

THE UNIVERSITY OF MANITOBA

LOCUS OF CONTROL AMONG LOW-INCOME RESIDENTS OF MEXICO CITY:
ANTECEDENTS, DIMENSIONALITY AND ATTRIBUTION

by



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Abstract

The relationship between psychological aspects of poverty and structural conditions of underdevelopment was explored using a multidimensional analysis of locus of control beliefs, based on Rotter's I-E scale, Personal Control and Control Ideology subscales and an Individual-System Blame measure. A questionnaire was administered to a sample of 120 subjects, drawn from the low-income population of Mexico City. A group of 60 "non-precarious" subjects, those with secure jobs, union membership and social security, was compared with a group of 60 "precarious" people, suffering from chronic economic and residential insecurity. Equal numbers of men and women within each group permitted comparison by sex. The scores of these low-income subjects were predominantly internal. Within this general internality, precarious subjects, as predicted, were significantly more external on overall internality-externality and personal control than non-precarious subjects. Predicted similarity between the groups' ideological beliefs was found on individual-system blame, but not on control ideology. In spite of stereotypes about womens' feelings of powerlessness, the womens' scores were heavily skewed towards internality. All the sex related hypotheses were confirmed: women were significantly more external than men on the overall I-E scale and on personal control. No significant differences emerged between the sexes on control ideology or on the individual-system blame measure. Attributions for different types of misfortunes-poverty and accidents-were compared. Results, showing individual blame in both instances, are con-

sistent with the overall internality and just world beliefs.

The degree of internality of the low-income subjects ($\underline{M}=9.4$, $\underline{SD}=3.5$) is striking when compared with either the norms for U.S. college students ($\underline{M}=10$ to 12) or with the results from cross-cultural studies. Nevertheless the data are consistent with other studies of Mexican populations.

The results contradict stereotypes about the fatalism of low-income populations, derived from the Culture of Poverty and modernization literature. While the subjects' internality appears to conflict with their real powerlessness, it is congruent with the need for survival in a society which lacks adequate employment and social welfare opportunities, and with an ideology emphasizing the values of individualism and self-reliance. The greater externality expressed by women and precarious subjects is an accurate reflection of their material and social conditions.

As a personality measure, Rotter's overall I-E scale may reinforce stereotypes of women and the poor, by confounding the relationship between ideology, individual beliefs and social reality. The use of subscales which reflect differences between personal experience and ideological beliefs helped to clarify this issue.

Chapter 1

Introduction

The present study analyses locus of control beliefs among the low-income population of Mexico City. It considers possible socio-economic antecedents of control beliefs. Their meaning is analysed by comparing personal and ideological control beliefs and examining congruent versus defensive externality. The relationship between locus of control and the attribution of responsibility is also explored.

The locus of control construct is defined within a Social Learning Theory framework. The development of Rotter's I-E scale is described, followed by a review of the literature, which considers locus of control as a personality variable and Rotter's I-E scale as a valid measure of a generalised expectancy. The research reviewed deals with the relationship between locus of control and both adjustment and social action.

Internality has been widely associated with effective motivation and social action. Internal control, personal efficacy, ego strength and self esteem all refer to a sense of effectiveness in controlling one's own behaviour and future, as well as the physical and social environment (Robinson & Shaver, 1969). Externality has been found to correlate with powerlessness, hopelessness and depression.

Despite the number of studies which support these findings, there is a growing body of research which questions the meaning, dimension-

ality and therefore the measurement of the locus of control construct. Doubts have been raised about the assumption that effective motivation necessarily comes from internal orientations. Several authors have considered the meaning of internality in relation to success and failure. Many studies assume that internality implies a sense of efficacy, but it may lead to self-blame and low self-esteem when associated with failure. A focus on external forces may be motivationally healthy for disadvantaged groups with a history of failure due to environmental obstacles.

Rotter (1975) himself criticises a "good guy - bad guy" dichotomy, which assumes that internality is desirable and externality undesirable. He contrasts "defensive" and "passive" externals, a distinction similar to that of "defensive" and "congruent" externals (Davis & Davis, 1972; Phares & Lamiell, 1974). Phares and Lamiell (1974) believe that the defensive function of externality may be particularly appropriate for college students, whereas the external beliefs of lower socio-economic groups may reflect their real external conditions. They conclude, "...it is important for improved prediction that we begin to systematically make qualitative discriminations beyond that simply implied by internal and external" (Phares & Lamiell, 1974, p. 877).

As well as this re-evaluation of the meaning of externality, there is evidence that responses to the I-E scale may reflect political positions. While Rotter (1975) does not accept that there is a relationship between locus of control and political ideology, there is evidence of

correlations between I-E scores and other political measures. Studies of political views and activism on college campuses in the United States have found internality associated with conservative views, and externality with liberal to left-wing views and activism. There is also evidence that internality is related to the Protestant Ethic and negative attitudes towards disadvantaged groups.

The meaning of both internality and externality is questioned by suggesting that different types of externality need to be distinguished, and by exploring the ideological implications of internality. The research on these issues casts serious doubt on the unidimensionality of the Rotter I-E scale and the validity of the locus of control construct as a personality variable.

Numerous factor analyses of the original Rotter I-E scale have produced factors which distinguish between personal control beliefs and control in the broader socio-political sphere. This distinction between personal experience of control and beliefs regarding control in society at large, which are the product of socialisation, appears particularly important for low-income groups.

The perceived contingency between behaviour and reinforcement may refer not only to self-perceptions, but also represent an important observer characteristic affecting perceptions of others. An individual's locus of control beliefs may be projected onto others. In the case of misfortunes, some form of defensive attribution may be adopted.

Social Learning Theory emphasises a holistic, historical approach to control beliefs and the need to explore stable antecedent variables.

Cross-cultural variation in locus of control, sex roles and economic conditions are considered relevant antecedent variables. In the literature on psychological aspects of poverty and underdevelopment, the material conditions of the disadvantaged group are attributed to its psychological state. Critics of these positions point to the danger of confounding causes and consequences. Their emphasis is on the material determinants of an individual's psyche.

Fatalism, a sense of powerlessness, and passivity are characteristic of Culture of Poverty notions. The study of internality-externality among the low-income population of Mexico City can contribute to the debate about the psychology of the poor. An individual-system blame measure regarding the causes of poverty and unemployment complements the I-E scale. It provides a measure of the perceptions low-income groups have of others' poverty.

The low-income population is defined in terms of income distribution. Distinctions are then made between those sectors which have stable occupations, union membership, social security and secure housing versus groups lacking many or all of these benefits. The chronic precariousness of the latter and the relative security of the former represent hypothesised antecedents of locus of control beliefs.

The present study addressed the following issues

- Are the urban poor in Mexico City passive fatalists?
- Are the locus of control beliefs of the low-income population congruent with their socio-economic conditions?

- Is the distinction between personal control and control ideology beliefs relevant for disadvantaged groups?
- Do locus of control beliefs contribute to an understanding of the attribution of responsibility for misfortune?
- What is the relationship between locus of control and stereotypes of the poor?

Chapter 2

Locus of Control: A Generalized Expectancy

Locus of control is a hypothetical construct that has been important in both personality research and a wide variety of social psychological experiments and field studies. Both the construct itself and the reliability and validity of the scale designed to measure it have generated a considerable amount of research.

Locus of control is derived from Rotter's Social Learning Theory (1954), and is measured by his Internal-External Locus of Control (I-E) Scale. It claims to refer to a unidimensional, generalized expectancy regarding the contingency between behaviour and reinforcement. Rotter (1975) describes social learning theory as a theory of personality which attempts to integrate two significant trends in American psychology, reinforcement theories and cognitive or field theories.

Internal versus External Control of Reinforcement

Internal-external control of reinforcement refers to the perceived contingency between behaviour and reinforcement. Locus of control offers alternative explanations for positive and negative events and for success and failure. It differentiates between people who see themselves as "masters of their own fate", and those who consider themselves "slaves of the environment" (Nickels & Tolen, 1968). Belief in internal control means that the individual perceives reinforcement

as contingent upon his own behaviour, as the result of personal skill, ability and/or effort. External control refers to the generalized expectancy that events are independent of one's own actions. Behavioural outcomes are seen as the result of luck, chance, fate or powerful others. Expectancy is defined as the probability held by the individual that a particular reinforcement will occur as a function of his behaviour in a specific situation. An individual's expectancy depends on both his history of reinforcement and the value of a specific reinforcement. The relative importance of a generalized expectancy increases in new and ambiguous situations and decreases in familiar ones.

A reinforcement acts to strengthen an expectancy that a given behaviour will be followed by that reinforcement in the future. The effect of reinforcement depends upon whether or not the individual perceives a causal relationship between his own behaviour and the reward. Perceived locus of control is influenced by the nature of the reinforcement, the value attached to it and past experience regarding it.

Prediction of a specific behaviour depends on four basic concepts: behaviour potential, expectancy, reinforcement value and psychological situation (Rotter et al., 1972). Behaviour potential refers to the probability of any behaviour occurring and is a function of the other alternatives available to the individual. Reinforcement value is defined as the degree of preference for that reinforcement, given an equal probability of occurrence of all other alternatives. Expectancy is described as a subjective probability, accessible to objective measurement.

The concept of psychological situation is used in social learning theory to refer to the individual's unique experience of both his internal and external environment.

Development of the Rotter I-E Scale

In his 1966 article, Rotter describes the development of the I-E scale. The first measure of generalized expectancies regarding internal-external control as a personality variable was a 26 item Likert type scale in which half the statements were worded as internal and half as external. In the same year, James revised Phare's test and still using a Likert format developed a 26 item scale plus some filler items.

Shepard Liverant, Rotter and Seeman broadened the James-Phares scale in an attempt to measure subscales dealing with achievement, affection and general social and political attitudes. They also tried to control for social desirability by using a forced-choice format. This scale consisted of 100 items, each pairing an internal and an external belief. The results of two factor analyses and an item analysis indicated that the subscales were failing to generate distinct predictions and so many of the items, which had been designed to measure specific sub-areas of control, were dropped from the scale. Items which showed high correlations with the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) were also removed.

As a result of this process, the scale was reduced to 60 items and subsequently reduced by half again based on validity and internal

consistency data. According to Rotter, the wording of some of the items was changed during the final revision, in order to make them understandable to noncollege adults and upper-level high school students.

The final 29 item forced-choice questionnaire was produced after further revisions based on item analyses, social desirability controls and studies of discriminant validity. The items refer to a number of different situations. Six are "fillers" and the other 23 offer choices between internal and external belief statements. The scale deals with beliefs rather than preferences for internal or external control, as the focus is on expectations about the control of reinforcement. The score is computed by summing the number of external items endorsed. Relationships with social desirability, the need for approval and intelligence are low for the samples studied and indicate good discriminant validity (Robinson & Shaver, 1969).

According to Rotter (1966), scale scores correlate with those obtained by other methods such as questionnaires, Likert type scales, interview assessment and story completion ratings, forced choice and true-false format questions. Among early alternative measures of internal-external locus of control were a variety of "projective" techniques, such as the story completion task used by Adams-Webber (1969). Tests for children include the Intellectual Achievement Response of Crandall, Katkowsky and Crandall (1965) and a projective test by Battle

and Rotter (1963). The IAR (Crandall et al., 1965) allows for possible differences in the attribution of success and failure outcomes. The test devised by Battle and Rotter consists of six situations modelled on the Rosenzweig Picture Frustration Test. The child states what he would say in the situation described and this involves the attribution of responsibility.

Rotter (1966) claims that the variable being studied is capable of reliable measurement by a variety of test methods. Lefcourt (1966) also believes that the use of a variety of techniques to measure the control dimension provides support for the construct validity of the scale and evidence against a response-set interpretation of the results. Despite the number of measures of locus of control, the 29 forced-choice item scale is still the most frequently used, with internal-external locus of control widely regarded as a unidimensional generalized expectancy.

Externality and Maladjustment

According to Rotter (1966) and Lefcourt (1966), the normal individual has a strong perception of himself as the agent of control, believing that he is master of his fate and develops his expectancies accordingly. The neurotic, depressed or psychotic individual rather perceives himself as the victim of external forces.

The relationship between internal-external control and adjustment is not, however, linear. There are indications that the control beliefs of people at either extreme of the reinforcement dimension

are unrealistic (Rotter, 1966). Lefcourt (1966) suggests that seriously maladjusted groups would display greater variability on I-E scores, with a probable tendency to score in the direction of externality.

Hersch and Scheibe (1967) found I-E consistently related to measures of maladjustment, with internal scorers less maladjusted. Internality was associated with indices of social adjustment and personal achievement, with internals describing themselves as more active, striving, achieving, powerful, independent and effective.

More recently, Strickland (1978) has reviewed the research on the relationship between locus of control expectancies and health attitudes and behaviours. Externality appears related to debilitating anxiety and mood disturbances and among hospitalized psychiatric patients, to the severity of psychiatric diagnosis. Strickland concludes,

These data are correlative, and there is no way of knowing if external beliefs accompany a predisposition to psychological difficulties or if locus of control beliefs occur as a function of the disturbances. At the least, it appears that the reporting of life contentment is related to internality, whereas pathological difficulties are linked to external expectancies. (p. 1200)

The evidence regarding the relationship between externality and both learned helplessness and depression is inconclusive. Hiroto (1974), for example, found that externals were significantly more helpless than internals and the early studies of learned helplessness emphasized the apparent similarity between learned helplessness and external control. Abramson et al. (1978), however, claim that the relationship may be more complex and their reformulation of the learned

helplessness hypothesis postulates that internal-external locus of control and helplessness are orthogonal.

Strickland (1978) cites a large number of studies whose findings support a hypothesized relationship between depression and externality. She also recognises that depression is a multi-dimensional disorder and that distinct aspects of depression may be differentially related to I-E.

Calhoun et al. (1974) found self-rating depression scores significantly related to general externality in both males and females. Prociuk, Breen and Lussier (1976) studied the relationship between internal-external locus of control, hopelessness and depression. Using the Rotter I-E scale, Beck's Hopelessness Scale (1974) and the Beck Depression Inventory (1967) with two samples of university students, they found externals scored significantly higher on hopelessness and depression. Williams and Nickels (1969) found that externality oriented subjects scored higher on both accident and suicide proneness than internals.

Strassberg and Robinson (1974) in a study of the relationship between locus of control and other personality measures in drug users found that the relationship between locus of control and both adjustment and self-concept was similar to that found for non-drug users. Internality was associated with higher levels of self-esteem and better psychological adjustment. Strickland's review, however,

reveals conflicting evidence regarding the internality or externality of various types of drug abusers.

Internality and Social Action

The above findings suggest that internals and externals will also vary considerably in their ways of dealing with the environment. Individuals with a strong belief that they can control their own destiny are likely to be more alert to those aspects of the environment which provide useful information for future behaviour and take steps to improve environmental conditions (Rotter, 1966). Internality appears related to both information seeking and commitment to social action.

Rotter (1966) cites two studies by Seeman, which look at information handling. Seeman and Evans (1962) compared internal and external patients in a T.B. hospital, who were matched on education, occupation and ward placement. The internals knew more about their condition, questioned medical staff more and were less satisfied with the amount of information and feedback they received. Seeman (1963) also found that internal reformatory inmates handled more information about the institution and parole. The significant relationship between control beliefs and the amount of information handled was independent of intelligence.

Strickland (1978) reviews studies which relate internality to seeking information about health maintenance and to the adoption of preventive measures. There is evidence that internals who value their

health are more likely to collect health related information, stop smoking, use safety belts, engage in preventive dental care and in the case of women practice effective birth control.

Internality also appears related to both verbal and behavioural commitment to social movements. Gore and Rotter (1963) found internal blacks more willing to commit themselves in writing to some activity in support of the civil rights movement than external students. Strickland (1965) comparing activists in the civil rights movement to non-activists found the former more internal than the latter.

Rotter (1966) cites a study of workers in Sweden (Seeman, 1967), which found that union membership, activism and general knowledge of political affairs were all significantly related to internality. The low but significant correlations held even when controlled for education, age and income.

During the 1970s a number of studies related locus of control beliefs to other psycho-social concepts. Seeman (1971) considers the I-E scale a measure of powerlessness, which he in turn relates to various notions of alienation. He considers powerlessness a critical concept for the study of the impact of large city living and the industrial work situation. Within Seeman's framework internality and externality are seen as reflecting low and high feelings of powerlessness respectively. Goodstadt and Hjelle (1973) also associate the notion of powerlessness with external control. They predict serious

societal consequences when an increasing number of people feel that they have little control over their existence and on the basis of their experimental findings, predict that such people may resort to coercive force as a means of influence.

Wolfe's (1972) study of a community facing a serious economic threat, compared residents of two communities, one of which was faced with the threat of the withdrawal of its main source of employment. Wolfe was interested in the relationship between anomie and external control. He describes anomie as the sociological counterpart of high external control expectancies. While there is a research tradition dealing with the social conditions that generate anomie, externality is more frequently used as a predictor variable, generally with college students. Using an abbreviated form of the I-E scale, Wolfe found that both anomie and externality were influenced by the economic threat, but found that externality scores reflected the degree of economic threat to a greater extent than the anomie scores.

Chapter 3

Dimensionality and Meaning of Locus of Control

A growing number of studies have questioned the meaning of both internality and externality. The dimensionality of the original I-E scale has been re-examined and a variety of multi-dimensional measures proposed.

The modified measures of locus of control differ in terms of their factors and the scales used. Of the six types of multi-dimensional measurement considered, two utilise factors and one content subscales derived from the original scale, two are Likert-type modifications of the Rotter Scale and one uses an opinion survey format.

Dimensionality of Internal-External Locus of Control

Mirels' Factors. One of the earliest studies of the dimensionality of the I-E construct was carried out by Mirels (1970). Arguing that the correlations between I-E scores and other variables were often low, he explored the possibility of establishing subscales, to enhance the prediction of a variety of attitudinal and behavioural variables. The factor analysis of the responses of a sample of college students produced two major factors. The items of Factor 1 were all worded in the first person. The respondent himself is the target of control and the items refer to beliefs about mastery over one's own life, contrasting ability and hard work, with luck. In Factor II, the social system is the relevant target of control. The items refer to the belief

that the individual citizen can influence political affairs. On the basis of these results, Mirels argues that the distinction between sources and targets of influence is important. He illustrates this point by comparing psychotherapy and political education programs, which may both be aimed at enhancing internality but in different spheres.

Abrahamson et al. (1973) replicated Mirels' study in Canada and Viney (1974) in Australia. While both the Canadian and Australian analyses produced the same two major factors, where Factor I is a personal responsibility factor dealing with control by the individual over his own life and Factor II, social responsibility, refers to the degree of control that people in general can exert over political and social institutions, Abrahamson et al. also found evidence of a third factor related to personal likability.

Hrycenko and Minton (1974) using the same factor analytic method used by Mirels also found two factors, which they labelled Personal Control and System Modifiability, the latter referring to the sociopolitical context of locus of control. They mention that Minton in a second factor analysis with a comparable sample found that the same items and high loadings on Factor II in both studies, but in the second analysis the items of Factor I were split between those worded in the first person and those in the third person. In their study Hrycenko and Minton made exclusive use of the Personal

Control Factor, rather than the total I-E score, and state that in view of the increasing evidence that the I-E scale is actually multi-dimensional, there is a need for further work to clearly identify and measure the independent dimensions of internal-external control.

In their analysis of the relationship between powerlessness and both political views and activism, Silvern and Nakamura (1971) used Mirels' factors and found that while they were positively correlated with each other, they were differentially correlated with the two political variables. On the basis of the previously reported relationship between internality and political activities Silvern predicted that Mirels' first factor would account for the relationship, if a sense of personal efficacy were the important determinant of action. The second factor would be more important if the critical beliefs were to do with the social-political systems.

The results, however, show that external scores on both the total I-E and the first factor were positively related to activism and to left-wing political views. The second factor was unrelated to views and action. The correlations of social-political views and political activism with Mirels' first factor were in general significantly higher than those found with the overall I-E scores. The personal control subscale therefore largely accounted for the relationship of the total I-E scale with activism and political views.

In a later study, Silvern (1975) found inconclusive results concerning the relationship between Mirels' second factor and political

position and beliefs. In one of two studies carried out on locus of control beliefs, political position and cultural stance, Factor II was significantly correlated with political position, but in the other study it was not. Similarly the distinctions between the first and third person items produced non-significant contrasts, although the trend supported the argument that third person items were more related to ideology (Gurin et al., 1969).

Thurber (1977) studied the dimensionality of the I-E scale among women who had been exposed to traumatic physical forces beyond their power to control, in the form of a mining disaster followed by major flooding in the region. The first factor appeared similar to Mirels' second factor, related to perceived control in the political and societal domain. Thurber's second factor suggested a measure of cognitive certainty versus uncertainty. Women who had been evacuated from their homes as a result of the flood had significantly more external scores on Factor I than the non-evacuated group.

Schneider and Parsons' Subscales In a cross-cultural study of locus of control beliefs in Denmark and the United States, Parsons and Schneider developed five different subscales based on content. Four judges sorted the I-E scale items into five unspecified categories, which were subsequently labelled general luck-fate, politics, respect, academics, leadership-success. Agreement between judges ranged from 86% to 95%, and there was 100% agreement on the location of 20 items. There were no significant differences between Danish

and American students on the overall I-E scores, but there was a significant difference on the leadership-success category.

A later study (Parsons & Schneider, 1974) of people of eight countries, Japan, India, France, Germany, Italy, Canada, the United States and Israel, provides further support for their assertion that the I-E scale is multidimensional rather than unidimensional. They also suggest that the subscales provide a useful way of comparing different countries in terms of their locus of control beliefs.

Garza and Ames (1974) used the same subscales to compare Anglo-and Mexican Americans. In addition to finding differences on the overall scale, they also found significant differences on the luck-fate and respect subscales. The subscales were also used in a study of factory workers from four different countries, the United States, Japan, Thailand and Mexico (Reitz & Groff, 1974), and produced significant intercountry differences. In a further cross-cultural study, Cole et al. (1978) compared male university students from the United States, Mexico, Ireland and West Germany, using the five subscales.

Collins' Likert Format Collins (1974) used the 46 alternatives of the original 23 forced choice items of Rotter's I-E scale, but with a Likert format. Factor analysis showed the existence of a common factor and in addition, rotation produced four discrete subscales. The first factor refers to a Difficult-Easy World dimension, and is made up

entirely of external items which make general statements about the environment. The second factor appears similar to the Control Ideology Factor of Gurin et al. (1969). Collins calls it the Just-Unjust World Factor and suggests a direct causal relationship between a person's behaviour and the feedback he receives from the environment. Factor 3 is called the Predictable-Unpredictable World Factor and includes the word "luck" in six of the seven items and "fate" in the seventh. The fourth factor is similar to Mirels' (1970) second factor and Gurin et al.'s system modifiability. Collins labels it the Politically Responsive-Unresponsive World Factor.

Collins believes that from Rotter's theoretical perspective, the four types of externality he describes are functionally equivalent, as all of the external beliefs inhibit coping and self-esteem. He argues however for a separate examination of the internal and external alternatives, given that the pattern of correlations for internal and external items do not coincide.

Collins' Just World Factor reflects a belief in a strong causal relationship between an individual's effort and ability and what happens to him. This belief is the product of internal attributions of justice and equity in the environment. Collins suggests that taken together, these represent a more complex form of internal control than suggested by the notion of internal attribution in the tradition of Heider's attribution theory.

Ryckman et al. (1978) compared American and Rhodesian students using Collins' I-E scale, which consists of 28 Likert-type items adapted from the original I-E scale. The seven items with the heaviest factor loadings on each of Collins' four factors made up the scale. Different factors were found for the American and Rhodesian samples. The American sample reproduced Collins' four factors, but the Just World Factor was not found for the Rhodesians. Analysis of the Rhodesian data produced a factor which Ryckman labelled Self-Determination for Success, which stresses the relationship between hard work and the use of one's abilities to be successful.

Duffy et al. (1977) applied Collins' adaptation of Rotter's I-E scale to a sample of male reservists in an army field setting. They replicated Collins' four factors and found an additional one, which they labelled the Friendly-Hostile World Factor.

Zuckerman and Gerbasi (1977) replicated Collins' study and found four comparable subscales. They conclude that the alternatives of the I-E scale are not necessarily symmetrical and hence the endorsement of one does not necessarily imply rejection of the other. Zuckerman found that the Difficult World and to a lesser extent the Predictable World Factors were the most general of the four. The Politically Responsive World Factor was related to measures of political efficacy, and to Machiavellianism in the case of male subjects. They suggest that external responses to political items may also re-

flect anomie and suspicion. The Just World Factor was only related to the Just World Scale (Rubin & Peplau, 1973).

Zuckerman and Gerbasi describe the Political and Just World Factors as having a specific meaning that may be unrelated to a general belief in internal or external control. They suggest that a specific belief in internal-external control may be more useful than the general belief, both as an independent and as a dependent variable.

The study made by Klockars and Varnum (1975) did not employ Collins' factors, but did examine both the assumptions of bipolarity of the paired alternatives and the unidimensionality of the overall I-E construct. They presented each of the original I-E statements and allowed the subjects to accept or reject each item separately. Their conclusion is that the results do not support the assumption of bipolarity, but rather support the findings of other studies that show locus of control to be a multidimensional construct.

The six factors found by Klockars and Varnum are: luck as an explanation, personal responsibility, control over politicians, responsibility for school performance, control over major world events and the individual's control over the direction of his life. The first, third and fourth of these factors have the highest correlations with the total Rotter I-E score. The locus of control construct is described as multidimensional, with each dimension having both an internal and external pole.

