved here?	What did you like most about this city when you first moved here?	Why do you feel it was good for you to come to Santiago?
Negative Impression of City	What did you dislike most about this city when you first moved here?	What did you dislike most about this city when you first moved here?	Difficulties in getting established in Santiago.
Attraction of Neighborhood	What is the thing you like most about living in this neighborhood?	What is the thing you like most about living in this neighborhood?	Do you believe persons are living better in their town than you are living in Santiago?
Satisfaction with Neighborhood	If you were able, what things would you like to have changed most in this neighborhood?	If you were able, what things would you like to have changed most in this neighborhood?	One most important change to make life happier.
Number of Relatives in City	How many relatives do you have living in this city but not with you?	How many relatives do you have living in this city but not with you?	Number of informal get togethers with relatives other than those living at home.
Presence of Relatives in City	Do you have relatives living in this city but not with you?	Do you have relatives living in this city but not with you?	Presence of relatives in birthplace.
Number of Friends in City	How many people would you call close friends in this city?	How many people would you call close friends in this city?	Number of close friends, not relatives?



## APPENDIX A (cont'd)

Presence of Friends in Neigh.	How many people would you call best friends in this neighborhood?	How many people would you call best friends in this neighborhood?	Not Available
Presence of Friends in City	Do your close friends live in this city?	Do your close friends live in this city?	Presence of friends in birthplace.
Tenancy	Not Available	Do you own or rent this place?	House tenancy.
Mobility Status	Would you like to move to some other place?	Would you like to move to some other place?	Have you thought of returning to birthplace?
Number of Moves	How often have you moved in the last 5 years?	How often have you moved in the last 5 years?	How often have you moved since birth?
Willingness to Migrate	Would you leave people you would miss anyway if you had a good job opportunity?	Would you leave people you would miss anyway if you had a good job opportunity?	A good son tries to find a job that will permit him being near his parents even though he may have to give up a good job in another part of the country.
Employment Status	Are you now employed full time?	Are you now employed full time?	Are you presently employed?
Literacy	If you have no formal education, can you read and write?	If you have no formal education, can you read and write?	Can you at least read?

APPENDIX A (cont'd)

Participation:

Interaction with Neighbors	About how often do you chat or visit with your neighbors?	About how often do you chat or visit with your neighbors?	How often do you have informal get togethers with your neighbors?
Extent of Organizational Participation	Which clubs, groups, associations or activities do you belong to?	Which clubs, groups, associations or activities do you belong to?	Aided recall to obtain information regarding various types of organizational participation.

APPENDIX B.  
PERCENTAGE OF RESPONDENTS POSSESSING GUTTMAN SCALE SCORE ITEMS  
FOR ALL SAMPLE CITIES

Lansing	Moose Jaw		Santiago	
Scale Score Items	%	Scale Score Items	%	Scale Score Items
Flush toilet, bath and shower	97.7	radio	96.2	books
Hot and cold water	96.4	television	94.8	magazines
Private cooking facilities and water	95.5	hot and cold water	93.6	radio
Television	93.2	private telephone	93.6	daily newspapers
Private use of flush toilet, bath, shower	92.3	heating	92.5	
Radio	91.4	dual egress	88.8	
Telephone	87.8	private use of flush toilet	87.3	
Private telephone	80.5	bath or shower - private use	86.1	
Dual egress	71.9	daily newspaper	81.6	

## APPENDIX B (cont'd)

Automobile	69.2	automobile	70.4	
Automobile - 1961 or newer	56.1	record player	63.7	
Bath and shower - separate use	33.5	excellent or good interior	61.8	
Deep freezer	10.0	children's books	52.4	
Motor cycle	5.1	laundry facilities	52.0	
		incinerator	50.9	
		magazines	45.7	
		automobile - 1961 or newer	44.6	
		deep freezer	39.3	
		washer and dryer	37.8	
		two or more periodicals	26.6	
		no refuse accumulated	7.9	
		motorcycle	2.2	
coefficient of reproducibility = .94505		coefficient of reproducibility = .86435		coefficient of reproducibility = .92164
minimal marginal reproducibility = .84228		minimal marginal reproducibility = .71389		minimal marginal reproducibility = .67724

# APPENDIX C.

## TABLE OF CRITICAL VALUES OF TAU

N	Probability Under $H_0$ that $T \geq \tau$					
	.001	.01	.05	.10	.15	.20
25	.437	.327	.233	.180	.147	.118
50	.307	.229	.163	.127	.103	.083
75	.239	.179	.127	.099	.080	.065
100	.195	.146	.104	.081	.066	.053
125	.195	.146	.104	.081	.066	.046
150	.171	.128	.091	.070	.057	.046
175	.171	.128	.091	.070	.057	.038
200	.139	.104	.074	.058	.047	.038
225	.139	.104	.074	.058	.047	.038
250	.139	.104	.074	.058	.047	.038
275	.139	.104	.074	.058	.047	.038
300	.099	.074	.053	.041	.033	.027
325	.099	.074	.053	.041	.033	.027
350	.099	.074	.053	.041	.033	.027