Coan et al.'s Personal Opinion Survey Rotter considers expectancy in terms of reinforcement, but Coan et al. (1973) define the experience of control as the expectancy that events will occur in accordance with personal intentions and wishes. The Personal Opinion Survey allows for several kinds of external forces including social, physical and indeterminate ones, and considers both their intentions and effects as beneficial, detrimental or indifferent. Items are worded in terms of both the subject himself and people in general. Seven dimensions emerged from the analyses.

Coan et al. (1973) conclude that there are good grounds for doubting that individual differences in the experience of control can be adequately described in terms of a single broad dimension or even a small number of dimensions. People experience control selectively according to different features of their lives.

Coan et al. draw attention to the need to broaden the study of locus of control in a cultural sense. They point out that virtually all the work to date has been done in a Western context, in societies that attach great value to the experience of individual identity and personal control. Cultural variations concerning the need for control, the experience of control and its meaning should be explored.

Adesso (1971) found that Coan et al.'s scales one, three and six correlated significantly with socio-economic variables. The correlations suggest that subjects of higher socio-economic status are more orientated towards greater involvement in broad-scale human affairs

and consider such involvement potentially useful, but they are inclined to reject the sort of conventional Protestant Ethic expressed in Factor one.

In a comparison of Rotter's I-E scale and the Personal Opinion Survey (1973), Gootnick (1974) found that factor six of the Personal Opinion Survey did significantly predict self-reported political participation among college students, while Rotter's I-E scale failed to do so. Gootnick found a strong relationship between the Personal Opinion Survey's factor six and Mirels' factor II. He concludes that Rotter's attempts to measure a hypothesised general expectancy and attempts to relate this to political participation have failed to allow for the complexity of human experience and behavior and the situation-specific nature of locus of control expectancies.

Levenson's ICP Scale In a clinical setting, Levenson (1973) claimed that the relationship between locus of control beliefs and both adjustment and reactions to therapy were inadequately understood. Her main criticisms of the Rotter I-E scale (Levenson, 1975) are that it combines political and non-political content; it includes both first person and third person frames of reference, and fails to distinguish between chance and powerful others as sources of external control. Three new scales based on the original I-E scale were developed, with all items worded in the first person. The internal (I), powerful others (P) and chance (C) scales each consist of eight items in a Likert format.

Levenson (1975) claims that her I, P and C scales have proved valuable in studying phenomena such as psychopathological diagnoses, clinical improvement, perceived parental upbringing and membership in anti-pollution groups. She compared scores on Mirels' second factor, the only significant difference appeared with the P scale.

Although Levenson's interest in the I-E scale was originally in the clinical field, she has subsequently used the multidimensional measure to study the locus of control beliefs of political activists (Levenson & Miller, 1976).

Cole and Cole (1977) used the Levenson IPC Scale to study locus of control beliefs among Mexican students and also used it to compare Anglo and Chicano high school students (Cole et al., 1978).

Gurin et al.'s Personal Control-Control Ideology The meaning of internality and externality for economically disadvantaged groups was critically analysed by Gurin, Gurin, Lao and Beattie (1969) and Forward and Williams (1970). They related the socio-economic conditions of the black, especially ghetto, population to locus of control beliefs.

Gurin et al. used the 23 I-E items of the Rotter scale. Factor analysing the scores obtained from three different black populations, -students at ten predominantly Negro colleges in the Deep South, high school drop-outs in a job training program in a northern city, and a national study of retraining programs- produced two major factors related to the control dimension in Rotter's I-E scale. The first

factor, which they labelled Control Ideology, involves general beliefs regarding the role of internal and external forces in determining success and failure in the culture at large. This factor reflects the traditional Protestant Ethic that hard work, skill and ability are the determinants of success in life. Personal Control, the second factor, deals with the role of personal competence and ability in what happens in one's own life. The five items with the highest loading on this factor are all worded in the first person.

Gurin et al. believe that the separation of personal and ideological beliefs is valid in black populations, where general cultural beliefs cannot always be applied to their own lives. It is possible to endorse a general belief in the Protestant Ethic⁽¹⁾, while being uncertain that one can control one's own life. This distinction between self and other means that a person may feel that he is in control of his own life, but that other people are not. Conversely, as seen above, someone may feel that most people control their destinies but he does not.

In analysing people's perception of the causes of their circumstances the key distinction is between identifying individuals and

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The "Protestant Ethic", following studies such as Mirels and Garret (1974) and MacDonald (1972), is used here to refer to the relationship between personal effort and reward. In this sense it differs from the sociological concept originating in Weber's (1956) work according to which, "Calvinist Protestantism motivated men to seek worldly success in order to prove to themselves as well as to others that they had achieved salvation that they were predestined to a state of grace" (Cohen, 1968). The sociological concept combines individual responsibility with fundamental determinism.

identifying the overall social system as the fundamental determinant. Gurin et al. suggest that this distinction may be particularly critical for disadvantaged groups. They therefore analysed additional items dealing with causal explanations for the status of blacks in the United States. Subjects could suggest an internal explanation which blamed the personal inadequacies of the blacks for their social conditions, or an external orientation, which stressed social discrimination.

A factor analysis of the additional race-related items produced four factors: Individual-System Blame, Individual-Collective Action, Discrimination Modifiability, and Racial Militancy. The first factor deals with causal attribution. The internal alternatives on this factor imply attributing failure to blacks themselves, specifically to their lack of skill, ability, training, effort or appropriate behaviour. The external alternatives attribute blame to the social system because of discrimination or lack of opportunities.

Gurin et al. present personal control and individual-system blame as two types of internal-external control with different attitudinal and behavioural implications. The data indicate that personal control and individual-system blame are not related either positively or negatively. They suggest that the relationship may vary under different conditions rather than postulate a simple relationship between the two concepts. Lao (1970) argues that the personal and the ideological variables are not only independent in a correlational sense, but also in the sense that neither affects how the other one operates. In her study, internality in

a personal sense related to competent behaviour in the academic field, while externality in an ideological sense related to innovative social behaviour.

Forward and Williams (1970) argue that a high external score on the part of ghetto youth may reflect a realistic appraisal of external forces rather than a belief that events are due to chance or fate. At the same time, high internal scores in the same context may indicate strong feelings of worthlessness and self-blame when associated with failure.

In their study of black high school students' perceptions of the Detroit riots, Forward and Williams found that neither the total scores nor the control ideology scores predicted the perceptions and evaluations of the riots. The personal control dimension however did discriminate: internals positively evaluated the riots while externals negatively evaluated them.

The relationship between individual-system blame and riot attitudes was compared before the Detroit race riot (1966) and after it (1967). The mean scores for the uncertain and negative attitudes towards rioting shifted over time towards higher internal blame scores, while the mean score for positive attitudes shifted towards greater external system blame. These findings are consistent with those of Caplan (1970) who found that rioters blamed the riot on police, merchants and other external sources, while nonrioters were inclined to blame the riot on internal sources such as drunkenness, shiftlessness and the desire to get something for nothing on the part of the rioters.

Forward and Williams describe the young black militant in terms of his self-concept in relation to the concept of the world around him. They reject the fatalistic stereotype that ghetto existence is the result of the inherent weaknesses of the residents, or an inability to improve themselves. Militants have strong beliefs regarding their ability to control events in their lives and to shape their own future, which they combine with realistic perceptions of the external barriers of exploitation and discrimination. This view represents a shift from self to system blame.

Sanger and Alker (1972) hypothesised that there are similarities between the fate control perceptions of black militants and feminists. They also believed that fate control is not a unitary personality dimension for women, but rather that there are several significant distinctions. Using Rotter's I-E scale plus an additional 17 feminist ideology items modelled on the race-related items used by Gurin et al., Sanger and Alker found three major factors: Personal Control, Protestant Ethic Ideology and Feminist Ideology. The scores on the 23 I-E items were far more external than previously cited norms. In the control group 68% had consistently internal or external scores across the three factors. The Women's Liberation group was however more internal on personal control and more external on the ideology measures than the control group, that is, feminists who reject the Protestant Ethic ideology are more likely to be personally internal than external.

Factor Groupings An increasing number of studies have moved from using the Rotter I-E scale as a measure of a generalised expectancy, to the use of subscales derived from Rotter's scale, especially those subscales derived from the factors described by Gurin et al. and by Mirels. A number of cross-cultural studies have used the subscales developed by Schneider and Parsons. Other researchers are now using Likert-type scales or subscales derived from the work of Levenson, Collins or Klockars and Varnum, and some have moved completely away from the original I-E alternatives, as in the case of Coan et al.'s Personal Opinion Survey.

At first glance, the various analyses appear to have produced a vast array of factors. In fact, the factors cluster together, suggesting certain common themes. The most important distinction is that between beliefs about personal control and those about socio-political control. This distinction is reflected in items worded in the first and third person respectively.

The personal control factors include personal control (Gurin et al., 1969), personal fate control (Mirels, 1970; Abrahamson et al., 1973; Viney, 1974; Hrycento and Minton, 1974), general fate or luck (Schneider & Parsons, 1970), personal responsibility and the individual's control over his own life (Klockars & Varnum, 1975) and personal confidence in the ability to achieve mastery and self-control over internal processes factors (Coan et al., 1973).

The socio-political factors fall into two major categories, the first of which is characterised by Gurin et al.'s Control Ideology. This factor appears related to Collins' Just-Unjust World Factor, which in turn is correlated with Rubin and Peplau's (1973) Just World Scale. On the other hand, Mirels' Factor II, or System Modifiability as it is called by Hrycenko and Minton, is similar to Gurin's system modifiability factor and Coan's control over large-scale social and political events factor, and appears related to Levenson's (1975) Powerful Others scale.

These personal control, control ideology and system modifiability dimensions do not exhaust the meaning of the internal-external locus of control construct, but suggest valuable subscales, which can be used according to the purpose of a given study.

Internality, Ideology and Political Activism

The internal-external locus of control dimension has been related to both political activism and beliefs. Gore and Rotter (1963) and Strickland (1965) found a relationship between internality and civil rights activities. Hoffman (1978) found a positive relationship between internal locus of control beliefs and the degree of involvement of Mexican-American farm workers in the United Farm Workers Union. Based on the suggestion by Gurin et al. (1969) that it is the personal rather than ideological control factor that is related to change-oriented activities, Hoffman omitted the control ideology items from his study.

Both Silvern and Nakamura (1971) and Levenson and Miller (1976) used multidimensional methods to analyse the relationship between locus of control expectancies and political beliefs and activism. These authors criticise the confounding of political beliefs and political activity in many of the studies of student activism.

Silvern and Nakamura describe the widespread association of internality with activity designed to achieve desired goals, while externality is often considered synonymous with powerlessness and related to general passivity. They studied whether powerlessness is related to a political passivity-activity dimension, to political convictions or to some combination of these variables. They compared active and non-active left-wing and conservative students using both the total I-E scale and Mirels' Factors I and II.

Externality was positively correlated with left-wing and counter-culture views both on the overall scale and Mirels' Factor I, which involves beliefs about control over personal outcomes. The content of this factor is not obviously political, but is related to acceptance or rejection of the traditional belief that individuals are responsible for their success or failure.

Silvern (1975) later studied the relationship between the I-E scale and political position in terms of a cultural stance construct, conceptualised as a continuum with traditional and counter-culture views representing the two poles. Her results replicate the earlier findings of a positive association between left-wing political beliefs and externality.

Levenson and Miller (1976) analysed the relationship between a multidimensional measure of locus of control and political activism, controlling for political ideology. Levenson's multidimensional scales differentiate between two types of externals, those who believe that powerful others are in control and those who believe in chance. They analysed male college students' locus of control beliefs, political ideology and activism, and considered the same variables in separate studies of women who differed in their degree of participation in left-wing and feminist movements. Activist liberals believed in control by powerful others, while activist conservatives did not. As a whole, conservatives tended to score higher on the internal scale.

Levenson and Miller point out that when activists score in an external direction, they are often seen as alienated. Rotter (1971) recognised that between 1962 and 1971 there was a shift to externality on college campuses, and interprets this as meaning that overall, students feel more powerless to change the world and control their destinies. Levenson and Miller criticise the forced-choice format of the I-E scale, which means that rejection of the internal options results in an external score.

Levenson believes that the differential relationship between activism and locus of control depending on political ideology, can be explained by a differential attribution of causality. Internals attribute causality to personal factors and externals to external forces.

In accordance with the tendency for conservatives to have higher internal scores, some researchers have obtained results suggesting that the Rotter I-E items themselves have a conservative bias. Zuckerman (1973) compared scores on the political and non-political items of the I-E scale for Nixon and McGovern supporters before and after the presidential election. He found that while there were no significant differences between the two groups in terms of the nonpolitical items, McGovern supporters were significantly more external than Nixon supporters on the political items. The correlation between the political and nonpolitical sections of the I-E scale were .76 for Nixon supporters, but only .26 among McGovern supporters, possibly reflecting the conservative bias of the overall scale.

Gootnick (1974) applied the Rotter I-E scale and Coan et al.'s Personal Opinion Survey to see how well the two measures would predict political behavior in a student population. His results cast doubt on the value of the I-E scale as a predictor of political participation. Gootnick describes an inherent conservative bias in the Rotter I-E scale and concludes that there is a need to change from a unidimensional to a multidimensional approach.

Thomas (1970) not only expresses doubts about the validity of the I-E scale as a measure of a stable personality trait, but also questions its value in predicting complex behaviour. He claims that there is little support for the hypothesis that people who perceive

outcomes as a result of their own actions are more likely to seek to influence their environment than are externals.

In a study of political socialisation, Thomas interviewed parents and college-aged children of politically active families and applied a shortened version of the I-E scale. He found that despite greater political activity and commitment to ideological causes, liberal parents scored lower on perceived internal causality than conservative parents. Among the students, left-wing radical activists scored lower on internality than either the non-activists or the right-wing activists. The internal items appear more attractive for people with conservative political views than those with liberal attitudes. Perceived internal control was not significantly correlated with any of the measures of political participation in the sample of parents. An item analysis of the scale suggested a conservative bias and Thomas argues that response to the items may be determined by an individual's political and social ideology.

Thomas distinguishes between the "moralizer" who places responsibility for society's problems on the individual, and the "reformer" who perceives the structure of society as preventing its members from developing their potential. The moralizer might therefore agree with the individualistic emphasis of the internal items, while the reformer would reject them. He postulates that I-E scores do not merely reflect a psychological dimension of a generalised expectancy of reinforcement, but also a cognitive assessment of real situations, which in turn may reflect the norms pre-

vailing in the individual's social and political environment. Thomas argues that in analysing an individual's world view, it is necessary to separate those aspects that reflect unique personality traits from those reflecting social norms.

Support for Thomas' claims that the internal items of the locus of control scale show a significant conservative bias, comes from a study of the psychological meaning of the Protestant Ethic carried out by Mirels and Garrett (1971). The 19 item Likert-type Protestant Ethic Scale was found to be positively correlated with internal control expectancy, which they interpret as reflecting a perceived causal relationship between effort and success.

Mirels and Garrett report that scores on their Protestant Ethic Scale were positively associated with internal control scores for the male undergraduates studied. MacDonald (1972) replicated this finding for males, but did not find a significant relationship between locus of control and Protestant Ethic scores for females.

MacDonald also studied the relationship between the Protestant Ethic Scale and the MacDonald Poverty Scale, a measure of attitudes towards the poor and poverty. The scale has 12 items, seven poverty items and five fillers in a Likert-type format. Scores on the Poverty Scale were significantly correlated with Mirels and Garrett's Protestant Ethic Scale. Supporters of the Protestant Ethic have negative attitudes towards the poor. Given the positive relationship

between internality and Protestant Ethic beliefs, it can be inferred that internals will have negative attitudes towards the poor.

Maselli and Altrocchi (1969) postulated that Rotter internals may have a particularly strong need to see the world as just and predictable. This is supported by the Just-Unjust World Factor found by Collins (1974) in his factor analysis of the 46 alternatives of the original forced-choice I-E items. This factor was also found in the studies of Duffy et al. (1977) and Zuckerman and Gerbasi (1977).

Additional evidence of the relationship between internality and beliefs in a just world has been provided by Rubin and Peplau (1973, 1975). They developed a 20 item Just World Scale based on Lerner's (1966, 1971) work on observer's reactions to the "innocent victim." Lerner argues that people need to believe that there is an appropriate fit between what they do and what happens to them. They need to believe that the world is a just place rather than "governed by a schedule of random reinforcement" (Lerner, 1966, p. 203). The rejection of an innocent victim may be explained as an attempt on the part of the observer to maintain a belief in a just world. According to Lerner, people order their cognitions to be consistent with the belief that people get what they deserve and deserve what they get.

Rubin and Peplau (1973, 1975) have studied the antecedents, correlates and social consequences of just world beliefs. Recognising the limitation that their evidence is entirely based on studies of

college students, they report negative correlations between scores on their Just World Scale and I-E scores, activism and authoritarianism. They also report a significant positive relationship between scores on the Just World Scale and the Protestant Ethic Scale, and with justifications of the situation of women and blacks. Their scores were not however, significantly related to their measure of justification of the plight of the poor.

While internals are more likely to believe in a just world, Rubin and Peplau suggest other possibilities that might clarify the relationship between locus of control and social activism. They postulate that some people may see the world as just, but externally controlled, alternatively that people may believe that they control their own lives but that the world in general tends to be unjust. Rubin and Peplau used a nine item version of the Rotter I-E scale in their studies. A multidimensional locus of control measure would be appropriate to explore the type of relationship postulated above. The belief in a just but externally controlled world could be examined using Levenson's Internal, Chance and Powerful Others scales, and the difference between a sense of personal control and the perception of an unjust world could be studied using Gurin et al.'s personal control and control ideology factors.

Rubin and Peplau point out that there is only 'rudimentary evidence' concerning the links between a belief in a just world and both sex and social class. They put forward a general hypothesis that

the belief in a just world will be less for people who have direct experience of injustice. This suggests that the belief will be less strong in women than in men and among lower socio-economic groups than in more privileged groups. Rubin and Peplau recognise, however, that the hypothesised tendency for the poor to perceive greater injustice in the world may be offset by ideological factors working in precisely the opposite direction. They propose further research with wider samples of respondents to clarify the contribution of socio-economic and ideological factors to the development of just world beliefs.

Zuckerman and Gerbasi (1977) question the use of the I-E scale to make predictions for which it is unsuited. They describe consistent correlations between the I-E scale and Rubin and Peplau's Just World Scale, and point to the identification of a just world factor within the I-E scale. They argue that internals on the Rotter scale are not involved in social-political activity, support conservative ideologies and attribute more responsibility to both victims and offenders.

Defensive versus Congruent Externality

While finding a consistent relationship between I-E scores and measures of maladjustment, Hersch and Scheibe (1967) noted that people with high external scores showed greater variability of behavior than strong internals. They suggested that the meaning of externality deserves further study and may require greater differentiation. They emphasise the need to assess how realistic external

expectancies are and also whether external forces are perceived as benevolent or malevolent.

Levenson (1974) claims that the relationship between control expectancies measured by the I-E scale and adjustment is not clear, and has developed three new scales with a Likert format, which distinguish between internals, powerful others and chance, as described earlier (Levenson, 1973).

Crandall, Katkowsky and Crandall (1965) and Forward and Williams (1970) point to the need to consider the interaction between internality-externality and the experience of success and failure. Crandall et al. suggest that the low correlations between the two subscales of the IAR raise doubts about the use of a total I-E score, which combines the attribution of responsibility to the self for both success and failure.

Crandall et al. point out differences in the real conditions faced by distinct groups. Lower class people, with less education and money are less able than upper class people to control events that affect their lives.

Gurin, Gurin, Lao and Beattie (1969) discuss the different implications of internal-external control beliefs, when dealing with success and failure experiences. Gurin et al. stress the importance of understanding the relationship between the motivations and behaviour of people with a history of failure, much of which is due to real external obstacles. It is usually assumed that internal beliefs



overlap with a sense of competence and efficiency, but when they are associated with failure they may lead to self-blame and low self-esteem.

They suggest that an acceptance of blame for failures may be normal for members of the middle class, but it may be extreme and intrapunitive for the poor. Gurin cites the work of Fanon (1967) and Merton (1964). Fanon emphasises the psychic damage done when self-blame turns into rejection of the group and of the self, and Merton argues that when people who are subordinate within a social system attribute responsibility to themselves rather than the system, they implicitly accept a rationale for the system as a whole. This rationale serves to perpetuate the system and their position in it.

A focus on external forces may be motivationally healthy for low-income people. This will depend on whether externality is the result of an assessment of the real external obstacles that block the poor. In this case externality reflects an understanding of social and economic discrimination.

Davis and Davis (1972) distinguish between defensive and non-defensive externals. Some externals appear to adopt this expectancy as a defence against failure, and would act like internals in situations where failure was unlikely. Others "may have developed this expectation because it more or less accurately reflects their life situation. An example may be socially disadvantaged groups who are typically found to be more external" (p. 133).

Phares (1971) studied possible defensive functions of external orientations, and found that externals devalued tasks on which they had failed to a greater extent than did internals. He hypothesised that the main reason for having an external orientation may be its ability to handle threat. Regardless of the origin of locus of control beliefs, once developed it appears that an external orientation can serve a defensive function.

Phares concludes that the defensive functions of an external orientation seem appropriate for predominately achievement-oriented college students, but that low-income populations may have external expectancies that reflect a realistic appraisal and perception of their life and environment, rather than a defensive function. Phares refers to the classification of externals into "defensive" and "congruent" (Phares, 1971) and concludes, "In any event, it is important for improved prediction that we begin to systematically make qualitative discriminations beyond that simply implied by internal and external" (Phares & Lamiell, 1974, p. 887).

Rotter's Reply

The controversies surrounding the meaning and dimensionality of the locus of control construct have been acknowledged, in part at least, by Rotter (1975). He believes that the interest shown in locus of control, in terms of both situational factors and individual differences, reflects concern with persistent social problems, such as rapid population growth, the increasing complexity of society, and a resulting sense of powerlessness.

Rotter claims that a number of the studies published appear to reflect a basic misunderstanding of the nature of the variables and their measurement. He attempts to specify some of the limitations of the predictive power of the concept and the measurement of individual differences. He deals with four major issues: the problem of conceptualisation, the measurement of individual differences, the dimensionality of locus of control, and the meaning of externality on the I-E scale. For the purposes of the present analysis, the information has been grouped according to the main subdivisions of the chapter: the dimensionality of the I-E scale, internality and ideology, and the meaning of externality.

Dimensionality of the I-E scale Rotter deals with this issue in two different ways. He considers the specificity-generality of the scale and then the dimensionality per se. He claims that in terms of application, the scale is intended to be easily administered, with low but not zero correlations with social desirability. He acknowledges that the I-E scale is subject to testing conditions and the known or suspected purpose of the study, but asserts that all questionnaires are subject to error under particular testing conditions.

With reference to the specificity-generality of the scale, Rotter describes it as a broad gauge instrument, not designed to permit high predictions in specific situations, such as political behavior, but rather to permit a low degree of prediction across a wide range of potential situations. Although the scores may be

expected to provide some significant predictions in comparing groups, the level of that prediction in any specific situation is theoretically limited.

Generalised expectancies are important in representing relevant personality characteristics and permitting broad predictions from limited data. A more specific measure allows for better predictions in a small number of situations, but is less useful in a wider range of settings. The kind of measure preferred by a research worker and the kind of data required depend on his purpose. Rotter considers the construction of a different measure for every specific purpose to be a very expensive enterprise, since development of an adequate measure demands careful test construction and discriminant validity studies.

A theorist may choose a construct of any breadth he likes: the distinction between a specific and a generalised expectancy is arbitrary. A broad measure has the advantage that it can be used to explore a large variety of possible problems, without the years of research necessary to develop more specific instruments. Such a measure is, however, limited by having a lower predictive level.

Rotter recognises that new methods of measurement and new scales, either general or more specific, may be justified and needed. He opposes the development of instruments without theoretical or practical justifications based on the factor structure of old measures.

Rotter feels that the issue of dimensionality has often been approached in an either-or manner. He believes that by demonstrating broad classes of dependency, one is not necessarily arguing against the existence of subcategories. A broad concept of internal versus external control will be valid if for most subjects, there are consistent orientations towards either internality or externality over subscales such as personal control and control ideology, together with inter-correlations between sources of external control.

When the scale was developed most of the variance was accounted for by one general factor. Rotter recognises, however, that there has been a growing body of evidence to suggest an increased differentiation in attitudes over time, and that some separate factors are emerging. These still vary from one population to the next, and between the sexes.

Rotter concludes that it is perfectly reasonable, if one has a specific purpose, to develop subscales or to use clusters of items within the present scale. He does not discourage factor analyses, the use of subscales, or conceptualising in terms of sub-dimensions. He believes subscales can be justified when they improve predictive power. At the same time he rejects the notion that any particular subscale reveals the "true structure of the concept."

Internality and ideology Rotter sees the most frequent conceptual problem as the failure to treat reinforcement value as a separate entity. In order to make a locus of control prediction, it is necessary

to either measure reinforcement value or control it. He argues that this is particularly true in the case of studies of social action. He believes that equally valued goals should be compared in terms of I-E behaviors. He criticises studies which attempt to evaluate the relationship between internal and external control and social action, which fail to control for shared high motivation on the part of all subjects towards the same goal.

In terms of the possible ideological content of the scale, Rotter claims that their early studies showed no relationship between locus of control and political liberalism-conservatism and he does not think that the situation has changed. He recognises that there may be a tendency for people who identify themselves as political radicals to endorse more external items, but does not discuss why this might occur. Nor does he believe that there is a logical basis for a relationship between locus of control and political ideology.

Meaning of externality Rotter argues that there is no justification for thinking in terms of a typology. Samples have always tended to have normal distributions, but there is evidence of a shift in time towards externality. Some subjects who would have been considered externals in the early studies would now be classified as internals.

Rotter criticised researchers who work on the basis of a "good-guy-bad-guy" dichotomy, where internals are always considered the good-guys and externals the bad-guys. The relationship between

locus of control and adjustment is complicated, especially since adjustment implies a value judgement and the relationship will depend on how adjustment is defined.

He does, however, acknowledge that there might be two different groups of externals, which he defines as defensive and passive externals. For the first group, externality fulfils an essentially defensive and blame-projecting function. In the second group, the passive expectancies can be seen as a logical outcome of external conditions and may result from direct teaching, even though such beliefs are contrary to the dominant, middle class Protestant Ethic. Rotter recognises the similarity between his distinction and that of defensive versus congruent externality used by Davis and Davis (1972).

Chapter 4

Locus of Control and Attribution of Responsibility

One of the most frequently studied aspects of both self and person perception is the study of the factors which lead an observer to believe that an event is caused by some attribute of the environment rather than a dispositional tendency or attribute of the actor. Much of this research, however, has focused on situational and environmental conditions rather than on observer characteristics that may influence causal attribution.

Rotter (1966) claimed that individual differences in the perception of causality had not been studied. He postulated a relationship between how the individual views the world from the point of view of internal versus external control of reinforcement and other perceptions of causal relationships. If locus of control is a generalised expectancy, the perception of others may be a special case of the internal-external control belief.

Collins (1973) suggested the need to study the tendency among observers to make internal or external attributions about themselves and others. He examined what he called dimensions of the internal-external metaphor in theories of personality. Behaviour may be determined by characteristics of an actor or the situation. An observer may attribute causality to one or both of these factors. Consistent attributions can be produced by strong situational and/or personality variables. There are individual differences in control

ideologies as reflected in internal and external beliefs. The situational-dispositional distinction links internal-external locus of control and attribution theory.

Individual Differences in Attribution

Phares and Wilson (1972) describe internal versus external control of reinforcement as a continuum which contributes to an understanding of responsibility attribution. They hypothesise that internally oriented people see themselves and others as responsible for events. This expands the meaning of the I-E construct, and adds an important individual differences dimension to the list of factors which contribute to the attribution of responsibility.

Evidence that internals attribute responsibility to both themselves and others is provided by Mirels and Garrett (1971) and MacDonald (1972). They found that scores on the Protestant Ethic Scale correlated with internal scores on the I-E scale. The Protestant Ethic contains a belief in personal responsibility for personal outcomes and more specifically for success and failure. Levenson and Miller (1976) in their study of political activists explained the interaction between political ideology and locus of control by the attribution of causality. Liberals were externals and attributed causality to powerful others, whereas conservatives were internals and attributed causality to personal factors. Thomas (1970) describes the conservative-internal as attributing responsibility to the individual for society's problems, while the liberal-external blames the system.

Gurin et al. (1969) established the importance of a causal attribution factor, which they labelled individual-system blame, which distinguishes between individual qualities and the social system as the crucial determinants of an individual's fate. Their control ideology factor reflects the traditional Protestant Ethic that hard work and ability lead to success. This factor reflects beliefs about the role of internal and external forces in determining success and failure in society.

Maselli and Altrocchi (1969) have postulated that Rotter internals may have a strong need to see the world as just and predictable. Believers in a just world tend to blame "victims" for their misfortunes. They also related I-E to individual differences in the attribution of intent. This represents a personal knowledge model based on experience of one's own intentions, as opposed to the inference model, which explains attribution as the logical processing of cues. While many studies have applied the latter model, Maselli and Altrocchi claim that there are no theories and few studies have dealt directly with the relationship between individual differences in perceivers and actors, and the attribution of intent.

Attribution of Causality for Positive and Negative Outcomes

Ethnic group and social class membership may interact with locus of control beliefs when people explain the behaviour of members of ingroups and outgroups by attributing causality in a systematically discriminant fashion. Mann and Taylor (1974) and Stephan (1977)

postulated that individuals would tend to use internal factors to explain the positive behaviour of ingroup actors. Internal factors would also be used to explain the negative behaviour of outgroup actors.

In Mann and Taylor's study, middle class English and French Canadians judged the importance of internal traits in causing socially desirable and undesirable behaviour in lower and middle class English and French Canadian actors. They found partial support for the hypothesised relationship and argue that their results indicate that people in different cultural contexts may focus on different characteristics as a basis for person and causal perception.

Stephan also argued that ingroup members are inclined to use more dispositional and fewer situational attributions to account for positive than negative behaviors. When accounting for the same type of behaviour the opposite should hold for outgroup members. He believed that members of an ingroup are likely to have much more information on the likely antecedents of an observed behaviour for an ingroup actor. They are able to empathise with the role of the actor and analyse the situation in terms similar to those used by the actor.

Stephan studied fifth and sixth grade Chicano, Anglo and Black students. He found a highly significant difference between the attributions made for behaviour with positive and negative outcomes. Positive behaviours were mainly attributed to positive attributes of the actor and negative outcomes were attributed more to the situation. This

finding held for all three ethnic groups, although the Anglo students tended to make more dispositional attributions than the other two groups. This may reflect a general orientation towards personal causality, where people are regarded as responsible for their positive behaviour. Based on a four item measure of internal versus external control, the Anglo students felt more internal control than the Blacks or Chicanos.

The results also suggest that prejudicial attributions will be made to some outgroups. When a member of a disliked outgroup engages in positive behaviour, he is less likely to have that behaviour attributed to positive dispositional characteristics than in the case of an ingroup member. Stephan argues that stereotypes result from biased perceptions of everyday events rather than socialisation or complex psychic processes.

Streufert and Streufert (1969) studied people participating in decision-making dyads. They investigated the effect of success or failure on the way that subjects explained the different outcomes. They found that subjects take more credit for success as success increases, but do not take the blame for increasing failure.

Differential attribution for success and failure has been studied by Davis and Davis (1972) in terms of defensive externality. They found that while there were no differences between internals and externals in taking credit for success, externals blamed bad luck for

their failures far more frequently than internals, who tended to blame themselves.

Gregory (1978) compared internal, moderate and external subjects, who were given an instructional set stressing achievement of a positive outcome or avoidance of a negative one. While for positive outcomes there were no differences between internals and externals, internals performed better than externals in the negative outcome condition. Only negative outcomes discriminated between internals and externals with respect to feelings of control. Internals and externals claimed equal amounts of control when they succeeded in attaining, or failed to attain, a positive outcome. When internals successfully avoided a negative outcome, they claimed more control than externals, when they failed to avoid negative outcomes. Gregory proposes that the Rotter I-E scale reflects locus of control for negative, but not for positive outcomes.

Frieze and Wiener (1971) found that there was a tendency to attribute an actor's success to internal sources, but that failure was attributed to external factors. They suggest that success or failure at an achievement task is attributed to four major causal factors: ability, effort, task difficulty and/or luck. These four elements are related to two causal dimensions, locus of control (internal versus external) and stability (stable versus variable). The former refers to self versus environmental responsibility for an outcome, whereas the stability of the attribution refers to its perceived variation over time.

Their findings suggest that ability and task difficulty (respectively internal and external factors) are both perceived as causes of consistent events, whereas effort and luck (again internal and external factors respectively) are perceived as causes of inconsistent events (see Table 1).

Collins (1973) makes a similar distinction in his analysis of the I-E scale from a personal perception perspective. He suggests that there are at least two distinct dimensions along which observers may differ in their causal attributions, the dispositional versus situational attributions (locus of control) and a lawfulness versus chance dimension (stability).

Attributed Responsibility for Accidents

The general tendency to attribute negative outcomes to external factors does not appear to hold true for internals. As believers in a just world, they are more likely to blame both themselves and others for misfortunes.

Walster (1966) studied the attribution of responsibility for accidents varying in the gravity of the outcome. She postulated that the more serious the consequences of an accident, the more likely the subjects were to attribute responsibility to someone. Such attribution serves a defensive function, as blaming the victim means that the event was both predictable and avoidable. She argued that if a serious accident could not be anticipated or controlled, it could also happen to the observer, and therefore represents a threatening situation. Using descriptions of a car accident, varying the number

Table 1
Perceived Determinants of Success and Failure

Stability	Locus of Control	
	Internal	External
Fixed	Ability	Task difficulty
Variable	Effort	Luck

Note. From "Causal Ascriptions and Achievement Behavior", by B. Weiner, H. Heckhausen and W. Meyer, Journal of Personality and Social Psychology, 1972, 21, 2, 239-248.

of victims and the degree of damage suffered, Walster found that the worse the consequences of the accident, the greater the tendency to assign responsibility to someone. While all the subjects perceived the driver to have taken the same precautions, the judgements of how careful one should be were harsher for serious accidents.

Shaver (1970) also considered defensive aspects of the attribution of responsibility. His experiments were based on Walster's descriptions, but he varied the similarity between the stimulus person and the subject. In this way, it was possible to study the notion of defensive attribution as a perceiver bias.

The effects of increasing the probability of occurrence, especially through greater personal similarity to the stimulus person, was studied under experimental conditions. Shaver found that this was related to reduced attribution of responsibility on the part of the observer. The findings suggest that the prediction of severity-dependent attributed responsibility depends upon the perception that the accident could happen to the observer. Both situational and personal similarity contribute to the perceived relevance of the accident. Situational similarity refers to perceived similarities between the circumstances of the stimulus person and the observer. Personal similarity reflects perceived congruence of beliefs, values and personal characteristics. In the case of situational similarity, the observer may attribute responsibility, while assuming differences

between self and the stimulus person. Personal similarity on the other hand, may produce defensive attribution.

Shaver postulates that defensive attribution, a tendency to self-protection, occurs when the subject's self-esteem, blameworthiness or physical safety are at stake. He sees belief in a just world (Lerner & Simmons, 1966; Lerner, 1971) as an example of defensive attribution. Avoidance of blame for an accident appears more important than avoidance of the outcome.

Shaver admits that his results could have been produced by generalising personal characteristics to others, rather than by a desire to avoid a threatening situation. He concludes that the relationship between increasingly severe outcomes and the degree of responsibility attributed is not linear.

Chaikin and Darley (1973) took Shaver's distinction between personal and situational relevance and manipulated the latter. They studied the attribution of responsibility for an accident by manipulating the severity of the consequences and the observer's identification with either the victim or the perpetrator of the accident. Subjects who expect to take part in an experimental task, witness an accident on videotape. They anticipate that they will be placed in a situation where a similar accident could happen and be in the same role as either the victim or the perpetrator.

The results support the defensive attribution hypothesis.

The subjects chose the least threatening alternative when assigning

responsibility. Where defensive attribution conflicted with just world beliefs, the former appeared to predominate. Chaikin and Darley conclude that their results are consistent with the Lerner and Walster hypothesis that people need to believe in an orderly world where misfortunes do not happen by chance.

In the case of the observer who believes he will be a potential victim in the severe consequences condition, the just-world hypothesis predicts that the victim will be blamed for the accident.

People who perceive themselves as similar to the victim, however, should engage in defensive attribution and not blame the victim.

This result was confirmed. Chaikin and Darley found that when the need for justice and defensive attribution are consistent, there is a strong combined effect. When they conflict, defensive attribution predominates.

Phares, Wilson and Klyver (1971) and Rotter (1975) argue that ambiguous situations allow generalized I-E expectancies to operate with greater force than do highly structured situations. Phares et al. postulate that the dimension of situational ambiguity may mediate the relationship between the severity of outcome and the attribution of responsibility. Using descriptions of motor accidents, they studied attribution of responsibility comparing internals and externals and varying the levels of severity of outcome and the degree of situational structure. They found a significant main effect for locus of control with internals attributing higher levels of

responsibility than externals. Whereas in a clearly structured situation the attribution of responsibility increases with the severity of the outcome, under ambiguous conditions there is virtually no relationship between severity of outcome and responsibility attribution. The predictions that I-E differences would be most pronounced in ambiguous situations were not confirmed, although the I-E x ambiguity x severity interaction did indicate that internals attributed more responsibility than externals in severe cases under ambiguous circumstances.

Sosis (1974) also studied the effects of internal-external control on a perceiver's attribution of responsibility regarding the defendant in an automobile accident. Sosis, arguing that locus of control would bear on one's attribution of responsibility, described this extension of self-perception to others as direct assimilative projection. Sosis found that internals attributed more responsibility, judged the defendant more harshly, and were more punitive, than externals. The data suggest that I-E self-perception can mediate the process of responsibility attributions. Sosis postulates that perceptions of another as internal or external depends upon factors such as the objective situation of the other person and the degree of similarity to the perceiver.

Hyland and Cooper (1976) hypothesized that the projection notion should work for both positive and negative events. They asked their subjects about the responsibility of a chemist for an important discovery. Internals thought he was more responsible than did externals,

thus adding support to the notion that people's feelings about control over the outcomes of their own behaviour are related to their attributions of responsibility to others.

Internals and externals appear to project their own generalized expectancies on to others, as in the actions of various authorities. However, externals appear to express greater suspicion than internals. Examples of this are found in the studies involving perceptions of the Warren Commission (Hamsher et al., 1968) and the Watergate burglary (Ryckman & Sherman, 1976).

Attribution, Learned Helplessness and Locus of Control

The attribution of causality is also central in the more recent literature on learned helplessness. In spite of the apparent similarity between this concept and locus of control, Abramson, Seligman and Teasdale (1978) proposed a reformulation such that locus of control and helplessness are regarded as orthogonal and the individual may be either internally or externally helpless.

Abramson et al. question the original learned helplessness hypothesis which states that learning outcomes are uncontrollable, results in negative motivational, cognitive and emotional consequences. They criticise it for failing to distinguish between outcomes which are universally uncontrollable and those which are personally uncontrollable. The hypothesis also fails to explain the differences between general and specific, and chronic versus acute helplessness.

The attribution process is of central importance in the reformulation of the learned helplessness model. The dynamic of learned helplessness as described by Abramson et al. begins with a situation of objective non-contingency leading to the perception of present and past non-contingency, which leads to the expectation of future non-contingency and symptoms of helplessness.

They distinguish between personal and universal helplessness as a self-other distinction which is related to internality-externality. Internal helplessness involves personal attributions and external helplessness involves universal attributions. The initial causal attributions then determine the generality, chronicity and self-esteem aspects of helplessness. Lowered self-esteem is related to personal helplessness.

Attribution predicts the expectations, but the expectations themselves determine the occurrence of helplessness. Abramson et al. propose an Internal x Global x Stable x Controllable table of attributions. They postulate that there are individual differences in attribution "style," such that the person with a tendency to attribute failure to global, stable, internal factors is the most prone to general and chronic helplessness depressions with lowered self-esteem.

Wortman and Dintzer (1978) believe that the distinction between personal and universal helplessness can explain the association be-

tween low self-esteem and the internal attributions for failure made by depressives.

There is a lack of evidence from the real world regarding attributions of causality for uncontrollable life events. This is pointed out by Wortman and Dintzer (1978), who describe one of the few studies which have dealt with this issue. Bulman and Wortman (1977) studied the relationship between the attributions of causality made by accident victims and their ability to cope with permanent paralysis. The three factors which best predicted coping behaviour were, attribution of blame, the perceived avoidability of the accident and self-blame. The greater the self-blame, the better the victims coped with their paralysis, whereas blaming others and the belief that the accident was avoidable were related to poor coping. They point out that the data are correlational, however, so that a causal relationship between attribution and coping cannot be established.

Wortman and Dintzer also argue that it is necessary to specify the conditions under which a given attribution will be made, otherwise the reformulated model becomes circular. They ask why some individuals make internal, stable and global attributions when exposed to a given uncontrollable outcome, while others make external, unstable and specific ones. The model lacks predictive power unless it can specify the individual's response.

An integration of the reformulated learned helplessness model and a multidimensional, attributional approach to the locus of control

construct may offer a useful approach. The relationship between factors such as personal control, control ideology and individual-system blame and the attribution of responsibility may provide an individual differences typology, which would contribute to the study of learned helplessness.

Chapter 5

Antecedents of Locus of Control Beliefs

Rotter et al. (1972) describe the unit of investigation for the study of personality as the interaction between the individual and his meaningful environment. Social Learning Theory rejects reductionism and dualism. It stresses a situational and historical approach and therefore recognises the importance of studying antecedent events in the life of the individual:

SLT also attempts to discard the term cause in favor of a view which holds that adequate description in terms of relevant past and present conditions is a more useful approach to explanation. Too often cause implies singularity... What actually is wanted is a specification of antecedent conditions adequate for prediction. (p. 8)

Both Rotter (1966) and Lefcourt (1966) argued the need for further research into the antecedents of internal-external locus of control. They differentiated between studies dealing with situational manipulations of locus of control beliefs, and those in which perceived control as a generalized expectancy is considered a personality variable and related to a variety of social behaviours. The former type of research looks at antecedents, but they are immediate experimental variables. The latter type of study normally considers locus of control beliefs as independent variables, without analysing their origins.

Exceptions to this general pattern are the studies by Wolfe (1972), Thurber (1977) and Hoffman (1978). Wolfe studied a community

facing an economic crisis and looked at the possible effects of this economic threat on locus of control beliefs. Thurber studied the impact of environmental conditions, a mining disaster and major flooding, on locus of control beliefs. Hoffman examined the relationship between socioeconomic empowerment and locus of control by studying workers who had different degrees of commitment to the United Farm Workers Union. In these studies, locus of control beliefs were the dependent variable, and economic threat, environmental disasters and degrees of commitment to the U.F.W. were the independent variables. These antecedent conditions were relatively specific and proved to be related to what can be considered congruent externality, in the case of the economic and natural disasters, and to internality in the case of commitment to the union.

The distinction made by Freize and Weiner (1971) between stable and variable factors and their importance in the attribution process, may prove useful in the analysis of antecedents of I-E beliefs. Locus of control as a generalized expectancy may be the result of relatively stable antecedent variables, but an individual's beliefs may vary or even change as the result of unpredictable, variable factors, such as the economic threat or mining disaster described above. Levenson's differentiation between externals who believe in powerful others and those who believe in chance, may parallel the stable-unstable distinction.

Three stable antecedent variables that have been considered in the research on internal-external control of reinforcement are culture, sex, and socio-economic position.

Cross-Cultural Studies of Locus of Control

Tin-Yee Hsieh et al. (1969) compared locus of control beliefs of Chinese, American-born Chinese and Anglo-American high school students. The Anglo-Americans were the most internal, followed by the American-born Chinese, with the Hong Kong Chinese having the most external scores. Hsieh interprets the locus of control scores in terms of cultural orientation. The differences may be due to the values of self-reliance and individualism in American culture as opposed to the values of kinship and maintenance of the status quo in Chinese culture.

McGinnies et al. (1974) applied the Rotter I-E scale to students in Australia, New Zealand, Japan, Sweden and the United States. They found a significant main effect for sex across nations, with females having stronger beliefs in external control. In terms of national differences, the Swedes and Japanese were significantly more external than the New Zealanders, Australians and Americans, whose scores were similar. The Anglo-Saxon background of the latter group, their common cultural legacy and Protestant Ethic were mentioned as possible explanatory factors. Japanese society was described as offering less opportunity for social and vocational mobility, and the high degree of security offered to the individual by the Swedish social

insurance system were considered possible factors accounting for greater external beliefs.

Parsons et al. (1970) believe that locus of control expectancies are of value in studying both cultural differences and national stereotypes, especially given their relevance to concepts such as power and alienation. A comparison between students from Denmark and the United States showed the same general levels of internality, but with different patterns of responses. Their findings indicate constant biases or expectancies regarding other nationalities. The students from the United States ascribed greater externality to all other groups, while the Danish students ascribed greater internality to students from the United States and West Germany than to themselves.

In a reanalysis of the Parsons et al. (1970) data, Schneider and Parsons (1970) considered the dimensionality of the Rotter I-E scale in cross-cultural contexts. Their five categories were general luck or fate, respect, politics, academics and leadership-success. While no overall differences between Danes and Americans were found, the Americans were more internal on the leadership-success category.

Parsons and Schneider (1974) in a later study of eight countries used the same five locus of control subscales. They found both sex and country effects. Women were more external, but this was explained by the differences on the luck-fate and leadership-success subscales. Within countries, male and female responses across the

subscales were similar, while the subscales revealed different patterns between the countries. In the analysis of scoring patterns over the five subscales, the two North American countries (Canada and the United States) had similar scores, and the West European nations studied - France, Germany and Italy, formed a second group. The Japanese students were the most external and the Indian sample the most internal. Parsons and Schneider consider that the results reinforce their earlier conclusion that internal-external locus of control is multidimensional rather than unidimensional.

Ryckman et al. (1978) compared control beliefs of Rhodesian and American university students using the Collins I-E scale. The factor structure of the American students was very similar to that found by Collins, but two of the factors differed for the Rhodesians. Ryckman suggests relabelling the Difficult-Easy World factor, Authoritarian Control for the Rhodesian sample, and calls the second one Self-Determination for Success. This factor appears to tap Protestant Ethic values, which in turn have been found to correlate positively with Just World beliefs.

Ryckman et al. adopt a "congruent" interpretation of locus of control beliefs. They argue that "It is apparent that differences in perceptions of control are closely aligned to the experiences and nature of the environment confronting the individual" (p. 171), and that care must be taken in using and interpreting the I-E construct in cross-cultural research.

For the purposes of the present study, the most important cultural comparisons are those which deal with Mexicans, whether nationals or Mexican-Americans.

Gaa and Shores (1979) analysed the assumption that minority groups are more external than Anglo-Americans. They used the Locus of Control Inventory for Three Achievement Domains (LOCITAD), a 47 item instrument measuring perceived acceptance of responsibility for success and failure in intellectual, physical and social activities.

Their results suggest that locus of control should be treated as a domain-specific characteristic, and that success and failure outcomes should be considered separately. Chicano and Black teacher training students were significantly more internal than the Anglo-American students in terms of success in intellectual activities. The groups did not differ significantly in terms of their perceptions of physical activities, but the Anglo subjects were significantly more internal than the members of minority groups with respect to both social success and failures. The Chicanos were more external than either the Blacks or the Anglos in the social domain.

Hoffman (1978) used the I-E scale as a measure of powerlessness in his study of Mexican-American seasonal farm workers. He used a modified version of the scale, omitting the control ideology items of Gurin et al., based on their assertion that the personal

control rather than the control ideology factor determined a sense of mastery in oppressed groups.

Hoffman found a positive relationship between commitment to the United Farm Workers Union and internality. While the differences could be due to either self-selection factors or result from the experience of union activities, Hoffman believes there is evidence of the latter. There were no significant differences between non-union and the newest members in terms of locus of control beliefs. Significant differences between boycott organizers and the rank-and-file union members still held after controlling for other relevant variables such as Spanish-speaking and citizenship. The boycott organizers were also more internal than a comparison group of college students.

Garza and Ames (1974) compared Anglo- and Mexican-American college students, matching their subjects on sex and socio-economic background. They compared both overall I-E scores and partial scores on the five categories used by Schneider and Parsons (1970). Mexican-Americans were significantly more internal than Anglo-Americans on both total I-E scores and the luck-fate and respect categories.

The findings, especially the luck-fate differences, contradict the dominant stereotype that Mexican-Americans are fatalistic and believe they are controlled by external forces. Socio-economic status was controlled in their study, and Garza and Ames argue that

fatalism may not be a cultural characteristic but rather a product of real socio-economic conditions.

The internality of many of the Mexican-Americans studied may reflect the dominant Protestant Ethic values of North American culture. If this were the case, the locus of control beliefs of Mexicans should be different.

Reitz and Groff (1974) included a Mexican sample in their cross-cultural comparison of Eastern and Western developing and developed nations. They compared the I-E scores of factory workers from the United States, Japan, Mexico and Thailand. The Mexican sample consisted of nonsupervisory workers in a shoe manufacturing plant and an industrial components factory.

Rotter's I-E scale was used and the data analysed in terms of Schneider and Parsons' (1970) categories. While workers from the United States and Japan were significantly more internal on the leadership and success category, Mexican workers were significantly more internal on luck and fate than workers from the other three countries (see Table 2).

The Mexican and American workers did not differ on the respect and politics dimensions. Both groups were most external on the politics category. The Mexicans were most internal on the luck and fate category, whereas the American workers were most internal on leadership and success.

Table 2
 Percentage of External Responses of Mexican and
 American Factory Workers

Workers	Category			
	Leadership and success	Respect	Politics	Luck and fate
Mexican	47	38	56	34
American	30	43	58	42
Z Scores of Differences in Percentage External				
	5.14**	1.56	0.54	2.22*

Note. Adapted from Reitz and Groff, 1974, p. 351.

* $p < .05$

** $p < .0001$

Cole and Cole (1977) used Levenson's IPC scale to measure locus of control beliefs in Mexican university students. They hypothesized that individuals who engage in counternormative activities will develop a strong sense of internal control and/or rejection of external control. Specifically, they predicted that female students taking a business administration course would be more internal than men, since higher education for women in Mexico is considered counternormative.

No sex differences were found on the Levenson I scale, but the Mexican women rejected control by powerful others and chance significantly more than the male students. Cole and Cole mention that Garza reported in a personal communication that the Chicano women in his study (Garza & Ames, 1974) were more internal than the males, but that the differences were not statistically significant.

In a later study, Cole et al. (1978) take up the issue of the stereotype of Mexicans and Chicanos as fatalistics. They compared the locus of control beliefs of male students in Mexico, the United States, Ireland and West Germany. The Mexican university students had significantly more internal scores on the Rotter I-E scale than the subjects from the other three countries.

Cole et al. also analysed the luck, politics, respect and leadership categories used by Reitz and Groff (1974). They found the Mexican students more internal than the workers on all four categories. Once again, the most internal scores were in the luck-

fate category and the most external scores dealt with political issues (see Table 3).

Cole et al. feel that their results challenge the stereotype of Mexicans as fatalistic. They decided to explore their data further by considering the Gurin et al. distinction between personal control and the perception of locus of control as a general social condition. They did this by means of an item analysis comparing responses to the personally worded items with those describing general social conditions. Cole did not find this a useful distinction as the students responses were similar to both types of item.

Evidence of stereotyping was found when they asked a sample of American liberal arts students how they thought Mexican university students would respond to the I-E scale. The Mexican students were significantly more internal ($\bar{M} = 5.88$) than their American counterparts ($\bar{M} = 10.15$). The American students, however, predicted far greater externality on the part of the Mexicans (mean of the predicted Mexican scores = 15.55).

Cole et al. conclude that,

... evidence to support a stereotype of a Mexican factory worker, a Mexican university student, or a Chicano high school senior as fatalistic, believing that his own actions are irrelevant to personal outcomes is almost totally lacking. Instead, these groups appear equally or more internal in perceived locus of control than their American counterparts or other groups with whom they have been compared. (p. 1328)

Table 3

Percentage of External Responses of Mexican Students and Factory
Workers

Group	Category			
	Leadership and success	Respect	Politics	Luck and fate
Factory workers	47	38	56	34
Students	26	26	38	19

Note. Adapted from Cole, Rodriguez and Cole, 1978, p. 1326.

The differences on all four categories were significant at the .001 level.

Sex Differences in Locus of Control Beliefs

Social Learning Theory stresses a situational and historical approach to perceived control of reinforcement. Women's locus of control beliefs can be expected to differ from men's as a function of both direct experience of control and the learning of sex roles.

Fransella (1977) claims that shared beliefs and experiences of sex roles reinforce each other. At the societal level a social world is constructed according to its members' interests and beliefs, and individuals construct their beliefs within this context to make sense of their particular experience of the world.

Baker Miller (1978) analyses women's situation in terms of a relationship of domination-subordination. Women as subordinates are described in terms of psychological characteristics such as,

... submissiveness, passivity, docility, dependency, lack of initiative, inability to act, to decide, to think, and the like. In general, this cluster includes qualities more characteristic of children than adults -immaturity, weakness and helplessness. (p. 7)

They are also encouraged to develop such characteristics.

Sanger and Alker (1972) found that the I-E scores of the women they studied generally far more external than the previously cited norms. Based on Gurin et al.'s personal control-control ideology distinction, they found that feminists were more internal on personal control and external on the ideology measure than the other women.

McGinnies et al. (1974) found a significant sex main effect across the five countries they studied, the United States, Australia,

New Zealand, Japan and Sweden. Women were more external than men. Parsons and Schneider (1974) also found women more external than men in France, Germany, Italy, Canada, the United States, Japan and India. The sex differences were due to differences on the luck-fate and leadership categories.

The Mexican women in Cole and Cole's (1977) study rejected control by both powerful others and chance significantly more than their male counterparts. These differences had been hypothesized, however, as the women were business administration students, considered to be engaging in counternormative behaviour. Cole and Cole characterize the traditionally accepted role of the Mexican woman by quoting Octavio Paz that, "she simply has no will of her own."

Poverty, Fatalism and Locus of Control

Externality, the perceived non-contingency between behaviour and reinforcement, has been associated with feelings of powerlessness and hopelessness. Fatalism also refers to a sense of powerlessness and is contrasted with feelings of personal efficacy. External locus of control scores may therefore, represent a measure which can be used in studies of fatalism among the poor.

Fatalism, a sense of powerlessness, and passivity are characteristics frequently attributed to Chicanos, Mexicans, the poor and "traditional man." The research reported on Chicano and Mexican students and workers found internal control beliefs rather than

fatalism. Locus of control beliefs should also be studied among low-income populations in developing countries to determine whether such groups are fatalistic externals or if fatalism is, in fact, part of a dominant stereotype. If external locus of control beliefs do predominate, it is important to analyse what they mean.

Smith and Inkeles (1966) studied social-psychological correlates of modernity. Individual modernity was defined as a set of attitudes, values and ways of feeling and acting. Central characteristics of the syndrome are a sense of efficacy, openness to new experience, increasing independence from traditional authority figures, abandoning passivity and ambitions to achieve educational and occupational goals for oneself and one's children.

They applied a 119 item Overall Modernity scale to 5500 men in Argentina, Chile, India, Pakistan and Nigeria. Their first short form of the scale was made up of the 38 items with the highest correlations of item to total form scores. 20 per cent of this scale dealt with efficacy, which overall appeared heavily weighted towards "instrumental activism."

Kahl (1968) in his study of values in Mexico and Brazil, defined modern values as rational, secular, change-oriented, with a stress on individual responsibility. Traditional values are timeless, they stress a fatalistic acceptance of the status quo, and combine respect for authority with belief that the individual is submerged in the collectivity.

The fatalism of Kahl's traditional man is a critical component of Oscar Lewis' Culture of Poverty (1966). Based on his studies of poverty and family life in Mexico, Lewis postulated a subculture of Western society, possessing its own structure and rational. He described it as a way of life which is passed on from generation to generation through the family.

Relevant psychological dimensions of the Culture of Poverty include strong feelings of hopelessness, fatalism, despair and dependence. According to Lewis, the poor are aware of the dominant middle class values and may nominally subscribe to them. Their hopelessness is due in part to the impossibility of living up to such values and achieving success in these terms.

Valentine (1970) has criticised Lewis in terms of his theory, methodology and policy implications. He questions the empirical foundations of the Culture of Poverty and claims that Lewis fails to provide adequate evidence to support his theory. Valentine suggests that the predominantly negative collection of attributes making up the Culture of Poverty, can be seen in terms of the traditional negative stereotypes of the poor, which are held by the dominant culture. These serve to support the rationalization of blaming poverty on the poor.

Mangin (1967 a & b) has criticised Culture of Poverty type stereotypes of Peruvian shanty town dwellers. Using direct observation, questionnaires and psychological tests, Mangin found that the

'barriada' residents were well organised, patriotic and relatively conservative. He emphasises that while they are poor, they do not live the life of squalor and hopelessness of Lewis' Culture of Poverty.

Portes (1971) studied lower class politics in Chile. He criticised the view that these groups tend towards political extremism, as a result of certain psychological and interpersonal features of their situation.

Portes worked in four settlements taken as typical of the main types of slums in Santiago: spontaneous settlements, squatter invasions, decaying housing projects, and government resettlement areas. He concluded that his data offer no support for the theory that lower class leftist radicalism is a function of political primitivism and social isolation. In fact, it appeared to be associated with greater education, mass media exposure and participation in organizations.

The attribution of responsibility for poverty to the poor themselves is a reflection of widespread stereotypes. Goodwin's (1972) research on inter-class perceptions showed that middle-class Americans drew sharp distinctions between themselves and the lower class welfare poor. Goodwin found that the poor do share the work ethic, although the most disadvantaged blacks lack confidence in their ability to succeed. Their insecurity and lack of confidence reflect objective realities such as lack of education and skills and the existence of racial discrimination.

The work ethic ratings that the middle class subjects give themselves did not differ markedly from the ratings of the welfare women. Middle class respondents, however, denied that this is strong among the poor. They tend to believe that the work ethic and confidence are positively correlated, and misunderstand how high work ethic leads to increased feelings of insecurity among the poor.

Allen (1970) believes that psychological problems in poverty can be considered independent or dependent variables. As dependent variables, the psychological characteristics of the poor are considered consequences of long-term adverse environmental conditions. The same psychological factors may also be independent variables, contributing to the individual's condition.

Allen sees most psychological theories as woefully inadequate when dealing with problems of poverty. He proposes the development of a social-psychological theory which specifies the interdependence between the individual and the social and economic system. This, he hopes could integrate elements of the real-world social system, (economic, class and political factors) with psychological variables. This would put psychology in closer contact with external objective factors. At present, "Most psychological theories make little attempt to discuss the role of objective environmental conditions; at best, environmental and situational factors are sometimes 'psychologized' " (p. 150).

Gurin and Gurin (1970) make a similar distinction. They describe two general approaches to the study of poverty. One focuses on the current realities that the poor must deal with, and the other on the problems "in" the poor themselves. As a result, situational and psychological approaches are sometimes considered mutually exclusive. They propose expectancy as an integrating concept, capable of overcoming this dichotomization by looking at the psychological problems which result from reality constraints.

Fatalism is seen as an obstacle to modernization or as a part of a normative system perpetuating poverty. Critics question the existence of such fatalism among the poor and/or the socio-political implications of confusing the causes and consequences of structural conditions, and locating the problem of poverty in the psychology of the poor.

Chapter 6

The Low-Income Population of Mexico City

The inadequacy of psychological theories when dealing with the issue of poverty has been pointed out by Allen (1970). He proposes a social psychological theory capable of handling the interdependence of the individual and the socio-economic system. Social learning theory recognises the need to specify antecedent conditions of locus of control beliefs within a situational perspective. In order to study the antecedents of control beliefs among low-income groups, it is therefore necessary to define critical aspects of their socio-economic context. This is especially relevant to the present study, where the results can be understood and interpreted more clearly in the light of information about the subjects' socio-economic background and conditions.

Allen suggests that "poverty" is probably too broad a category, even in economic terms. The poor-nonpoor dichotomy is unable to pick up important psychological differences that exist within the poverty category. He recommends comparisons between different poverty groups. Housing, as a material expression of the economic system, will be used to locate the different groups. The distribution of the housing available in Mexico City reflects the distribution of income. Distinctions within low-income housing are similar to those noted in connection with unionisation and social security, reflecting a security-precariousness dimension.

Poverty, the Culture of Poverty and the urban poor are broad, often emotive terms. The term low-income will be used instead to describe macro-level socio-economic conditions. The low-income population of this study will be defined according to the income distribution of the society as a whole and of the Federal District of Mexico City in particular.

Data on a further set of socio-economic indicators: union membership, social security, and housing will then be presented. These data will illustrate the simultaneous homogeneity and heterogeneity of the low-income population. The city can be seen as a "concrete" expression of the overall economic structure. Within this structure the urban low-income population, -approximately 70% of the total- face common problems. These include a shortage of social services, housing and transportation problems. In terms of their absolute numbers and the number of difficulties faced by each individual, the low-income population bears the brunt of these problems.

An examination of the indicators to be presented, however, suggests that there may be important differences within the low-income population. There is a clear distinction between low-income groups whose jobs provide a degree of economic security, as well as union membership and social security benefits, and those groups who suffer from chronic economic insecurity. The latter groups can be defined as socio-economically precarious. However it is important to stress that the former group, although a favoured minority, enjoys benefits

that are minor and relative compared to socio-economic conditions of the elite.

Income Distribution

In 1979, the population of the United States of Mexico was estimated to be 67,899,000 (CONAPO, 1978) and that of Mexico City 14,600,000 (Garza & Schteingart, 1978). Therefore, 21.5% of the population is living in Mexico City (see Table 4 for socio-demographic characteristics).

The income distribution of Mexico is comparable to that of the majority of African nations and other South American countries such as El Salvador, Bolivia, Brazil and Jamaica. The income received by the richest 5% of families is 50 times that received by the poorest 10%. According to Hernandez and Cordova (1979), the poorest 20% earn only 3.2% of the income, while the top 20% have 55.08% of the income (see Figure 1).

At a national level, in 1970 24% of the labour force in the industrial sector and 33% in the service industries were earning below the minimum wage (Centro de Estudios Economicos del Sector Privado, 1979). During the previous administration (1970 - 1976), there was some income redistribution from the wealthiest families to the urban middle class and organised working class, but this did not, however, benefit the poorest 30% of families (Hernandez & Cordova, 1979).

An equally skewed distribution of income is found in the Federal District. At the time of the 1970 census, the minimum wage

Table 4

Sociodemographic characteristics of the Population
of Mexico City (1977)

Population	100.0%
Below 12 and over 64	35.6%
Between 12 and 64	63.1%
Employed	29.6%
Education level of head of household	100.0%
Without schooling	12.6%
Incomplete Primary Education	29.2%
Complete Primary Education	25.2%
Secondary and Higher Education (incomplete and complete)	21.5%
University Education (Undergraduate and Postgraduate, incomplete and complete)	10.8%
Age of Head of Household	100.0%
Below 24	7.4%
Between 25 - 54	72.6%
Over 54	20.0%
Size of Household	100.0%
Six members or less	69.6%
Over six members	30.4%

Note. Source: Hernandez and Cordova, 1979.

PERCENTAGE
INCOME

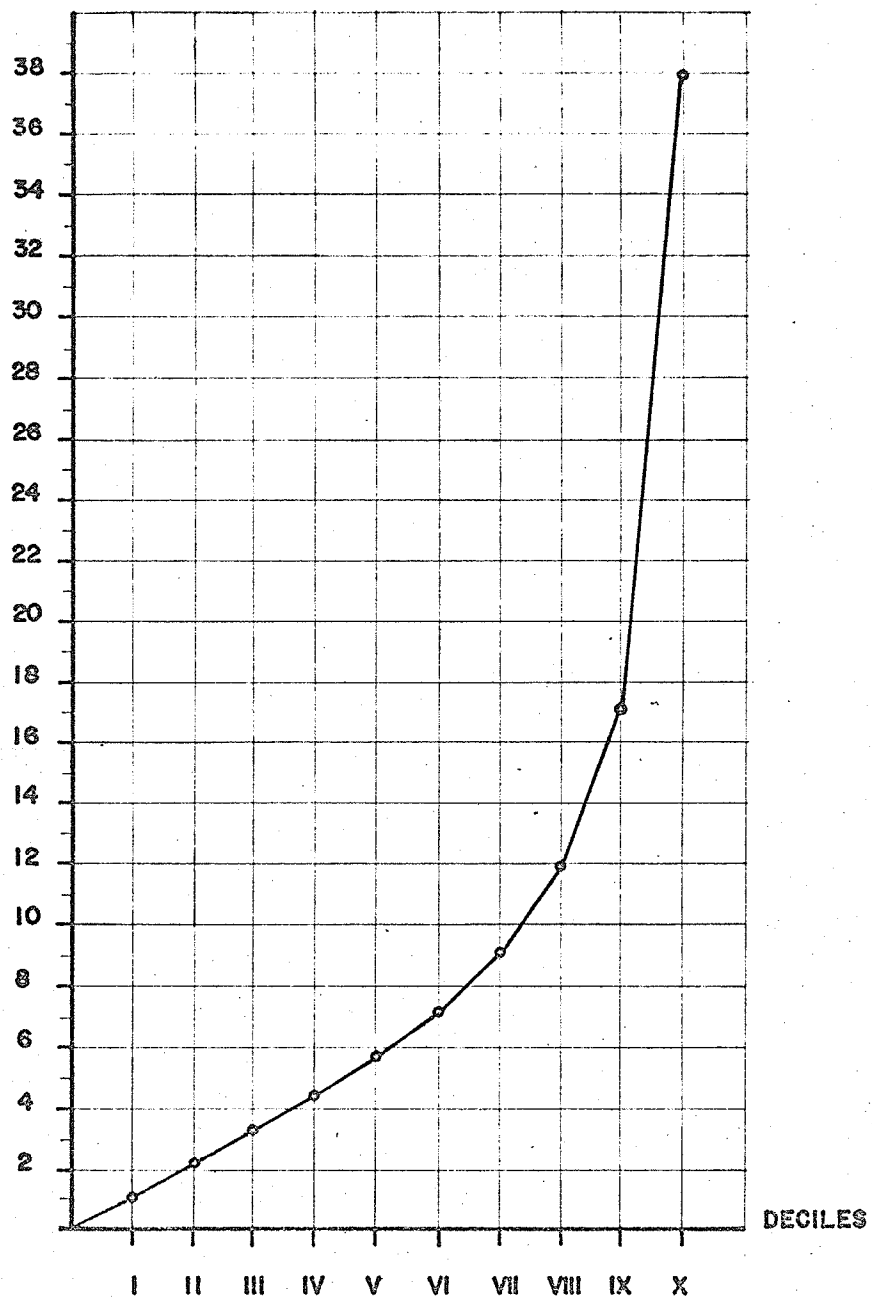


Figure 1

Percentage Income Distribution In Mexico by Deciles

(Source: Hernandez & Cordova, 1979)

in Mexico City stood at 32 pesos a day, approximately 900 pesos a month.⁽¹⁾ About half the population earned around that amount, and almost 80% earned less than twice the minimum wage. Approximately 80% of the 14,600,000 residents of Mexico City can be defined as low-income, based on income distribution (see Table 5).

Union Membership and Social Security

In 1970 only 36.3% of the country's industrial labour force and 13.1% of those working in services were unionised (Laurell, 1975). Laurell attributes the granting of social security, among other factors, to the militancy of certain groups of workers such as the railway, petroleum and electrical workers. The counterpart of this is that large groups of workers lacking union organisation also lack social security. Those left unprotected in the urban sector are domestic servants, home workers and the self-employed such as street vendors and small artisans. In rural areas they include self-employed, unpaid family workers, small farmers, and other peasants working under various types of contracts.

In 1970, 24.9% of the total population of Mexico were covered by social security. In the Federal District 63.0% of the economically active population were insured, 52.9% with IMSS, for blue and white collar workers, and 10.1% with ISSSTE, for federal government workers (Mesa-Lago, 1974). The first modern social security system in Mexico

(1) Equivalent to \$2.56 U.S. a day or \$72 a month (one U.S. \$ = 12.5 pesos, 1970 parity).

Table 5

Monthly Income of the Economically Active Population
of the Federal District

Economically Active Population

<u>Monthly Income (pesos)</u>	<u>Total</u>	<u>%</u>	<u>Cumulative %</u>
up to 199	77,782	3.60	3.60
200 - 299	266,921	12.40	16.00
500 - 999	674,915	31.00	47.00
1,000 -1,499	423,840	22.80	69.88
1,500-2,499	329,500	15.21	85.00
2,500 -4,999	206,220	9.60	94.60
5,000 -9,999	81,040	3.80	98.40
over 10,000	35,950	1.60	100.00

Note. Based on 1970 census figures, adapted from Garza and Schteingart, 1978.

was granted to federal civil servants in 1925. The strongest national labour federation in Mexico, with 500,000 members, is that of the civil servants, FSTSE. The main source of power of this group seems to be control of public administration and integration into the political machinery, but union organisation and strikes were also important.

Housing

Castells (1977) describes three modes of housing production and distribution: private capitalist, public and "popular." Only the second and third modes are utilised by the low-income population.

A typology of low-income housing in Mexico City (Ward, 1976) describes four major subsystems which vary according to their origins and tenure (see Table 6).

Vecindades (neighbourhoods) represent the oldest of the four subsystems. The classic 'vecindad' was originally a colonial palace in the heart of the city, later sub-divided to provide accommodation for a growing low-income population. The demand for 'vecindad' accommodation was such that purpose-built 'vecindades' were constructed. In both the classic and purpose-built 'vecindades', families normally live in single rooms running off a central patio, and share services such as bathrooms and washing facilities. Most of the people interviewed by Oscar Lewis in Mexico City lived in inner city 'vecindades'. In all, about two million people are living in some type of 'vecindad'.

Colonias proletarias (Proletarian settlements), where the residents build their own houses, represent the largest low-income

Table 6

The Low-Income Housing System of Mexico City

SUB-SYSTEM	USUAL TENURE	STRUCTURE	SERVICES	APPROX. TOTAL NUMBERS
<u>VECINDADES</u> "neighbourhoods"				
<u>Classic Vecindades</u>	Rent (often controlled)	Often colonial palaces sub-divided and deteriorating	Access to all services but shared	
<u>Vecindades</u>	Rent ('libre')	Large purpose-built, varying state of repair	As above	2 million
<u>New Vecindades</u>	As above	Small, 1-10 families, Varying degree of permanency	As above	
<u>COLONIAS PROLETARIAS</u> "Proletarian Settlements"				
<u>Fraccionamientos Clandestinos</u> "Clandestine Development"	'Owned' by occupier - contract often invalid or confused	Varies, usually consolidating. Autoconstruction.	Varies, may often lack one or all of the following: drainage, paving, water, refuse collection, etc.	
<u>Colonias Paracaidistas</u>	Held illegally by occupier	As above	As above	3-3.5 million
<u>Colonias Paracaidistas</u> - legalised	Owner occupied. Some renting and sharing	Consolidating	May lack any of the services listed above	
<u>CIUDADES PERDIDAS</u> "Lost Cities"	Rent. Often confused	Shanty, unconsolidated	Usually access to water. Limited or lack of other facilities	112,000 - 200,000
<u>CONJUNTOS SUBSIDIADOS</u> "Public Housing"				
a) Social security affiliates	Rent	Multifamily	All services	Below 100,000
b) Resettlement schemes	Varies, usually owner occupiers	Individual units, some multifamily	As above	

Source. Adapted from Ward, 1976,

housing subsystem. By 1970 they covered 41.5% of the urban area and housed between 35% and 40% of the urban population, at that time some three and a half million people (Ward, 1976).

The division and sale of plots of land vary in their legality. While there are legal transfers of property with all the required services installed, many land sales are illegal. The illegality may be due to the sub-divider selling land to which he has no rights, or to the failure to install the services required by law.

Squatter settlements are a major type of *colonia proletaria*. These begin by land invasions and the squatters are well aware of the illegality of their actions. This is the type of housing system described by Mangin (1967 (a), (b)) in Peru. The unifying characteristic of this sub-system is its development and consolidation by means of auto-construction of dwellings, and location on the periphery at the time of purchase or invasion.

Ciudades perdidas ("lost cities"), as their name implies, are often hidden behind high walls. They are smaller than most squatter settlements and are typically shack yards lacking urban services. They differ from squatter settlements in terms of their age, location, tenure, structure and development potential. These differences are important as the two sub-systems are often confused or treated as interchangeable by academics, politicians and the general public alike. The confusion often arises from an exclusive focus on the material conditions of the housing. Ward contrasts the consolidation process

within squatter settlements with the ciudades perdidas, which he classifies as a non-developing sub-system.

Government housing projects are the most recent and smallest low-income sub-system. There is no single housing body, but a proliferation of government housing agencies designed to deal with different low-income groups.

In 1972 INFONAVIT (Instituto del Fondo Nacional de la Vivienda para los Trabajadores), for unionised workers in the private sector covered by social security, and FOVISSSTE (Fondo de la Vivienda del Instituto de Seguro Social para los Trabajadores del Estado), for federal government employees, were created. Both INFONAVIT and FOVISSSTE members enjoy regular employment. They earn at least the minimum wage and are entitled to social security, which covers all major economic crises.

The low-income housing system displays internal features similar in various crucial respects to those noted in the areas of unionisation and social security. Manuel Castells' analysis of Mexico's urban policies demonstrates how government housing policies reflect macro-economic conditions and political considerations.

Until the 1960s State intervention in the housing fields was limited, and in terms of public housing a quantitative and qualitative change occurred during the 1970s. In 1972, during the presidency of Luis Echeverria (1970 - 1976) the new public housing funds, described above were created. According to Castells (1977) the programs appear

to pursue various related objectives: the reproduction of the labour force, the direct integration of the industrial workers into the State apparatus, a deliberate effort to promote social participation and integration, plus the creation of a large housing market, permitting the concentration and modernisation of the construction industry. Government housing policy in the main appears to favor the population of unionised workers with social security.

Public housing projects represent the most secure type of housing for low-income residents. The residents of these projects purchase accommodation in fully urbanised areas. Ciudades Perdidas, 'vecindades' and squatter settlements, which have not been regularised by the government and lack urban services, represent different types of precarious housing.

Precariousness can be used to define both a given settlement and its residents. At the settlement level, it exists in topographic, legal, construction, infrastructure and service terms. The residents of such settlements suffer from chronic economic and social insecurity due to low and irregular incomes, and a lack of stable employment and union and social security membership.

The different forms of insecurity experienced in the urban and socio-economic contexts interact. The lowest-income population has a limited access to the housing market. Precarious settlements are frequently found in areas unsuitable for house construction, such as under bridges, along railway lines, next to factories or mines. The topographic insecurity is often compounded by insecurity of tenure due

to land invasions, illegal sub-divisions or rental of land and/or accomodation. In these circumstances, building materials are often provisional and the areas lack both urban infrastructure and services.

In order to compare the locus of control beliefs between secure and precarious groups, the present study selected a sample from residents of a public housing project to represent the secure population, and residents of a 'ciudad perdida' and a squatter settlement to represent a precarious population. The housing project residents are amongst the lowest paid federal government employees. The residents of the other two types of housing are not only confronting chronic precariousness in the terms defined earlier, but were also facing the possible eradication of their homes as part of a road building program.

Chapter 7

Background and Hypotheses

The present study set out to describe locus of control beliefs among the low-income population of Mexico City and to critically analyse the meaning and socio-political implications of such beliefs. Possible antecedents, the dimensionality of the construct and its relationship to the attribution of responsibility were considered important issues.

Theoretical Context of the Present Study

Many of the controversies surrounding internal-external control of reinforcement are particularly relevant in the case of socially disadvantaged groups. As a unidimensional personality measure, the I-E scale could be used to describe the adjustment or maladjustment of the urban poor. The meaning of externality has been questioned however, and a distinction drawn between defensive and congruent externality. The former appears related to indices of maladjustment such as depression and hopelessness. The latter represents an appropriate assessment of real external obstacles faced by groups occupying subordinate positions within society.

Rather than utilise a unidimensional measure numerous analyses have produced factors which differentiate between notions of personal control and control in the wider socio-political sense. Control beliefs regarding these two contexts may, but need not, coincide. They are the product of both direct personal experience and socialisation.

An examination of these issues among the low-income population of Mexico City should also contribute to an understanding of the psychology of the poor and stereotypes of poverty. Lewis' (1966) Culture of Poverty (supposedly typical of sectors of the urban poor in Mexico) stresses the specific psychological characteristics of the poor and their role in perpetuating poverty. Modernization theories similarly emphasise the attitudes and values of traditionalism as obstacles to change. Fatalism is central to both these models, and a sense of personal efficacy is regarded as the key to change. The fatalism, passivity and irrationality of the poor have however been questioned.

Locus of control and the I-E scale offer a more precise instrument for testing the fatalism component of the Culture of Poverty. At the same time the Culture of Poverty and modernism approaches offer a macro-level context within which the debate about the meaning and dimensionality of internality-externality may be usefully analysed.

Earlier studies have tended to introduce these issues in the course of post-hoc interpretations of statistically derived factors. As such the conclusions tend to be speculative. In the present study relevant factors derived from an analysis of the low-income population's real socio-economic situation were built into the research design so that the results could be interpreted in a socially meaningful context.

At the same time, the criticisms directed at the early interpretations of externality can also be applied to the controversy over the Culture of Poverty. Interpretations of maladjustment among the

poor may reflect an ethnocentric bias on the part of the researchers; stereotypes of low-power groups in their own or other societies.

In order to go beyond a simple description of the locus of control beliefs of a given low-income group, it was decided to compare groups varying in their degree of chronic precariousness. The distinction between relatively secure and precarious groups is relevant given the socio-economic differences which exist within the low-income population of Mexico City. This allows comparisons to be made between those subjects whose characteristics qualify them as members of the Culture of Poverty and subjects who can be defined as privileged. (although low-income) urban residents. Precariousness, as a stable antecedent of congruent externality can also be investigated by comparing the I-E scores of the two groups.

Similarly, the locus of control beliefs of men and women should differ. Women can be expected to be more external than men, due to dominant sex role stereotyping and structural constraints. A consistent finding in the cross-cultural research is that regardless of absolute I-E scores, women are consistently more external than men. In the present research culture, class and sex combine to increase the probability of congruent externality.

Congruent externality is a product of direct personal experience of powerlessness. To the extent that the dominant ideology reflects the Protestant Ethic, there will be incongruence between

personal experience and ideological beliefs. This may be particularly marked in the case of disadvantaged groups.

In addition to using the overall I-E scores to establish the internality or externality of the subjects, personal control and control ideology subscales were therefore analysed. Scores on the personal control subscale should reflect direct control experiences and as such, measure congruent externality. Control ideology beliefs are learned during socialisation through agents such as the family, school, church, and mass media. These beliefs are widely shared and hence may not differentiate between the sexes nor between the different residential groups.

Interpretations of defensive versus congruent externality are complex but evidence of congruent externality in the present study is provided by the socio-economic antecedents analysed and the pattern of personal control and control ideology beliefs. Defensive externality can be expected to act uniformly across subscales, whereas congruent externality would appear more marked in the personal control than in the control ideology scores.

The personal control-control ideology subscales relate to a self-other distinction considered important by Gurin et al. (1969). This distinction, together with that developed by Levenson between powerful others and chance as sources of external control and defensiveness, were examined in terms of responsibility attribution. An individual-system blame dimension (Gurin et al., 1969) was used to

study perceptions of poverty. A further control ideology measure, the IS scale (see Appendix 4) offers alternative explanations of poverty and unemployment. Poverty may be attributed to the poor themselves, (as in notions derived from the Culture of Poverty), or to the system (Powerful Others). Individual blame reflects Just World beliefs, and in this case internality may serve a defensive function by blaming the victims for their misfortunes.

The operation of either projection or defensive internality/externality was also examined by comparing accidents. If control beliefs are projected, this should occur regardless of outcome. Differences in the attributions made for fortunate and unfortunate events may indicate the operation of some form of defensive attribution. The degree of threat was manipulated in terms of the similarity between the actor and the observer. If defensive attributions occur, they should be more marked when the threat of misfortune is greater.

Hypotheses

Based on the preceeding considerations, it was hypothesized that:

1. Residents of the precarious settlements will have significantly higher external scores on the total Rotter I-E scale and on the Personal Control subscale than residents of the public housing project. The two groups will not differ in terms of the Control Ideology and Individual-System Blame scores.

2. Women will have significantly higher external scores than men on the total Rotter I-E scale and on the Personal Control subscale. The two groups will not differ in terms of the Control Ideology and Individual-System Blame scores.
3. Externals will have significantly lower individual responsibility scores than internals in the case of unfortunate outcomes. There will be no significant differences between internals and externals in the case of fortunate outcomes.
4. Subjects will attribute significantly less individual responsibility for unfortunate outcomes to actors described as similar to rather than different from themselves.

Chapter 8

Method

Subjects

A total sample of 120 low-income subjects were interviewed. The sample was selected according to the factorial design illustrated in Table 7. Subjects were matched across housing for both age and marital status. The mean age of the subjects in the Public Housing project was 39.0 years ($SD = 10.9$) and in the precarious settlements was 37.3 ($SD = 10.2$) and 90% of the subjects were married.

As expected, given that income and education are closely correlated with precariousness, there were significant differences on education and income levels. The average monthly income in the housing project was 6.900 pesos⁽¹⁾ and in the precarious settlements was 4.000 pesos⁽²⁾. The average figures are probably somewhat inflated since many people responded to the income question saying "about the minimum wage,"⁽³⁾ although a number of them probably earned less.

The average number of years schooling in the housing project was seven, which represents completed primary school plus one year of secondary education. In the precarious settlement people had an average of three years education, which means they had not completed primary school.

(1) 300 U.S. dollars a month

(2) 174 U.S. dollars a month

(3) 1979 minimum wage = 3.312 pesos = 144 U.S. dollars

Table 7
Sampling Distribution

Group	Public Housing	Precarious Settlements	Total
Men	30	30	60
Women	30	30	60
Total	60	60	120

While the income and education levels are significantly different, it is clear that all the subjects are part of the low-income population (see Chapter 6. The Low-Income Population of Mexico City).

The public housing project is financed by one of Mexico's major social security organisations to provide housing for federal government employees earning around one and a half times the minimum wage. All residents have social security and union membership.

The housing project is located on the Eastern outskirts of the city and consists of 504 duplex apartments. The residents are purchasing the apartments over a fifteen year period.

The precarious settlements were selected on the basis of topography, tenure, degree of urbanisation, the threat of eradication and the socio-economic conditions of their residents. The population is more occupationally heterogeneous than that of the housing project, although the majority suffer from job instability and incomes around the minimum wage. The housing has been built by squatters on Federally owned land in one settlement and by renters of privately owned land along the edge of a quarry in the other. Both settlements lack most urban services (drainage, domestic water supply, paved streets, street lighting and garbage collection). They were faced with eradication as part of a city-wide road building program.

The housing project is organised into numbered blocks and buildings. Each building consists of eight apartments, four per floor, identified by letters from A to H. These apartments were

coded from one to eight and the numbers combined with their building number. Apartments were then selected within each block by using random numbers ⁽¹⁾. A maximum of three apartments per block were included.

In the precarious settlements the sampling procedure differed, due to the nature of the housing. It was impossible to establish the exact number of dwellings or families in each settlement without carrying out a prior census. The additional information which could be gained for sampling purposes had to be weighed against the arousal of suspicions regarding the purpose of the study. Such initial contact with the community would have changed the overall interview situation, such that it would no longer be comparable with that of the housing project. Sketch maps were prepared on the basis of visits to the settlement. These maps were then divided into areas with quotas specified within each area.

In both the housing project and the precarious settlements the whole residential area was covered and the sample contained equal numbers of men and women.

Materials

The final version of the questionnaire was the result of a pilot study (see Appendix 6). It consisted of four sections dealing with locus of control beliefs, responsibility attribution, socio-economic characteristics of the respondent and demand characteristics.

(1) Random Number Generator Program, Texas Instrument Programmable 58.

Locus of control beliefs were measured by a Spanish version of the Rotter I-E scale, followed by six Individual-System Blame items and two fillers taken from Diaz Guerrero's "Views of Life" scale (1976). The four locus of control measures were the total Rotter I-E scale, consisting of 23 I-E items, the five item Personal Control subscale, the nine item Control Ideology subscale and the six item Individual-System Blame scale. The Individual-System Blame items, adapted from the race-related items of Gurin et al. (1969) and the Protestant Ethic scale of Mirels and Garrett (1971), refer to occupational success and failure.

The development of the Spanish version of the Rotter I-E scale (Appendix 2) involved two translations of the scale, three pilot studies and two revisions. The Spanish version aims to maintain the original sense of the alternatives, while using idiomatic Mexican expressions where necessary to make them comprehensible to respondents with minimal formal education.

The attribution of responsibility was measured by responses to accounts of accidents with fortunate and unfortunate outcomes. On the basis of the results of the pilot study, the attribution material based on Sosis' (1974) account of a motor accident was considered inappropriate for the present study (see Appendix 6). The accidents described in the final instrument were therefore designed to be class and culture free. The outcome and the similarity between the actor and the respondent were systematically varied. The account was

followed by a five point individual responsibility scale ranging from "none" (0) to "complete" (4).

The different combination of actors, outcomes and counterbalancing the responsibility scale options produced twelve versions of the accident. Each subject responded to a single account. First the respondent was asked to imagine one of three actors, oneself, a man or a woman. These alternatives were subsequently coded for similarity as "self", "other of same sex" or "other of the opposite sex". While walking home, the actor sees something shining in the road and decides to retrieve it before it gets run over by an approaching bicycle. In the positive outcome a gold watch is recovered and in the negative outcome the actor is cut by the blades of a knife. The incident is designed to include both an element of chance and a decision on the part of the actor.

The socio-economic section included questions dealing with the sex, age, marital status and education of the respondent, plus housing data on tenure, services and type of construction and finally employment in terms of income, occupation, job stability, social security and union membership.

The operation of demand characteristics was explored by asking each subject how he imagined the interviewer would respond to two I-E items, one from the Personal Control and the other from the Control Ideology subscale, and why the interviewer would respond in this way.

Procedure

Given the low levels of formal education found in the pilot study, especially among the residents of the precarious settlement, together with the need for a standard presentation of the I-E items, it was decided to apply the questionnaire in an interview situation.

In addition to the author, a foreigner, data gatherers were seven Mexican interviewers, three male and four female Social Psychology students from the Autonomous Metropolitan University (Universidad Autónoma Metropolitana).

High internality scores in the pilot study had suggested the operation of demand characteristics. In order to control for possible demand characteristics and E-bias, by guaranteeing a standard presentation, a tape recording of the I-E alternatives was prepared and discussed with experienced interviewers. It was not used because of the difficulty of handling a tape-recorder in door-to-door interviews and the loss of rapport outweighing the advantages of a uniform presentation of the items.

In an interviewer training session, each interviewer read through the locus of control items and underlined the words he or she thought should be emphasized, and marked possible pauses in the reading of the alternatives. The appropriate intonation was then discussed and defined by the group. This standard presentation was complemented by a question to detect demand characteristics. At the end of the interview the respondent was asked how he thought the interviewer would

answer two of the locus of control items and why he would answer in that way.

The interviewers worked "blind" regarding both the locus of control measures and the research hypotheses. They were told that the research design could not be explained until after the data collection in order to reduce E-bias. After studying the questionnaire, the residential areas and sampling procedures were described. Each interviewer was given a time-table and quota, the number of interviews being calculated on an average per day, plus a letter from the university introducing the study as a Public Opinion Survey, to be shown if any respondents expressed misgivings.

Before the final data collection the interviewers applied the questionnaire a number of times so that they were familiar with the instrument and any doubts could be clarified.

In the case of the housing project the interviewers were given maps of the project and a list of apartments identified by block and building numbers and the apartment letter. Each interviewer was given a quota of 50% men and 50% women to be interviewed. As men were more difficult to find at home, the interviewers first asked for the male head of household and when unavailable, asked if they could speak to the wife or female head of household. Call-backs later the same day were permitted, but when unsuccessful substitution was allowed. Rapid coverage of the area was important to minimise the possible contamination of the responses due to neighbours commenting on the interview.

In the precarious settlements interviewers used sketch maps and were assigned specific areas and quotas. They went to every third dwelling and asked for the male head of household. If he was neither present nor available later the same day, the wife was interviewed when the quota permitted. When neither was available, the neighbouring household was approached.

The interviewing took four weekends, starting with three days in the Public Housing project, followed by interviewing in the larger precarious settlement, and finishing with two days in the smaller settlement.

The interviewers introduced themselves as coming from the Metropolitan University, where a public opinion survey was being carried out on topics such as school and work. A variety of opinions had already been gathered in different residential areas.

"Given that opinions aren't 'right' or 'wrong,' we are looking for different opinions and would like to know yours. For example, some people think: 'Children get into trouble because their parents punish them too much', and others say that: 'The trouble with most children nowadays is that their parents are too easy with them'.

Which do you believe is more common, or which do you agree with?"

The use of the first item of the I-E scale, a filler, illustrated the type of choice to be made, and encouraged the subjects to state an opinion and so start responding to the questionnaire.

The interviewers then read out both alternatives of each item and marked the response. If the subject did not understand or failed to respond, the interviewer repeated the alternatives using the standard presentation. When subjects agreed with both alternatives, the interviewer tried to get the respondent to opt for one of them. For example, he would acknowledge that both occur but asked which the subject believed was more common. If the person insisted on both, both alternatives would be marked and subsequently scored 0.5.

The question to detect demand characteristics at the end of the interview also helped to initiate an informal discussion of locus of control beliefs. When the interviewers thanked the respondents for their collaboration they gave a general idea of the value of the responses, answered questions and clarified doubts. This often led to lengthy discussions. As the formal interview lasted approximately half an hour, a guideline of between 45 and 60 minutes per subject was suggested.

Chapter 9

Results

The data shown in Table 8 display a general tendency for the total sample to score in the internal direction on the overall Rotter Internal-External Scale ($\underline{M} = 9.36$, $\underline{SD} = 3.48$). This trend is also displayed on the subscales: Personal Control ($\underline{M} = 1.89$, $\underline{SD} = 1.39$), Control Ideology ($\underline{M} = 3.13$, $\underline{SD} = 1.68$) and Individual-System Blame ($\underline{M} = 2.17$, $\underline{SD} = 1.32$).

The subpopulations show a similar trend towards internality. On the overall I-E scale, the secure population has a mean score of 8.56 ($\underline{SD} = 3.43$) while the precarious population has a mean score of 10.16 ($\underline{SD} = 3.36$) as shown in Table 9. Men have a mean score of 8.52 ($\underline{SD} = 3.71$) and women have a mean score of 10.2 ($\underline{SD} = 3.02$) as shown in Table 10.

The skewed distributions towards internality on the overall I-E scores for the total population and the housing and sex subpopulations are graphically demonstrated in Figures 2, 3 and 4.

Four 2 x 2 (precariousness x sex) analyses of variance were carried out on the overall Rotter I-E and the Personal Control (PC), Control Ideology (CI) and Individual-System Blame (IS) measures respectively, in order to test the hypotheses that locus of control beliefs would vary as a function of sex and socio-economic precariousness (see Tables 11, 12, 13, 14).

Table 8

Means and Standard Deviations for Locus of Control Measures
of the Total Sample

Scale	Number of items	Mean ^{a/}	Standard Deviation
Rotter IE	23	9.358	3.475
Personal Control	5	1.892	1.385
Control Ideology	9	3.133	1.679
Individual-System Blame	6	2.167	1.323

Note. N = 120

^{a/} All the measures are scored in the external direction, and in the System Blame direction on the IS scale.

Table 9

Means and Standard Deviations for Locus of Control Measures
of the Secure and Precarious Groups.

Scale	N Items	Secure population		Precarious population	
		Mean ^{a/}	SD	Mean	SD
Rotter IE	23	8.558	3.431	10.158	3.359
Personal Control	5	1.400	1.228	2.383	1.385
Control Ideology	9	2.783	1.666	3.483	1.631
Individual-System Blame	6	2.242	1.345	2.092	1.301

Note. For secure population, N = 60; for precarious population,

N = 60.

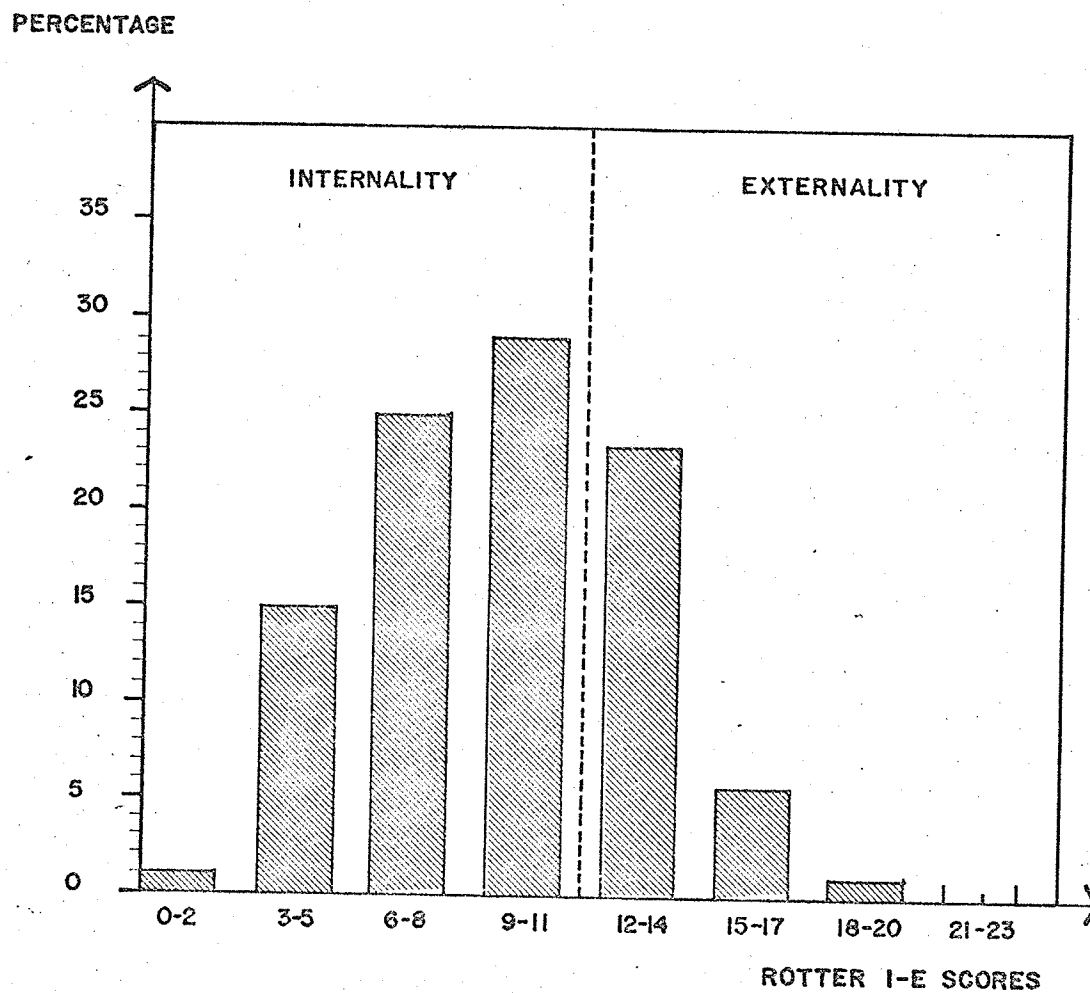
a/ All the measures are scored in the external direction, and in the System Blame direction on the IS scale.

Table 10
Means and Standard Deviations for Locus of Control Measures
of Men and Women

Scale	N Items	<u>Men</u>		<u>Women</u>	
		Mean ^{a/}	SD	Mean	SD
Rotter IE	23	8.517	3.714	10.200	3.020
Personal Control	5	1.567	1.260	2.217	1.436
Control Ideology	9	2.983	1.893	3.283	1.433
Individual-System Blame	6	2.175	1.449	2.158	1.195

Note. For men, N = 60; for women, N = 60.

a/ All the measures are scored in the external direction, and in the System Blame direction on the IS scale.



N=120

Mean = 9.36, Standard Deviation = 3.48

Median = 9.11

Range = 2.0 - 18.0

Figure 2
Distribution of I-E Scores

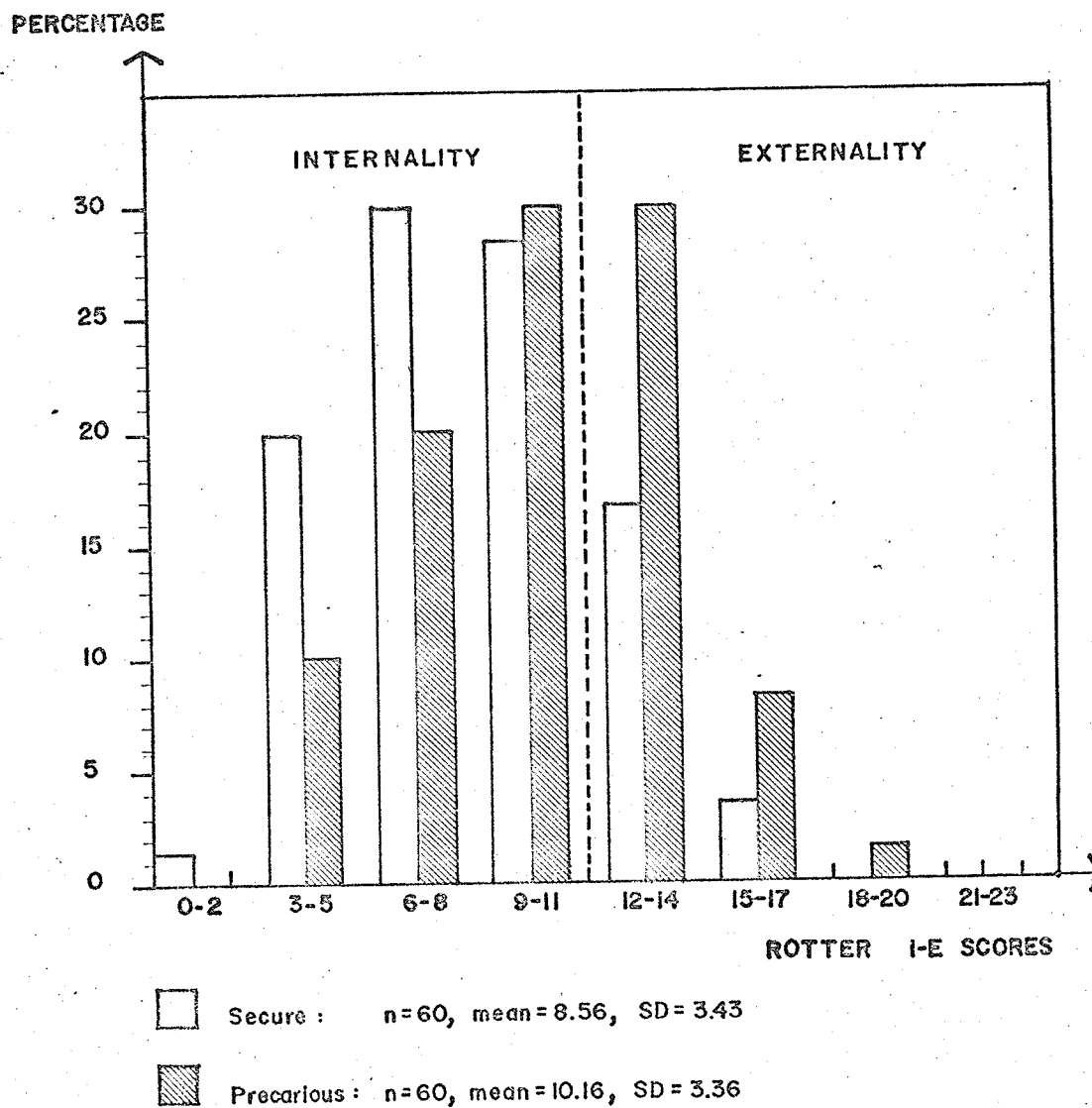


Figure 3

Distribution of I-E Scores by Socio-economic Condition

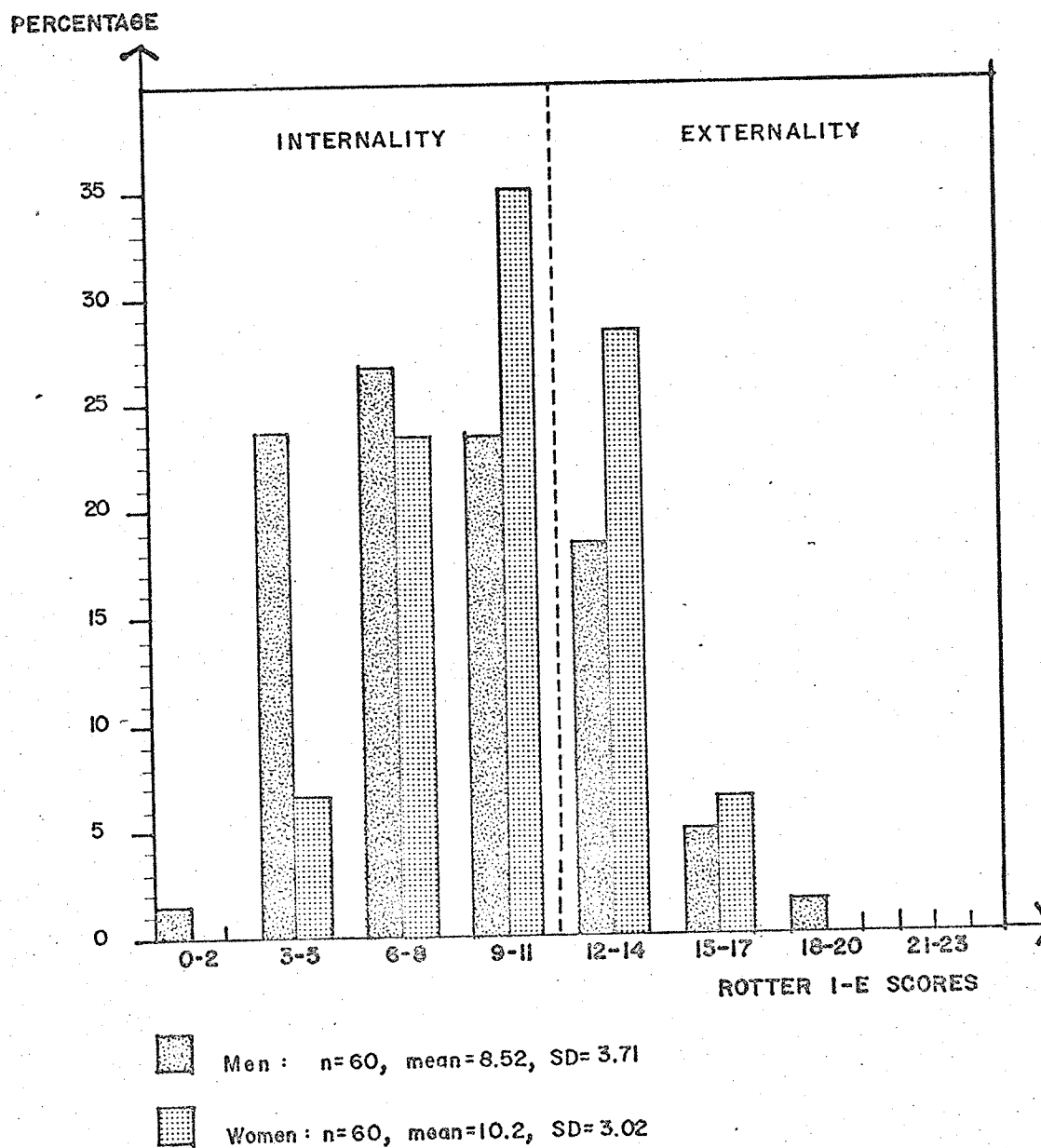


Figure 4

Distribution of I-E Scores by Sex

Table 11

Analysis of Variance:

Effects of Precariousness and Sex on I-E Locus of Control

Source	SS	df	MS	F
Precariousness	76.800	1	76.800	6.998*
Sex	85.008	1	85.008	7.745**
Precariousness x Sex	2.133	1	2.133	0.194
Within Cells	273.136	116	10.975	

* $p < .009$ ** $p < .006$

Table 12

Analysis of Variance:

Effects of Precariousness and Sex on Personal Control Beliefs

Source	SS	df	MS	F
Precariousness	29.008	1	29.008	18.117**
Sex	12.675	1	12.675	7.916*
Precariousness x Sex	0.675	1	0.675	0.422
Within Cells	185.732	116	1.601	

* $p < .006$ ** $p < .001$

Table 13

Analysis of Variance:

Effects of Precariousness and Sex on Control Ideology Beliefs

Source	SS	df	MS	F
Precariousness	14.700	1	14.700	5.363*
Sex	2.700	1	2.700	0.985
Precariousness x Sex	0.000	1	0.000	0.000
Within Cells	317.961	116	2.741	

* $p < .021$

Table 14

Analysis of Variance:

Effects of Precariousness and Sex on Individual-System Blame

Source	SS	df	MS	F
Precariousness	0.675	1	0.675	0.384
Sex	0.008	1	0.008	0.005
Precariousness x Sex	3.333	1	3.333	1.894
Within Cells	204.149	116	1.760	

The analysis of variance results support the hypothesized patterns of locus of control beliefs. Precariousness main effects were found for the overall I-E ($F = 7.0$, $df\ 1/116$, $p < .01$), Personal Control ($F = 18.12$, $df\ 1/116$, $p < .001$), and the Control Ideology ($F = 5.36$, $df\ 1/116$, $p < .02$) measures. The Individual-System Blame scores ($F = 0.38$, $df\ 1/116$, $p < .99$) did not produce significant main effects.

The residents of the precarious settlements had significantly higher scores on the total Rotter I-E scale and on the Personal Control subscale than the residents of the public housing project, but the two groups did not differ significantly on the Individual-System Blame measure. The precarious population was significantly more external on the total I-E, Personal Control and Control Ideology measures. While, contrary to predictions, the residents of the precarious settlements were significantly more external than the secure population on the Control Ideology subscale ($F = 5.36$, $df\ 1/116$, $p < .021$), the difference between the two groups was smaller than on the Personal Control subscale ($F = 18.12$, $df\ 1/116$, $p < .001$).

There were significant sex differences on the total I-E ($F = 7.75$, $df\ 1/116$, $p < .006$) and Personal Control scores ($F = 7.92$, $df\ 1/116$, $p < .006$), together with non-significant differences on the Control Ideology scores ($F = 0.99$, $df\ 1/116$, $p < .99$) and Individual-System Blame ($F = 0.01$, $df\ 1/116$, $p < .99$). As predicted, women were significantly more external than men on the total Rotter I-E

scale and the Personal Control subscale, with no significant differences on the Control Ideology and Individual-System Blame measures.

The attribution of responsibility was analysed by means of a $2 \times 3 \times 2$ (personal control beliefs \times actor similarity \times outcome) analysis of variance. None of the predicted differences was found, the only significant F ratio ($F = 4.58$, $df\ 1/107$, $p < .035$) indicated an outcome main effect, due to the attribution of greater responsibility in the case of the unfortunate outcome, regardless of the observer's own locus of control beliefs or similarity to the actor. Neither personal locus of control beliefs nor actor-observer similarity was significantly related to the attribution of responsibility for an accident (see Table 15).

Table 15

Analysis of Variance:

Effects of PC Beliefs, Actor Similarity and Outcome on the
Attribution of Responsibility for Accidents.

Source	SS	df	MS	F
Actor Similarity	4.523	2	2.262	1.279
Outcome	8.103	1	8.103	4.581*
PC Beliefs	1.483	1	1.483	0.838
Similarity x Outcome	1.216	2	0.608	0.344
Similarity x Beliefs	0.921	2	0.461	0.260
Outcome x Beliefs	0.678	1	0.678	0.383
Similarity x Outcome x Beliefs	8.027	2	4.014	2.269
Within Cells	189.238	107	1.769	

* $p < .03$

Chapter 10

Discussion

Overall I-E Scores

When the I-E scale was developed, the mean for college students was a score of 8 with a standard deviation of approximately 4 (Rotter, 1975). By 1971, Rotter had reported an average score of about 11 for college populations, and in 1975 he referred to means of between 10 and 12 depending on the sample.

In the present study the grand mean obtained on the I-E scale is 9.36 with a standard deviation of 3.48. The mean score for males is 8.5 ($SD = 3.7$) and 10.2 ($SD = 3.0$) for females. The distributions of overall I-E scores for the total population and the male and female sub-populations, display a skew towards the lower, internal end of the scale (see Figures 2 and 3). Dividing at the mid-point of the scale (11.5), 70% of the subjects have internal scores, and using the same criterion 75% of the men and 65% of the women are internals.

The I-E scores are not only low in comparison with the North American college means, but also in the context of cross-cultural research. In the McGinnies et al. (1974) study of five countries, the overall mean was 11.20, with a combined mean for males of 10.71 and for females of 11.64. Similarly the combined mean for males was 10.48 and for females was 11.29 in Parsons and Schneider's (1974) study of eight countries. The range of scores in the McGinnies et al.

sample went from a combined mean score of 10.14 for the New Zealand students (males: $\underline{M} = 9.7$, $\underline{SD} = 5.35$; females: $\underline{M} = 10.66$, $\underline{SD} = 5.74$), to 14.57 for the Swedish sample (males: $\underline{M} = 13.85$, $\underline{SD} = 4.17$; females: $\underline{M} = 15.59$, $\underline{SD} = 3.12$). The lowest combined mean in the Parsons and Schneider study was 9.60 with a standard deviation of 2.45, with almost identical scores for the male and female Indian students. Japanese students had the highest scores (combined $\underline{M} = 13.97$, $\underline{SD} = 3.59$), with the consistent pattern of males ($\underline{M} = 13.83$, $\underline{SD} = 3.59$) scoring lower than females ($\underline{M} = 14.12$, $\underline{SD} = 3.63$).

The Mexican low-income population of the present study therefore has more internal scores than the students in the United States, Canada, Japan, Australia, New Zealand, West Germany, France, Italy, Sweden and Israel (McGinnies et al., 1974; Parsons & Schneider, 1974). Their scores are similar to those of the Indian sample.

However, the internality described in this study is consistent with that found in other research on Mexicans and Mexican Americans. Garza and Ames (1974) found the mean score for Mexican American college students was 8.79 as opposed to 10.98 for Anglo-American students. Cole et al. (1978) found male Mexican university students even more internal ($\underline{M} = 5.88$) and the Mexican factory workers studied by Reitz and Groff (1974) with a mean of 8.7 were significantly more internal than the American ($\underline{M} = 8.9$), Japanese ($\underline{M} = 9.4$) and Thai ($\underline{M} = 10.1$) workers. The scores of the workers are generally lower than those of the students cited above.

The present results, with men having a lower mean score ($M = 8.5$) than women ($M = 10.2$), confirm a consistent sex difference found in the cross-cultural studies. The women in the present study did, however, have lower scores than all the other women described in the previous studies. The only comparable figures were those of the female students in India, which could be explained in terms of their counternormative behavior (Cole & Cole, 1977), but this argument cannot be used with the Mexican women in the present low-income context. The Mexican women also had more internal scores than the female college students studied by Sanger and Alker (1972), who had an overall mean score of 12.8 on the I-E scale.

The overall I-E scores show a striking degree of internality in both an absolute and a relative sense. Within the range of the scale the scores are skewed in an internal direction. They are also more internal than the scores found in the cross-cultural studies of students reviewed above (McGinnies et al., 1974; Parsons and Schneider, 1974).

Internality is thus a consistent finding in studies of Mexicans and Mexican Americans (Reitz & Groff, 1974; Garza & Ames, 1974; Cole & Cole, 1977; Cole et al., 1978). At the same time, the results run counter to predictions of externality based on locus of control research among disadvantaged groups (Battle & Rotter, 1963; Rotter, 1966; Lefcourt, 1966; Gurin et al., 1969), the supposed Culture of Poverty among the Mexican urban poor (Lewis, 1961, 1966) and studies

of modernism (Smith & Inkeles, 1966; Kahl, 1968). The overall internality found in the present study challenges assumption of externality, feelings of powerlessness and fatalism among the urban poor.

It is not obvious how internality should be interpreted in this context. Internal beliefs are usually associated with a sense of personal efficacy. When related to experiences of chronic failure as in the case of the poor, however, these beliefs can lead to self-blame and low self-esteem (Crandall et al., 1965; Gurin et al., 1969; Forward & Williams, 1970). Conversely externality has frequently been associated with maladjustment, but may be motivationally healthy when it reflects an assessment of real structural obstacles (Gurin et al., 1969).

The overall internality found in the study may be an indicator of psychological adjustment and effective social behaviour, or of self-blame among the low-income population. To explore these alternatives, the meaning of the I-E scores was analysed in terms of possible antecedents and subscales.

Antecedents

Two types of externality, defensive and congruent, have been described (Davis & Davis, 1972; Phares, 1971; Phares & Lamiell, 1974; Rotter, 1975). Defensive externality avoids blame and punishment. Failure is attributed to sources external to the individual and thus its threat is reduced (Phares, 1971). Davis and Davis (1972) believe that

defensive externality allows the individual to maintain self-esteem in the face of failure, by attributing failures to forces beyond their control. Phares (1971) and Davis and Davis (1972) postulate that lower socio-economic groups develop external expectations which accurately reflect their life situation. Phares and Lamiell (1974) postulate that socially disadvantaged groups "may have external beliefs that are more veridical than defensive in nature" (p. 877).

Sex roles and chronic socio-economic precariousness have been hypothesised as stable antecedents (Weiner et al., 1972) of such congruent externality. The overall internality found in the low-income samples, however, appeared to exclude the operation of externality. The 2 x 2 (precariousness x sex) analysis of variance of the overall I-E scores produced significant main effects for both precariousness ($F = 6.998$, $df\ 1/116$, $p < .009$) and sex ($F = 7.745$, $df\ 1/116$, $p < .006$). As predicted, residents of the precarious settlements are more external than the public housing sample, and women are more external than men. These results suggest the operation of congruent rather than defensive externality, since the I-E beliefs reflect realistic perceptions of obstacles to control faced by women and the precarious subjects.

In the previous section, alternative interpretations of the subjects' internality were discussed. While internality is generally associated with a sense of efficacy, it has been suggested that it may imply low self-esteem among disadvantaged groups with a history of failure (Crandall et al., 1965; Gurin et al., 1969; Forward &

Williams, 1970). The evidence supports the personal efficacy interpretation with congruent externality operating within a framework of overall internality.

In order to clarify the significance of these findings, further analysis was undertaken using subscales. The subscales, derived from the factor groupings described in Chapter 3, distinguish between personal control and control ideology. The former taps the effect of individual experience while the latter reflects the dominant values in society as a whole.* Responses across these subscales need not be homogeneous. Disadvantaged groups, such as the precarious and female populations in the present study, may well experience conflict between personal experience and the dominant ideological values.

Sex Differences in Locus of Control Beliefs

Women were more external than men on the overall I-E scale ($F = 7.745$, $df\ 1/116$, $p < .006$) and on the personal control subscale ($F = 7.916$, $df\ 1/116$, $p < .006$). This is consistent with the hypothesised congruent externality.

As predicted, there were no sex differences on control ideology ($F = 0.985$, $df\ 1/116$, $p < .999$). Both sexes were equally internal on the nine item subscale (females: $M = 3.28$, $SD = 1.43$; males: $M = 2.98$, $SD = 1.89$), and dividing the scale at the midpoint, 78.3% of men and women are internals.

If defensive externality were operating for women, it could be expected to act uniformly across the subscales. The fact that signif-

icant differences emerge between the responses given by men and women to the personal control subscale, but not on the control ideology measure is further support for the congruent externality argument.

The effects detected using the subscales indicate differences in personal control and control ideology beliefs on the part of women. They may experience non-contingency between behaviour and reinforcement in their own lives, but believe that people in general control their destinies, that effort is rewarded, and that people deserve what they get.

Once again the distinction between personal control-control ideology, self and others, is relevant. Women are more external on personal control than control ideology. Their personal control scores indicate the operation of congruent externality, whereas their internal ideological beliefs are consistent with the Protestant Ethic.

The internality across subscales for men reflects a consistent Protestant Ethic viewpoint regarding the relationship between individual effort and success at both the personal and societal level. In the case of the men studied there is no evidence of defensive externality and no support for the stereotype of the urban poor as passive fatalists.

Precariousness and Locus of Control

The precarious population was significantly more external than the public housing residents on the overall I-E scale ($F = 6.998$, df 1/116, $p < .009$) and personal control subscale ($F = 18.2$, df 1/116, $p < .001$). These results are consistent with the hypothesised con-

gruent externality among groups suffering from chronic socio-economic insecurity.

The existence of the hypothesised ideological beliefs common to both precarious and secure groups, is not clearly established. The precarious sample is significantly more external ($F = 5.36$, $df\ 1/116$, $p < .02$) in its ideological beliefs than the secure group. Internal scores were recorded for 78.3% of the total population, 81.7% of the secure subpopulation and 75.0% of the precarious subpopulation (see Figure 5). The difference between the group means (secure: $\bar{M} = 2.78$, and precarious $\bar{M} = 3.48$) on the control ideology subscale is, however, smaller and less significant than the difference between the groups' mean personal control scores.

Figure 5 shows the similarity in the patterns of locus of control scores for women and the precarious groups on the one hand and men and the secure population on the other.

Apart from the overall internality, the distribution of subscale scores reveals greater sex and precariousness differences on the personal control than on the control ideology measure. The scores for men and the secure population are also more homogeneous across subscales.

The findings regarding the I-E scores show that the low-income population has generally internal locus of control beliefs. Within this context there is evidence of a degree of congruent externality on the part of women and precarious groups, as demonstrated in their

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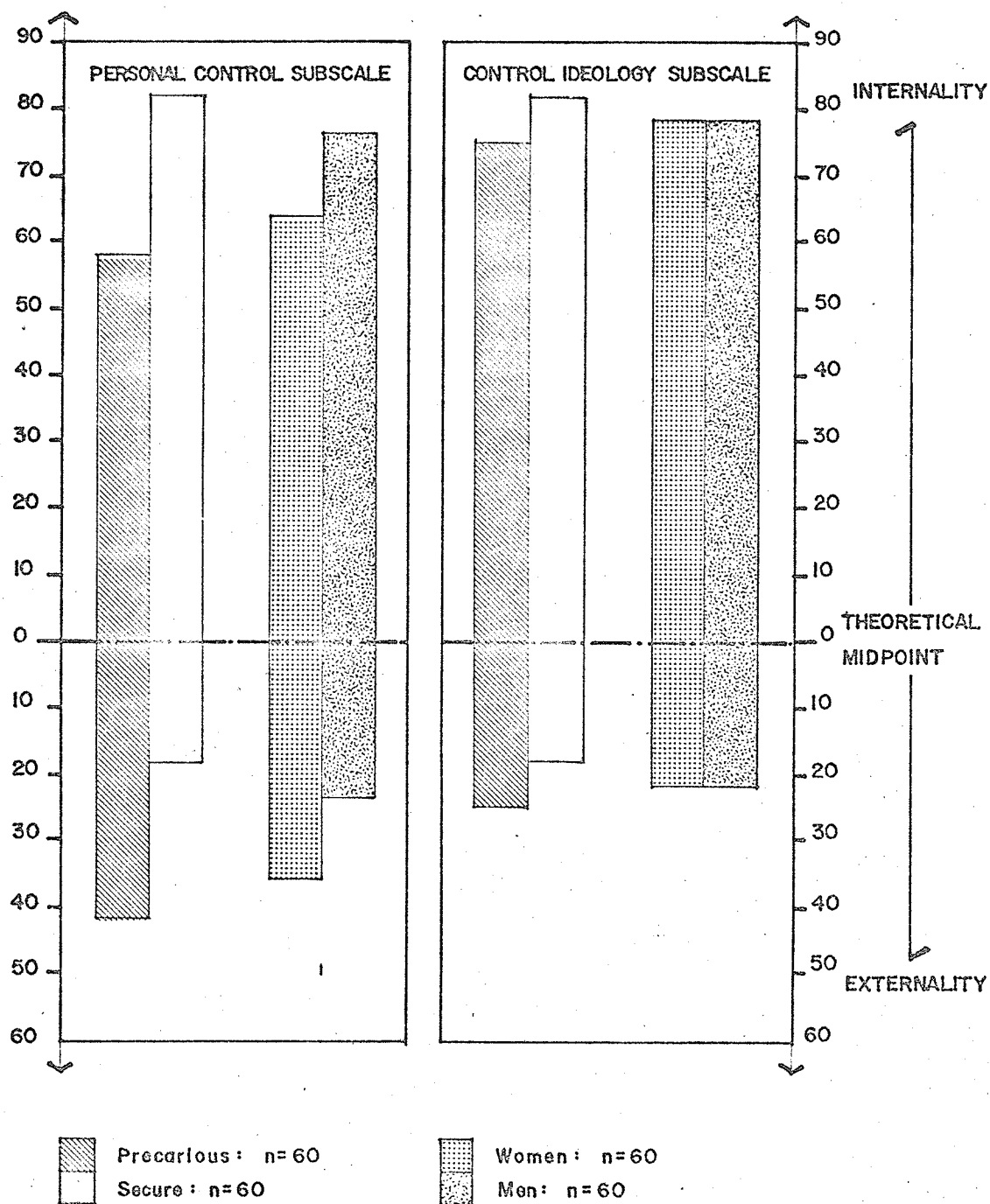


Figure 5

Comparison of the Subpopulations on the
Personal Control and Control Ideology Measures

personal control scores. The overall internality on the control ideology measure suggests Protestant Ethic beliefs.

These findings challenge both sexual stereotypes and stereotypes of the poor. Rather than passive externality, fatalism, a sense of powerlessness and depression, it can be argued that the subjects feel a sense of efficacy. They share Protestant Ethic beliefs, while maintaining a realistic sense of their immediate environmental constraints.

Dimensionality

The patterns of control beliefs using the subscales show that the distinction between experience of personal control and generally held ideological beliefs appears particularly relevant for people who do not form part of the dominant groups in a given society. Claims that the Rotter I-E scale is unidimensional may be statistically valid for samples such as college students, who experience relative consistency between the dominant ideological values and personal experience. In low-income groups however, there are marked differences between Protestant Ethic values of individual effort and success and personal experiences of control.

Rotter (1975) does not oppose the use of subscales "...if it can be demonstrated that reliable and logical predictions can be made from the subscales to specific behaviors and that a particular subscale score produces a significantly higher relationship than that of the score of the total test" (p. 63).

In the present study, the personal control subscale largely accounted for the relationship between the total I-E scores and both sex and precariousness. The total I-E scale produced significant main effects (precariousness: $F = 7.0$, $df\ 1/116$, $p < .009$; sex: $F = 7.75$, $df\ 1/116$, $p < .006$). The I-E scale minus the personal control items, however, failed to produce these effects (precariousness: $F = 2.68$, $df\ 1/116$, $p < .10$; sex: $F = 3.54$, $df\ 1/116$, $p < .06$). The personal control factor therefore fulfills the conditions specified by Rotter (1975) to justify using it as a subscale.

The various locus of control measures were correlated with the antecedents as dummy variables. There were significant correlations of sex with the overall I-E scores ($r = +.24$, $p < .004$) and personal control scores ($r = +.24$, $p < .005$). The control ideology variables were not significantly related to the sex variable ($r = +.09$, $p < .17$). In the case of precariousness, the strongest association was between precariousness and personal control scores ($r = +.37$, $p < .001$). The correlations with the total I-E scores ($r = +.23$, $p < .006$) and the control ideology scores ($r = +.21$, $p < .01$) were also significant, but the relationship was weaker.

In order to examine the homogeneity of the scale for the different subgroups, separate correlation matrices were obtained for the secure and precarious populations. The correlation between the personal control and control ideology scores was $r = +.49$ for the combined population, but was $r = +.54$ for the secure population and drops to $r = +.39$ for the precarious group (see Appendix 10).

Similarly the correlations between the different subscale scores were calculated separately for men and women. The correlation between the personal control and control ideology scores was $r = +.65$ for men and $r = +.32$ for women.

Despite the arguments in favour of subscale analysis in studies of locus of control beliefs among disadvantaged groups, the I-E scale has been defended as a measure of a very broad generalized expectancy allowing prediction in a large number of different situations, but at a low level (Rotter, 1975). The overall I-E scores did establish the internality of the low-income population and the significant sex and precariousness differences.

The issue of dimensionality is not merely whether the total I-E scale discriminates or not, nor whether the subscales provide greater differences between groups. The issue hinges on the meaning of the construct and the corresponding interpretations of the scale scores. Rotter (1975) defends the scale as a personality measure and does not accept that it has political content. Critics such as Thomas (1970) question the I-E scale as a personality measure, asserting that locus of control beliefs reflect both cognitive assessments of real situations and the dominant values prevailing in the individual's social and political environment.

The arguments in favour of using the subscales are both statistical and conceptual. It has been shown that the personal control factor is the major component which produced the significant

differences found in the present study. Distinct patterns of locus of control beliefs (for example, PC/CI correlations for the secure and precarious populations) and differential predictions (the PC and CI scores for men and women) can be derived from the use of subscales and this in turn enhances the explanatory value of the I-E measures.

Locus of Control Typology

In order to examine the relationship between personal control and control ideology beliefs, a control typology was explored. The evidence that the I-E scale is not unidimensional among low-income populations justified consideration of the implications of different locus of control "types." Based on the scores on the Personal Control and the Control Ideology subscales, there are four possible combinations of personal and political control beliefs:

1. Internal Personal Control - Internal Control Ideology (II)
2. Internal Personal Control - External Control Ideology (IE)
3. External Personal Control - Internal Control Ideology (EI)
4. External Personal Control - External Control Ideology (EE)

It was suggested earlier that some of the apparent inconsistencies regarding the meaning of internality and externality might be explained in terms of the existence of underlying personal and political dimensions, whose relative importance and impact on the overall I-E scores in a given study may vary as a function of the issue in question.

Internal Personal Control may be related to information seeking and social action, while external Personal Control may correlate with powerlessness and fatalism. Internal Control Ideology and Individual Blame, on the other hand, may reflect a conservative political stance and a Protestant Ethic ideology, while ideological externality may be related to liberal or left-wing views. Individual blame attributes responsibility to the individual or members of a social group, while system blame regards external structural constraints as responsible for the socio-economic conditions of certain groups.

According to this characterisation, the people who are internal on both personal and control ideology factors would be socially active, possibly socially mobile, and supporters of the Protestant Ethic ideology. Alternatively, in the case of low-income subjects, their control beliefs may come into conflict with their direct experiences. This would explain the low self-esteem described by Crandall et al. (1965), Forward and Williams (1970) and Gurin et al. (1969). They argue that internality combined with failure leads to self-blame.

The personally internal individuals with external control or system blame beliefs were the most active, critical individuals in the studies of Gurin et al. (1969), Lao (1970), Forward and Williams (1970) and Sanger and Alker (1972). The individual who is personally external, while supporting a Protestant Ethic ideology may be self-blaming with low self esteem. Congruent externality has been postulated for EI individuals, if their personal externality is

congruent with their socio-economic conditions, although they share the dominant ideology. Finally, the person who is external on both the personal and political dimensions may be demonstrating defensive externality, powerlessness and alienation.

An alternative interpretation of EEs could describe them as congruent externals, based on a realistic assessment of the lack of individual control in society at large. An alternative interpretation of the EIs would describe them as ideologically internal individuals who are failing in terms of the dominant values, and adopt personal externality as a defence against the implications of such failure.

The typology is largely speculative at this stage, but the present study did undertake a preliminary exploration of the type of analysis that can be carried out using subscales rather than a single global I-E score.

Using the midpoints on the Personal Control (2.5) and Control Ideology (4.5) subscales to divide the subjects into "internals" and "externals", each subject was classified as personally and ideologically internal or external. This produced the four control "types": personally and ideologically internal (II), personally internal and ideologically external (IE), personally external and ideologically internal (EI) and personally and ideologically external (EE), (see Table 16).

Sanger and Alker (1972) found 68% of their subjects consistently internal or external on the PC - CI subscales. In this study 77.5%

Table 16
Locus of Control Typology among the
Low-Income Population

Personal Control/ Control Ideology (PCCI) Typology	Low-Income Population					
	Secure		Precarious		Total	
	f	%	f	%	f	%
Internal/Internal (II)	44	73.5	30	50.0	74	61.7
Internal/External (IE)	4	6.7	4	6.7	8	6.7
External/Internal (EI)	5	8.4	14	23.3	19	15.8
External/External (EE)	7	11.7	12	20.0	19	15.8
Total	60	100.0	60	100.0	120	100.0

of the subjects were either both personally and ideologically internal (61.7%) or external (15.8%). Sixteen per cent of the subjects were personally external and ideologically internal and the other 6.7% were personally internal and ideologically external.

The personally and ideologically internal (II) represent the largest single group. They have internally consistent locus of control beliefs. These are more in line with the socio-economic conditions of the public housing residents who have stable employment, social security, union membership and secure housing. Over 50% (59.5%) of the IIs live in the public housing project. All the subjects of the study are, however, low-income within the overall income distribution of Mexico City residents. Although the locus of control beliefs are internally consistent, they do not appear to reflect wider socio-economic conditions. In spite of their relatively low education and income levels, the IIs may regard themselves as successful in comparison with other members of the low-income population and support the Protestant Ethic.

There is a significant difference between the number of years schooling of the four control types ($F = 5.85$ df 3/116 $p < .001$). The II (mean number of years = 7.33) and IE ($M = 5.67$) public housing residents have more education than both the EIs ($M = 6.0$) and EEs ($M = 5.43$). These education levels are all higher than those in the precarious settlements (see Table 17). However, the same overall pattern is found in the precarious subpopulation; IIs have the highest

Table 17

Means and Standard Deviations for the Education
Levels of the Locus of Control Types

		Low-Income Population					
PCCI		Secure		Precarious		Total	
Typology	n.	mean	SD	mean	SD	mean	SD
II	74	7.33	3.09	4.73	2.80	6.26	3.23
IE	8	7.40	3.91	3.50	3.00	5.66	3.91
EI	19	6.00	2.55	3.14	2.41	3.89	2.71
EE	19	5.43	4.19	2.00	2.26	3.26	3.45

level of education ($\underline{M} = 4.73$) followed by the IEs ($\underline{M} = 3.50$), EIs ($\underline{M} = 3.74$) and EEs ($\underline{M} = 2.0$).

Education levels appear related to personal control rather than control ideology beliefs. Personally internal subjects (II mean = 6.26 and IE mean = 5.66) have higher levels of education than personally external subjects (EI mean = 3.84 and EE mean = 3.26) regardless of their control ideology beliefs.

The income of the male head of household does not appear related to the PCCI types (see Table 18). This may be due to using a single question regarding income for men, working and non-working women.

Evidence that IIs not only have higher levels of education than other control types living in the same kind of residential area, but also perceive themselves as more fortunate and subscribe to the Protestant Ethic is provided by the subjects' spontaneous comments during and after the interview. A 44-year old with two years of formal schooling, living in the housing project, referring to the poor said, "They can and must work, otherwise no-one else will help them. We are poor, but there are people who are worse off than we are. They are treated badly." A 35-year old man with two years of primary school education, living in a precarious settlement, claimed that one can only be successful by working hard, "Neither destiny nor luck exist, effort is what determines one's position." This Protestant Ethic was also expressed by a 38-year old man with two years schooling, earning the minimum wage and living in a precarious settlement.

Table 18

Means and Standard Deviations for the Income Levels
of the Locus of Control Types

		Low-Income Population					
PCCI		Secure		Precarious		Total	
Typology	n.	M.	SD	M.	SD	M.	SD
II	74	7.02	2.84	4.22	1.37	5.83	2.70
IE	8	7.37	4.50	3.48	0.34	5.64	3.79
EI	19	6.25	1.70	4.20	1.67	4.66	1.85
EE	19	6.29	2.17	3.67	0.55	4.64	1.85

Note. Figures = 1,000 pesos

He explained that, "Mexico is a good country. I'm poor, but here I can have a television and a radio. It's a free country... In a free country one can do what one wants. People who work hard live well." In response to a question regarding leadership, he commented that he gives the orders at home and clarifying his responses to three of the individual-system blame items he stated, "In the old days many people who had money owed it to an inheritance and they exploited the workers. That's not true any longer... Peasants come to the city to escape work in the country... There is work in Mexico, we're just lazy."

Care must be taken in interpreting I-E scores. Based on research mainly carried out on college students in the United States, internality on the Control Ideology factor has been related to Protestant Ethic values and from there to a conservative political stance. It is unexpected in a Latin American context to find such emphasis on the value of individual effort and rewards. While this is part of the dominant ideology in the United States, an individualistic bias in the present study may reflect the harsh realities of a society without universal access to effective systems of social security and welfare.

The issue of congruent versus defensive externality is complex as the two types may occur to varying degrees in the same individual. Given the socio-economic realities of the disadvantaged groups, the congruence between environmental conditions and external personal

control beliefs is self-evident. Whether defensive externality occurs in addition to congruent externality requires further research.

An example of such congruent externality are the EE scores of a 42-year old woman with no formal schooling, living in the public housing project. She lived in the two-bedroomed apartment with her husband and six of her nine children. At the time of the interview she was very agitated and said that she felt desperate. She explained that a neighbour had been systematically harrassing her and the children, because he wanted them to move out so that a relative of his could move in. He insulted her constantly, had punched holes in the front door, and recently had thrown boiling water over one of her children. She had appealed to the housing authorities and been told that it was virtually impossible to change apartments. The external scores of this woman clearly reflected her situation and her sense of helplessness. This externality did not appear to serve any defensive purpose. Another example of congruent externality is a 60-year old man, with no formal education, earning the minimum wage and living in a precarious settlement. His externality does not appear a passive, fatalistic defense given that he is a labourer who has worked for 19 years in a cement works and has lived for 15 years in the settlement, building his own house and others in the same area.

His externality was expressed on more than one occasion in terms of the problem of illiteracy. Responding to the alternative, "By taking an active part in political and social affairs the people can

control world events," he explained that this was only true for people who could read. Similarly he qualified the item referring to failure to get jobs due to lack of education, in terms of the inability to read. When asked about his own education he explained that he had never been to school as a child, had once been able to recognise the alphabet but had since forgotten it. He'd been to school fairly recently, "but my eyesight became clouded and I couldn't get to the blackboard."

On either the defensive or congruent interpretation, one would expect the majority of the EEs to be among the precarious population. In this group, 63.2% of them were found. However, the EEs only represent 15.8% of the total population. More striking is the relative proportion of IIs (50.0%) to EEs (20.0%) within the precarious settlements (see Table 16).

EIs were described above as congruent externals, and most of them (73.7%) were found, as expected, in the precarious settlements. They are the second largest precarious group (23.3%), subscribing to a Protestant Ethic, although they recognise a lack of control in the personal sphere.

One such EI is a 35-year old housewife living in a precarious settlement. She had no formal education whatsoever, but is married to a government employee earning almost twice the minimum wage. She believes that success is due to hard work, that leadership positions are achieved through ability and education and that the education system is fair. In response to two of the personal control items, however,

she explained that it is our destiny to be subject to God's will and that, "Man proposes and God disposes."

The IEs were the least numerous group, 6.7% of the total sample, and were equally divided between the secure and precarious groups. Personal internality and ideological externality, together with system blaming, has been found characteristic of socially active, critical individuals.

One example of this type is a 26-year old married, male resident of the housing project. He has a secondary school education and is still studying in the open education system. He spoke of the way every individual has a natural psychology, and the need to understand this and be open.

The meaning of the types, according to the consistency of the subscale beliefs and the congruence of these beliefs with the broader socio-economic context needs to be analysed further in order to establish the validity and value of the proposed typology.

Attribution of Responsibility

Attribution of responsibility was studied in two ways. Taking Levenson's distinction between powerful others and chance as alternative sources of external control, attributions for stable and variable misfortunes were analysed. Perceptions of poverty were first explored using an individual-system blame dimension (Gurin et al., 1969).

The forced choice items offered alternative explanations for poverty, juxtaposing attributions of poverty to the poor themselves or to

structural conditions -powerful others (see Appendix 4). Luck as a source of control was considered in accidents with fortunate and unfortunate outcomes (see Appendix 7).

Individual-system blame. Internality was once again the predominant tendency in the individual-system blame scores (n items = 6, overall $M = 2.17$, $SD = 1.32$). A 2 x 2 (precariousness x sex) analysis of variance produced no main effects.

Rubin and Peplau (1973) suggested that people who suffer social injustice would be less likely to believe in a just world, but they also recognise that ideological considerations might be more important than personal experience. Thus, if sex and precariousness are antecedents of congruent externality, women and precarious subjects should blame the system rather than individuals for their poverty. If perceptions of poverty among the poor themselves are ideologically determined rather than a projection of personal control beliefs, neither sex nor precariousness differences would be expected.

The results provide support for the latter argument, but a personal knowledge model (Maselli & Altrocchi, 1969) cannot be ruled out given the overall internality of the subjects. Attributing responsibility for poverty to the poor themselves is consistent with the general personal and ideological internality. Individual blame is a logical correlate of the internality which includes Protestant Ethic and Just World beliefs.

Attribution for accidents. It was postulated that locus of control beliefs would affect responsibility attribution. The operation of defensive externality, which serves to reduce the responsibility attributed by externals, was predicted in the case of unfortunate outcomes. The results do not support this prediction. Neither the observer's personal control beliefs nor his similarity to the actor affected attributions. The only significant effect was an overall tendency to attribute greater responsibility in the case of unfortunate outcomes ($F = 4.58$, $df = 1/107$, $p < .03$). This finding is consistent with the subjects' general tendency to blame individuals rather than fate or the system for their misfortunes. The analysis of variance also failed to produce the predicted interaction between locus of control beliefs and outcome. Externals did not attribute less responsibility to the actor in the case of the negative outcome.

Given the overall internality of the subjects, it is possible that the greater responsibility attributed to the actor for the unhappy outcome could be due to projecting the observer's locus of control beliefs on to others. But if this were the case, these locus of control beliefs would have been similarly projected for the happy outcomes. Higher individual responsibility attributions for unfortunate outcomes is consistent with Just World beliefs. Blaming victims for their misfortunes in the context of a just world is threat reducing and can be considered defensive attribution.

The results do not support the hypothesis that the attribution of responsibility is a simple projection of personal locus of control beliefs as suggested by Sosis (1974) and Hyland and Cooper (1976).

The analysis of variance failed to produce significant main or interaction effects for locus of control beliefs. Given that the subjects had been classified as internal or external in terms of a median split, the relationship between locus of control and responsibility attribution was also explored by means of correlation coefficients. The only significant correlation was between the overall I-E and the individual responsibility scores for unfortunate outcomes ($r = -.25$, $p < .05$). Internals therefore blamed victims more than did externals for unfortunate accidents.

The findings regarding the attribution of responsibility for accidents are consistent with those of Davis and Davis (1972). They found that internals and externals did not differ on the amount of responsibility attributed for successful outcomes, but that internals attributed more responsibility than externals in the case of failure.

The other significant correlation was between the IS scores and responsibility attribution (IS: Responsibility, $r = +.25$, $p < .05$), where individual blame on IS is related to a lower level of responsibility attributed to the victim of the accident.

These findings appear paradoxical. They may be explained by the different scores of external control being considered. The individual rather than the system or powerful others may be blamed for

stable conditions, without implying that he will be held responsible for variable, chance factors such as those involved in the accident. Levenson's distinction between sources of externality appears valid and useful when considering locus of control beliefs regarding stable and variable situations. In both cases negative circumstances are described, but the attribution of responsibility for poverty and for accidents appears to involve very different factors and produce different attributions.

E-Bias and Demand Characteristics

The overall tendency towards internality found in the present study had also been noted in the pilot study. It was suggested that it might reflect the operation of demand characteristics rather than genuine locus of control beliefs. But even if this internality were to be explained by demand characteristics, it would be an interesting phenomenon, as it would reflect Protestant Ethic values, not normally considered the dominant ideology in developing countries and still less among their low-income populations.

Various attempts were made to control for this E-bias and demand characteristics. Six of the eight interviewers worked "blind," that is, without knowledge of the hypotheses or of the significance of individual scale items. All interviewers used a standard presentation of the items.

E-bias was examined by means of a $2 \times 2 \times 8$ (sex of respondent \times sex of interviewer \times interviewer) analysis of variance, performed

on each of the locus of control scores in turn. This would detect possible interviewer or sex of interviewer main effects, and a sex of subject x sex of interviewer interaction. No significant interaction effects were found and the only significant main effect was an interviewer sex effect ($F = 4.78$, $df\ 1/118$, $p < .029$) on the personal control measure. This was due to the more external personal control scores obtained by the female interviewers.

In order to explore the operation of demand characteristics, at the end of the interview subjects were asked how they thought the interviewer would answer two of the I-E items. The nature of this item is substantially different. It requires the subject to respond at a meta-level of perception. As a result, a high proportion of the less educated population had difficulty in understanding it. While 95% of the secure population was able to respond to this question, responses were only obtained from 60% of the precarious population.

The I-E scores obtained by each interviewer on the demand characteristics question and on each of the dichotomised I-E scores were analysed, but no significant differences were found. The reasons given for the answers were subsequently coded as either interviewer characteristics or as explanations given in terms of the subject's own responses without reference to the interviewer.

Of the subjects who did respond, 21.1% of the secure population, and 27.8% of the precarious settlements mentioned interviewer characteristics; 7% of the secure population and 13.9% of the precarious

population explained the expected responses in terms of their own reasons; and 56% and 48% respectively could not explain the reasons for their expectations.

Of the 22 subjects who mentioned interviewer characteristics, 40.9% applied to one female interviewer. These responses represent 40.9% of the reasons she was given by the 21 subjects who answered her question. This suggests that one of the interviewers was seen to represent a certain educational level and social class to a sizeable proportion of the subjects she interviewed. These subjects however, only represent 7.5% of the total sample.

Only a minority of the subjects therefore relate the expected responses of the interviewer to characteristics such as education or socio-economic position. The majority of the subjects were either unable to understand and respond to the question, or, if they did respond, were unable to explain the predictions.

Further evidence against the operation of demand characteristics producing internal responses is provided by the predicted responses themselves. When the respondents were asked how the interviewer would respond to one of the personal control items and an item from the control ideology subscale, only 57.5% of the subjects who responded to the question named the internal option for the personal control item, and 46.5% for the control ideology item.

If the responses of the two groups to the control ideology item is compared with the groups' responses to the same item embedded in the scale, the distribution of scores is very similar (see Table 19).

The apparent discrepancy between the Own and Predicted personal control scores of the precarious population is explained by its relatively high rate of non-response to the demand characteristics question. Based on these analyses, it can be concluded that no substantial evidence was found of interviewer bias, nor the operation of demand characteristics.

Table 19

Group and Predicted Interviewer Responses:

Percentage Internal Responses

Item	Secure Population		Precarious Population	
	Group	Predicted	Group	Predicted
Personal Control	48.3	56.1	31.7	58.8
Control Ideology	61.7	60.7	33.3	32.3

Chapter 11

Summary and Conclusions

Theories derived from the Culture of Poverty and modernization literature predict fatalism among broad sectors of the low-income population of Mexico City. The validity of such predictions was explored by employing locus of control as an indicator of the fatalism-efficacy dimension.

The locus of control construct has generated two major types of research (Rotter, 1966; Lefcourt, 1966). The first investigated how experimental manipulation of situational variables affected control beliefs. The second took these beliefs as a personality variable and studied their relation to social behaviour. A series of findings emerged which associated internality with a sense of personal efficacy, while externality was considered a sign of maladjustment.

These interpretations of locus of control beliefs were subsequently subjected to a variety of criticisms. The I-E scale's claim to be a unidimensional personality measure was undermined by a series of factor analyses. Internality-externality was related to experiences of success and failure. The question of the relevance of stable antecedents of control beliefs was raised. Logically, an individual's socio-economic conditions should have an impact on control beliefs. The concepts of defensive and congruent externality (Davis & Davis, 1972; Phares, 1971; Phares & Lamiell, 1974; Rotter, 1975)

were put forward with the latter referring to a cognitive assessment of obstacles encountered in the socio-economic environment.

The meaning of I-E scores has also been questioned in terms of their political bias. Internality has been associated with conservative political views (Thomas, 1970; Silvern & Nakamara, 1971; Levenson & Miller, 1976; Gootnick, 1974; Mirels & Garrett, 1971, MacDonald, 1972) and externality with liberal and left-wing views and activism (Thomas, 1970; Silvern, 1975, Zuckerman, 1973). Numerous factor analyses distinguished between a personal control dimension and beliefs dealing with broader socio-political issues.

The present study was designed to clarify the meaning of locus of control. On the basis of the issues described above, it set out to analyse the pattern of relations between populations which varied in their degree of socio-economic subordination and their response to the Personal Control and Control Ideology sub-scales (Gurin et al., 1969). Early studies of the attribution of responsibility emphasized dispositional characteristics of actors versus situational determinants. Locus of control beliefs may represent an important observer characteristic. Stereotypes of poverty were analysed in terms of an individual/system blame measure. Differing attributions for fortunate and unfortunate accidents as evidence of defensive attribution were studied to clarify the distinction between defensive and congruent attribution. The low-income population of Mexico City was described and analysed in order to define possible socio-economic antecedent

variables and to select differentiated groups (Allen, 1970). Chronic socio-economic precariousness was postulated as an antecedent of congruent externality. The control beliefs of subjects with job stability, union membership and social security (low precariousness) were compared with people suffering from chronic economic insecurity (high precariousness). Housing provided the material expression of the degree of precariousness and the context for the field work. A public housing project for low-income federal employees was the setting for the low-precariousness subjects. The 'precarious' subjects came from two settlements defined as precarious on the basis of land tenure, quality of house construction, infrastructure, services and the threat of eradication.

A total of 120 people were interviewed in these residential areas, half in the housing project and half in the precarious settlement. Within each, an equal number of men and women were included.

The instrument consisted of four sections. A Spanish version of the Rotter I-E scale was followed by an Individual/System Blame scale. An account of the accident (one of twelve, due to variations in actor characteristics and outcome, plus counterbalancing the responsibility scale) was followed by a section on socio-economic data (personal characteristics, housing and occupation related questions). Finally, there were two questions designed to explore the operation of demand characteristics.

Locus of control was described in terms of the distributions of scores on the overall I-E, the Personal Control and Control Ideology subscales and the Individual/System Blame scale. Means and standard deviations were calculated for the precarious and secure groups, for females and males and for the combined scores. The hypothesized patterns of control beliefs were tested by (2 x 2: Precariousness x sex) analyses of variance. Subsequent analyses of the meaning and dimensionality of the scores were based on Pearson correlation coefficients. Hypothesized responsibility attributions for happy and unhappy accidents were tested in a 2 x 3 x 2 (locus of control beliefs x actor similarity x outcome) analysis of variance.

E-bias and demand characteristics were explored by comparing the different I-E scores obtained by the interviewers and the responses to the demand characteristics probe.

Support was obtained for the hypothesized relationships between socio-economic antecedents and locus of control beliefs. The results supported the pattern of scores predicted in the second hypothesis: women had significantly higher external scores than men on the total Rotter I-E scale and on the personal control subscale. There were no significant differences on the control ideology nor on the individual-system blame measures. As predicted in the first hypothesis, the precarious subjects were more external than the secure population

on the overall I-E and personal control measures. They did not differ on the individual-system blame scale. Contrary to predictions, however, the precarious population was more external than the secure subjects on the control ideology measure.

The hypotheses regarding responsibility attribution for accidents were partially confirmed. As had been predicted, internals and externals did not differ in their attributions for fortunate outcomes. Unfortunate outcomes produced higher responsibility attributions regardless of locus of control beliefs. While no differences in attribution were found using dichotomized I-E scores, a subsequent analysis found a significant correlation in the predicted direction, between internality and higher responsibility attributions for unfortunate accidents. The degree of threat, defined in terms of actor-observer similarity did not affect attributions.

The findings challenge the supposed externality and fatalism of disadvantaged groups. All the I-E measures revealed internally skewed scores. The low-income Mexicans studied have more internal scores than the norm for North-American college students (Rotter, 1971, 1975) and those found in cross-cultural studies of locus of control (McGinnies et al., 1974; Parsons & Schneider, 1974). These results are consistent with the internality found in other studies of Mexicans (Reitz & Groff, 1974; Cole & Cole, 1977; Cole et al., 1978).

Greater externality (within the general internality) was found among the precarious subjects and women, supporting the hypothesized

congruent externality argument. The macro-level conditions of both precarious groups and women may explain their externality.

The distinction between personal and ideological control beliefs is important in the low-income context. The hypothesized sex differences were found showing women to be more external on both the overall I-E scale and on the Personal Control subscale. As predicted there were no sex differences on the ideological measures (Control Ideology and Individual-System Blame). These results suggest shared ideological beliefs.

A similar pattern of personal control and control ideology beliefs was found for the precarious and secure groups. While the precarious groups were significantly more external than the secure group on both personal and ideological control, the differences on the latter were smaller.

The scores on the Personal Control subscale provide further evidence of congruent externality. This externality may reflect direct experiences of non-contingency between behaviour and reinforcement. The congruence between personal control beliefs and socio-economic realities is evident. Defensive externality, if it does occur, would be in addition to congruent externality in the case of disadvantaged groups.

The internality on the Control Ideology measure may reflect Protestant Ethic values (Mirels & Garret, 1971; MacDonald, 1972) and Just World beliefs (Lerner, 1971; Rubin & Peplau, 1975). Individual ability and effort are believed to be rewarded and socio-economic

"failures" are held personally responsible for their situation. Internality was also found on the Individual-System Blame scale. Individual rather than system blame for poverty and unemployment is consistent with Just World beliefs.

The poor themselves may be internals both personally and ideologically and believe in the value of individual effort. To members of the dominant groups in society, however, they often appear members of the Culture of Poverty, passive and fatalistic. Although the beliefs of the low-income subjects contradict this stereotype, they in turn adopt Protestant Ethic beliefs and blame the poor for their poverty.

Blaming victims for their misfortunes is also found in the attribution of responsibility for an unfortunate accident. Subjects blame individuals for their misfortunes regardless of whether the external sources of control are powerful others or chance (Levenson, 1975). This may represent a form of defensive attribution as Just World beliefs imply a coherent, ordered environment.

The questions raised in the opening chapter will be discussed in the light of these results. The five major issues deal with the relationship between locus of control and stereotypes of the poor. More specifically the questions deal with the supposed fatalism of the urban poor, the congruence between locus of control beliefs and the socio-economic conditions of low-income populations, the relevance of the personal control-control ideology distinction and the attribution of responsibility.

The Rotter I-E scale can be used to either support or demystify stereotypes of the poor. Its use as a unidimensional personality measure means that external scores are interpreted as indicating maladjustment, powerlessness and fatalism. External control beliefs, which in the literature are frequently understood within a framework of psychological maladjustment, are thus consistent with the Culture of Poverty tradition of blaming poverty on the poor.

On the other hand, the distinctions between defensive and congruent externality and between personal and ideological control beliefs emphasize the importance of socio-economic antecedents of control beliefs.

The antecedent conditions considered in the present study are sex roles and chronic precariousness. Precariousness is defined in terms of low education and income levels, unstable employment, lack of union and social security membership, and housing without security of tenure, urban infrastructure and services.

Locus of control beliefs within a Social Learning Theory framework can result from direct experiences of control or from transmission of the dominant values regarding control in society at large. While the latter should be widespread throughout a given society, people's personal experiences of control are a function of their position within that society.

The distinction between control ideology and personal control beliefs reflects these two types of social learning and provides a

means of exploring the defensive versus congruent externality issue. Congruent externality may be postulated when personal control beliefs are a function of the power and control exercised by different groups. For example, sex role differences provide men and women with a different experience of control in both work and home environments. As a result we would predict differences in personal control beliefs even when their ideological beliefs coincide. A similar argument was developed about the secure and precarious populations.

In the present study the use of the Rotter I-E scale to analyse locus of control beliefs among the low-income population of Mexico City has provided an empirical test of certain claims made regarding the psychology of the poor.

An efficacy-fatalism dimension is central to both the Culture of Poverty and modernity as psychological concepts. External scores on the Rotter I-E scale were initially considered an indicator of fatalism. The low-income groups studied in Mexico City had predominantly internal scores. If internality is taken as an indicator of psychological efficacy and adjustment and externality reflects fatalism, then the results challenge the dominant stereotype of disadvantaged groups. The urban poor, as analysed in the present study, are not passive fatalists.

Within this overall internality, there is evidence that locus of control beliefs are congruent with the socio-economic conditions of the low-income population. The precarious subpopulation and women are more external than the secure population and men on both the

total I-E scale and the Personal Control subscale. The macro-level conditions of these subjects explains their externality.

Once again, women exercise less power and control than men in Mexican society. As a result differences on I-E scores were predicted with respect to sex. The I-E differences between precarious and secure subpopulations were predicted on similar grounds. The clearest differences were found on the personal control subscale, which picks up the effects of variations in direct control experiences.

Control ideology beliefs, which are learned during socialization are widely shared and therefore do not distinguish as clearly between the subpopulations. The pattern of scores obtained on the subscales thus justifies distinguishing between personal control and control ideology beliefs among the disadvantaged. Not only do the subscale scores provide more information than the total Rotter I-E scale, but they also reduce the probability of making erroneous interpretations based on overall scores.

The patterns of control beliefs using the subscales suggest that the distinction between experience of personal control and generally held ideological beliefs appears particularly relevant for people who do not form part of the dominant groups in a given society. Claims that the Rotter I-E scale is unidimensional may be statistically valid for samples such as college students, who experience relative consistency between the dominant ideological values and personal experience. In low-income groups however, there are marked differences

between the values of individual effort and success and personal experiences of control.

Internality on the Control Ideology subscale appears to reflect Protestant Ethic values and Just World beliefs. Such internality means a belief that individual ability and effort are rewarded and, consequently, the poor are responsible for their poverty. This posture is generally referred to as the Protestant Ethic and is unexpected in a Latin American context, where the society is described as underdeveloped and the dominant religion is Catholic. Weber (1956) originally postulated this ethic as one of the elements associated with the rise of capitalism in some Western societies. Mexico is clearly part of the capitalist system and hence the so-called Protestant Ethic can be explained as a historically predictable aspect of the dominant ideology. On the other hand, Mexico does not enjoy the social institutions associated with capitalism in its advanced, industrial forms. As a result the perceived relation between work and survival may be the result of the direct experience of the realities of the low-income population. The origins and meaning of such beliefs and their relation to the dominant ideology in Mexico deserve further study.

The relationship between locus of control beliefs and the attribution of responsibility also requires further study. It does not appear that an individual's locus of control beliefs are automatically projected on to others regardless of the situation. The distinctions between stable and variable conditions and between chance and powerful others as sources of external control are relevant to attributions. In the

present study the attribution of responsibility for unemployment and poverty to individuals rather than the system appears consistent with the overall internality of the subjects and especially the internality on the control ideology measure.

In the case of accidents, the outcome was the most important factor and the responsibility attributed to the actor was consistent with Just World beliefs. The people interviewed blame individuals for their misfortunes regardless of whether the external source of control is chance or powerful others.

Individual-System Blame and the attribution of responsibility for misfortunes appear ideologically determined rather than a projection of personal control beliefs. Just World beliefs appear a better predictor of the attribution of responsibility. They in turn are positively correlated with internality. The relationship between internality, Just World beliefs and attribution deserve further investigation. Use of more varied attribution material would further clarify the issue.

Future research in the area could use the Personal Control and Control Ideology subscales to explore the locus of control typology. The typology can be used to analyse two types of congruence. At one level an individual's personal and ideological control beliefs may be either consistent (II and EE), or inconsistent (EI and IE). Each of these beliefs may or may not be congruent with socio-economic conditions. Further exploration of these types and the belief-environment

interface may clarify the externality debate. The four control "types" may also differ in terms of their personal adjustment and social and political convictions in a given context. Self-blame, fatalism, powerlessness or personal efficacy, effort and effective social action, notions central in discussions of the 'psychology of the poor', could be studied in this way.

The attribution of responsibility for misfortunes offers another way of systematically studying the issue of congruent versus defensive externality. Perceptions of others in general, and stereotypes of the poor in particular, can also be analysed in terms of the attributions made by different locus of control 'types'. The quantitative data of the control scale scores can be complemented by the spontaneous and less structured comments and explanations given by the subjects to explain their responses to the forced-choice items, providing additional evidence of congruent externality or fatalism. The results of such research would further clarify stereotypes of the poor both as an expression of the dominant ideology and as experienced and reproduced by the dominated themselves.

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Appendix 1

Rotter I-E Scale

INTERNAL VS. EXTERNAL CONTROL

- 1.a. Children get into trouble because their parents punish them too much.
- b. The trouble with most children nowadays is that their parents are too easy with them.
- 2.a. Many of the unhappy things in people's lives are partly due to bad luck.
- b. People's misfortunes result from the mistakes they make.
- 3.a. One of the major reasons why we have wars is because people don't take enough interest in politics.
- b. There will always be wars, no matter how hard people try to prevent them.
- 4.a. In the long run people get the respect they deserve in this world.
- b. Unfortunately, an individual's worth often passes unrecognised no matter how hard he tries.
- 5.a. The idea that teachers are unfair to students is nonsense.
- b. Most students don't realise the extent to which their grades are influenced by accidental happenings.
- 6.a. Without the right breaks one cannot be an effective leader.
- b. Capable people who fail to become leaders have not taken advantage of their opportunities.
- 7.a. No matter how hard you try some people just don't like you.
- b. People who can't get others to like them don't understand how to get along with others.

- 8.a. Heredity plays the major role in determining one's personality.
- b. It is one's experiences in life which determine what they're like.
- 9.a. I have often found that what is going to happen will happen.
- b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
- 10.a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
- b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
- 11.a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
- b. Getting a good job depends mainly on being in the right place at the right time.
- 12.a. The average citizen can have an influence in government decisions.
- b. This world is run by the few people in power, and there is not much the little guy can do about it.
- 13.a. When I make plans, I am almost certain that I can make them work.
- b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
- 14.a. There are certain people who are just no good.
- b. There is some good in everybody.

- 15.a. In my case getting what I want has little or nothing to do with luck.
- b. Many times we might just as well decide what to do by flipping a coin.
- 16.a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
- b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
- 17.a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
- b. By taking an active part in political and social affairs the people can control world events.
- 18.a. Most people don't realise the extent to which their lives are controlled by accidental happenings.
- b. There really is no such thing as "luck".
- 19.a. One should always be willing to admit mistakes.
- b. It is usually best to cover up one's mistakes.
- 20.a. It is hard to know whether or not a person really likes you.
- b. How many friends you have depends on how nice a person you are.
- 21.a. In the long run the bad things that happen to us are balanced by the good ones.
- b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. a. With enough effort we can wipe out political corruption.
b. It is difficult for people to have much control over the things politicians do in office.
23. a. Sometimes I can't understand how teachers arrived at the grades they give.
b. There is a direct connection between how hard I study and the grades I get.
24. a. A good leader expects people to decide for themselves what they should do.
b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.
b. It is impossible to believe that chance or luck plays an important role in my life.
26. a. People are lonely because they don't try to be friendly.
b. There's not much use in trying too hard to please people, if they like you, they like you.
27. a. There is too much emphasis on athletics in high school.
b. Team sports are an excellent way to build character.
28. a. What happens to me is my own doing.
b. Sometimes I feel that I don't have enough control over the direction my life is taking.

- 29.a. Most of the time I can't understand why politicians behave the way they do.
- b. In the long run the people are responsible for bad government on a national as well as on a local level.

Appendix 2

Development of the Spanish Version of the Rotter I-E Scale

DEVELOPMENT OF THE SPANISH VERSION OF THE
ROTTER I-E SCALE

The original scale has 29 items, six of which are fillers. The score is the total number of external items endorsed. The development of the Spanish version of the scale consisted of nine stages.

1. Translation of the 29 items to produce Version A of the scale. Translated by a professional interpreter with instructions to keep as close to the original text and meaning as possible. Precision in formal linguistic terms was stressed.
2. Pilot of Version A: four interviewers applied the scale to 12 residents of a precarious settlement as part of a wider study. While all the subjects were able to respond, it was agreed that many of the items were poorly understood. Even the interviewers had difficulty understanding the wording of certain items.
3. Using Version A of the scale, another professional bilingual interpreter simplified the wording, while retaining the original meaning.
4. Pilot of the second version of the scale with a further sample of the residents of the same community. This version was better understood, but was still felt to be too difficult for people with minimal formal education.
5. A bilingual Mexican psychologist returned to the original Rotter I-E scale and further simplified the items.

6. The third version of the scale was piloted in both a precarious settlement and a public housing project. Thirty people were interviewed, 15 in each of the two areas.
7. The third version of the scale was compared with Marin's translation (unpublished manuscript), developed for Colombian university students. There was a large degree of agreement between the two translations and the differences were due to Mexican and Colombian idioms and in some cases to language appropriate for low-income populations and university students respectively.
8. A final revision with the team of Mexican interviewers modified three items, introducing popular Mexican idioms.
9. The final version of the IE scale was translated back into English by a bilingual translator, unfamiliar with the original Rotter scale.

Appendix 3

Spanish Version of the Rotter I-E Scale

ROTTER I-E SCALE

Spanish Version

1. a. Los niños se meten en dificultades porque sus padres los regañan demasiado.
b. El problema con muchos niños hoy en día es que sus padres los consienten demasiado.
2. a. Mucha de la infelicidad que sufre la gente se debe en parte a la mala suerte.
b. Las desgracias de la gente son consecuencia de sus errores.
3. a. Las guerras son consecuencia de que la gente no tiene suficiente interés en la política.
b. Siempre habrá guerras aunque la gente trate de evitarlas.
4. a. A la larga en este mundo, la gente obtiene el respeto que se merece.
b. Desgraciadamente, es muy común que no se reconozca el valor de una persona a pesar de sus esfuerzos.
5. a. No es verdad que los maestros sean injustos con sus alumnos.
b. Muchos alumnos no se dan cuenta de que sus calificaciones están afectadas por hechos fuera de su control.
6. a. Si a uno le dan chance, puede llegar a ser buen líder.
b. La gente capaz que no llega a ser líder no ha sabido aprovechar sus oportunidades.

- 7.a. Aunque uno quiera, no le puede caer bien a todo el mundo.
- b. No caerle bien a los demás es no saber tratar con la gente.
- 8.a. El carácter de una persona se hereda.
- b. La forma de ser de la gente es consecuencia de sus experiencias en la vida.
- 9.a. Muchas veces he visto que lo que tiene que pasar, pasa.
- b. Me va mucho mejor cuando yo tomo las decisiones que cuando dejo que el destino decida.
- 10.a. Para un alumno bien preparado no existe prueba injusta.
- b. En muchas pruebas las preguntas no tienen que ver con lo que se estudió en las clases, así que no vale la pena estudiar antes.
- 11.a. El éxito se debe al trabajo y nada tiene que ver con la suerte.
- b. Conseguir buena chamba es más que nada saber aprovechar el momento.
- 12.a. Cualquier persona puede influir en las decisiones del gobierno.
- b. Este mundo está manejado por unos cuantos y no hay mucho que los demás puedan hacer.
- 13.a. Cuando planeo las cosas estoy casi seguro de que las voy a hacer.
- b. No siempre es bueno hacer planes a muy largo plazo; muchas cosas dependen de la buena o mala suerte.
- 14.a. Hay gente que de plano no vale nada.
- b. Siempre hay algo valioso en cada persona.

- 15.a. En mi caso conseguir lo quiero tiene muy poco que ver con la suerte.
- b. Muchas veces echar un volado es mejor que romperse la cabeza con decisiones.
- 16.a. A veces, si se llega a ser patrón es por pura suerte.
- b. Saber dirigir la gente es cuestión de habilidad y no de suerte.
- 17.a. En cuestiones de política mundial, la mayoría de nosotros no puede comprender ni controlar lo que pasa.
- b. Si toma parte en los asuntos políticos y sociales, la gente puede controlar lo que pasa en el mundo.
- 18.a. La mayoría de la gente no se da cuenta de que sus vidas están decididas por el azar.
- b. En realidad la llamada "suerte" no existe.
- 19.a. Uno siempre debe estar dispuesto a admitir sus errores.
- b. Es mejor por lo general esconder sus errores.
- 20.a. Es difícil saber si de veras uno le cae bien a alguien.
- b. El número de amigos que uno tiene depende de lo buena gente que es uno.
- 21.a. A la larga las cosas malas que nos suceden se compensan con las buenas.
- 22.a. Con mucho esfuerzo podemos eliminar la corrupción política.
- b. Es difícil para la gente tener mucho control sobre lo que hacen los políticos.

- 23.a. Algunas veces no entiendo cómo ponen los maestros las calificaciones.
- b. Hay una relación directa entre cuánto se estudia y las calificaciones.
- 24.a. Un buen líder espera que la gente tome sus propias decisiones.
- b. Un buen líder decide y aclara el trabajo de cada persona.
- 25.a. Muchas veces siento que tengo poca influencia sobre las cosas que me pasan.
- b. No puedo creer que mi vida depende de la suerte o del destino.
- 26.a. La gente se siente sola porque no trata de hacerse amigos.
- b. No tiene caso hacer muchos esfuerzos por caerle bien a todo el mundo, las amistades se hacen solas.
- 27.a. Se enfatizan demasiado los deportes en la escuela.
- b. El deporte es un medio excelente para desarrollar el carácter del individuo.
- 28.a. Lo que pasa en mi vida es obra mía.
- b. A veces siento que no tengo suficiente control sobre mi vida.
- 29.a. Casi nunca entiendo lo que hacen los políticos.
- b. A fin de cuentas la gente es responsable de los malos gobiernos.

Appendix 4

Individual-System Blame Items:

English and Spanish Versions

INDIVIDUAL-SYSTEM BLAME ITEMS

English Version

1. a. Living well and getting a good education is a matter of being born rich.
b. Living well and getting a good education can only be achieved through hard work.
2. a. It is due to their lack of education that the poor fail to get work.
b. There are very few jobs available and many trained people cannot find work.
3. a.* I prefer to use my own ideas rather than those of other people.
b. I prefer to use other people's ideas.
4. a.** Most people who don't succeed in life are just plain lazy.
b. Hard work offers little guarantee of success.
5. a. People with money owe it to their work.
b. Many people with money owe it to the work of others.
6. a. These days the opportunities for the poor to get ahead are getting less and less.
b. The poor socio-economic conditions of many people are due to their failure to take advantage of the opportunities that exist.
7. a.* When there is a problem, the best thing is to do something about it.
b. When there is a problem, wait and see what happens.

* Fillers

** These alternatives are taken from the Protestant Ethic Scale developed by Mirels and Garrett (1971).

- 8.a. Many people don't get work because they don't have the right contacts.
- b. Many people don't find jobs because they don't even look for them.

INDIVIDUAL-SYSTEM BLAME ITEMS

Spanish Version

- 1.a. Vivir, comer y educarse bien es cuestión de nacer rico.
- b. Vivir, comer y educarse bien sólo se logra trabajando duro.
- 2.a. Es por falta de preparación que gente de pocos recursos no consigue buenos empleos.
- b. Hay muy pocos empleos y hasta muchos que están preparados no consiguen trabajo.
- 3.a. Yo prefiero utilizar mis propias ideas en vez de las ideas de otros.
- b. Yo prefiero utilizar las ideas de otras personas.
- 4.a. La mayoría de la gente que no tiene éxito en la vida es sencillamente porque es floja.
- b. El que uno trabaje duro no garantiza que vaya a tener éxito.
- 5.a. La gente de dinero se lo debe a su trabajo.
- b. Mucha gente que tiene dinero se lo debe al trabajo de los demás.
- 6.a. Cada día hay menos oportunidades para que la gente humilde salga adelante.
- b. La mala situación de muchas personas se debe a que no saben aprovechar las oportunidades que existen.
- 7.a. Cuando hay algún problema, lo mejor es hacer algo.
- b. Cuando hay algún problema, esperar y ver qué sucede.
- 8.a. Mucha gente no consigue empleo porque no tiene palancas.
- b. Mucha gente no consigue trabajo porque ni siquiera lo busca.

Appendix 5

I-E Score Sheet

I-E SCORE SHEET

No:

EM	ALTERNATIVE	Total IE	PC	CI	(IE-PC)	(IE - CI)	IS
1	a b	/			/	/	
2	<u>a</u> b	a			a	a	
3	a <u>b</u>	b			b	b	
4	a <u>b</u>	b			b	b	
5	a <u>b</u>	b			b	b	
6	<u>a</u> b	a		a	a	/	
7	<u>a</u> b	a		a	a	/	
8	a b	/			/	/	
9	<u>a</u> b	a	a		/	a	
0	a <u>b</u>	b		b	b	/	
1	a <u>b</u>	b		b	b	/	
2	a <u>b</u>	b			b	b	
3	a <u>b</u>	b	b		/	b	
4	a b	/			/	/	
5	a <u>b</u>	b	b		/	b	
6	a b	a		a	a	/	
7	a b	a			a	a	
8	a b	a		a	a	/	
9	a b	/			/	/	
0	a b	a		a	a	/	
1	a b	a			a	a	
2	a <u>b</u>	b			b	b	
3	<u>a</u> b	a		a	a	/	
4	a b	/			/	/	
5	<u>a</u> b	a	a		/	a	
6	a <u>b</u>	b		b	b	/	
7	a b	/			/	/	
8	a <u>b</u>	b	b		/	b	
9	<u>a</u> b	a			a	a	
0	a b						a
1	a b						b
2	a b						/
3	a <u>b</u>						b
4	a <u>b</u>						b
5	<u>a</u> b						a
6	a b						/
7	a b						a

ALS:

Appendix 6

Pilot Study

Pilot Study

Method

Subjects

A total of 30 people were interviewed, 15 in each of the two areas sampled. Five men and 10 women were interviewed in a precarious settlement and six men and nine women in a public housing project. Almost half of the subjects, 43%, were aged between 31 and 40, 80% of the residents interviewed were married and only 6.7% were single.

A squatter settlement was selected where none of the residents have legal title to their property and many of them live in rental accommodation. The settlement is located in the South of the city along the side of an abandoned canal, which is now mainly used to dump garbage.

The area has electricity and water is brought into the "colonia" and supplied to the residents by means of communal taps in the streets. Some people have constructed their own improvised drainage system. None of the streets are paved and the garbage collection is virtually non-existent. The type of housing is varied but would fall into the general category of self-help housing.

The "secure" subjects were living in a section of a large government housing project completed six years ago. Access to the programme originally required membership of a social security organisation. The housing is mass-produced, purpose-built and the section selected consisted of terraced houses. The area has all the urban services.

Every third dwelling in each of the two areas was selected and in the case of nobody replying or refusal to be interviewed, the next residence was approached. Neither next-door neighbours, nor more than one person per household were interviewed.

Materials

The instrument consisted of the Spanish version of Rotter's I-E scale, six additional Individual-System Blame items based on those developed by Gurin et al. (1969), a series of questions dealing with the attribution of responsibility in connection with an accident based on the material used by Sosis (1974)⁽¹⁾, and finally a section dealing with socio-economic precariousness.

Attribution of responsibility measures: Based on her account of a motor accident and the questions regarding responsibility used by Sosis (1974), an account of an accident involving a careless driver and a child was developed. The basic incident was held constant, but the sex and social class of the driver were systematically varied so as to produce four versions of the accident. The characteristics of the four drivers were:

- a) Mario Hernandez, Head of Personnel in a factory, driving a '79 Mustang;
- b) Marta Hernandez, Head of Personnel in a factory, driving a '79 Mustang;
- c) Mario Hernandez, factory worker, driving a '65 Chevrolet;
- d) Marta Hernandez, factory worker, driving a '65 Chevrolet

(1) Only the attribution material will be described in detail. Based on the results of the Pilot Study, it was changed in the final instrument. All the other sections remained the same.

The account was such, that the driver clearly knocked over the child. Relevant information regarding the incident included the fact that the driver was tired and in a hurry, driving fast, knew that the brakes were faulty and did not have the car insured. On the other hand, the child dashed out into the street while his mother was talking to a friend, thus allowing for a certain degree of ambiguity regarding the degree of driver responsibility for the accident.

Procedure

The interviewing, which took a total of eight days working between one and four hours a day, was done over week-ends -Friday afternoon, Saturday and Sunday- to maximise the chances of finding working women and male heads of household at home.

The interviewer introduced herself as coming from the Metropolitan University, where a study of Public Opinion was being carried out. The university was working in a number of different areas and had already collected a variety of opinions regarding the different topics such as school and work. Would it be possible to speak to the male head of household and failing that with the "Señora" of the house? It would take about 10 to 15 minutes of their time.

Immediately following item 29 of the I-E scale, one of the four accounts of the accident was read out to the respondent. The four versions of the accident were randomly distributed across the 30 questionnaires.

There was no attempt to adopt the jury simulation setting used by Sosis, as this appeared inappropriate in a Mexican setting. This part of the instrument was introduced by explaining that the interviewer would read out an account of an incident, at the end of which she would ask the respondent about his or her opinions and judgement regarding what happened.

The Coding Guide for the Attribution Questions involves ten pieces of information. While the focus was on the perception of the driver's responsibility, given the variety of responses to the question regarding responsibility for the accident, the first piece of information coded dealt with the different actors perceived to have some degree of responsibility.

The degree of driver responsibility, which ranged from none to complete, was then coded from 0 to 4 in a manner similar to the analysis used by Sosis (1974).

The three measures proposed of paying the medical expenses, paying a fine and/or going to prison, were first coded in terms of agreement or disagreement and then in terms of the amounts of money or time considered appropriate. It was decided that the amounts of money named should not be taken as an absolute measure of the severity of the judgement, but rather that the absolute estimates in pesos should be converted into a proportion of the respondent's declared income. Money apart from its absolute value and purchasing power has a symbolic and psychological value, which is relative to the economic

position of the individual. A fine which represented a considerable amount of money to the poorer respondents, might be negligible to a higher income subject.

The medical expenses and fine were therefore expressed in terms of the subject's declared income =

$$\frac{\text{payment of medical expenses / fine}}{\text{declared monthly income}}$$

A further severity measure was calculated in terms of the number of measures considered appropriate, ranging from 0 to 3. The relative severity of the medical expenses, fine and prison sentence were not weighted, but the three measures appear to represent a Guttman scale, such that all the subjects that agree with a prison sentence also agree with paying the medical expenses and fine.

Analysis

In the original design, it was proposed to analyse the attribution of responsibility in terms of both observer and actor characteristics, using factorial analyses of variance. The relevant actor characteristics were sex and social class, which would be related in turn to the sex and precariousness of the observer and then to his locus of control beliefs.

The analyses of variance would therefore consist of a series of $2 \times 2 \times 2 \times 2$ (sex of actor x social class of actor x sex of observer x precariousness of observer) analyses of the attribution data, followed

by a further $2 \times 2 \times 2 \times 2$ (sex of actor \times social class of actor \times Personal Control \times Control Ideology Beliefs of the respondent) ANOVAs.

Given the small number of cases included in the pilot study, it was decided that such analyses would be inappropriate at this stage. Instead a series of partial tests of the hypothesized relationships was carried out at an exploratory level.

Descriptive data regarding the perception of the accident, the attribution of responsibility and the measures considered appropriate were obtained. These were then related to observer characteristics, which were divided into antecedent variables and locus of control beliefs. The relationship between the antecedent variables of sex and precariousness and the attribution of responsibility was analysed by means of two sets of X^2 s, the first comparing the attributions of men and women and the second comparing the precarious and non-precarious groups. The relationship between locus of control beliefs and attribution was studied by means of a series of correlation coefficients, based on the four locus of control measures on the one hand and correlating them with the degree of driver responsibility and the amounts estimated for the medical expenses, fine and prison sentence on the other.

It had also been postulated that attribution of responsibility would vary as a function of the characteristics of the driver. In this case the sex and social class of the driver had been systematically

varied so that the subjects had responded to one of four accounts of the accident. X^2 s were used to compare the degree of responsibility attributed.

Results

The focus of interest was on the degree of responsibility attributed to the driver, but given a certain degree of ambiguity in the situation, it was decided to consider the perception of the responsibility of all the principal actors involved in the accident: the driver, the mother and the child. Fifty per cent of those interviewed named one of these actors, 43.3% named two people, while a single respondent claimed that nobody was responsible. In all 76.6% of the subjects named the driver, 40% the mother and 20% the child as either solely or jointly responsible.

All of the males interviewed mention the driver, and 50% of them perceive the driver as exclusively responsible, whereas only 21% of the women do so. Twenty-five per cent of the women disregard the driver's contribution to the accident, mentioning either the mother or child exclusively. Only women, 31.5% of them, mention the child's responsibility either alone or in conjunction with the driver. None of these differences reach statistical significance, but the degree of attributed driver responsibility does show a barely significant difference between men and women ($\underline{X^2} = 10.62$, $\underline{df} = 5$, $\underline{p} < .059$). The degree of driver responsibility was measured on a five point scale ranging from NONE (0), through LITTLE (1), SOME (2), A GOOD

DEAL (3) to COMPLETE (4). Men attribute more responsibility to the driver than women. Their scores range from "some" to "complete" responsibility, with 36% of the men attributing complete responsibility. On the other hand, 26% of the women attribute no responsibility to the driver and a total of 52.1% responded that the driver had little or no responsibility for the accident.

There was a high degree of consensus and no significant sex differences regarding the appropriate measures to be taken. Of those interviewed, 83.3% believed that the driver should contribute to the child's medical expenses and 86.7% that a fine should be paid, whereas 76.7% opposed a prison sentence. Twenty per cent of the subjects were in favour of all three measures, 56.7% favoured two of them and 16.7% only favoured one.

A further series of X^2 s, comparing the precarious and non-precarious populations on all of the attribution of responsibility measures described above, failed to reveal any significant differences between the two groups.

The characteristics of the driver did not affect attributions. There were no significant differences in terms of the responsibility attributed to the male and female, working class and middle class drivers described in the four different accounts.

The relationship between internality-externality and the attribution of responsibility was studied by correlating each of the four locus of control measures in turn with the degree of attributed driver res-

ponsibility and the amounts to be paid in medical expenses and the fine. As only seven respondents considered a prison sentence appropriate, it was decided not to include this severity measure in the analysis.

None of these correlation coefficients is statistically significant. While all 30 subjects answered the question regarding the degree of driver responsibility, only 18 estimated the amount of medical expenses that the driver should pay and only 20 specified the fine. The negative correlation coefficients seen in the majority of the cases, while not statistically significant, do go in the predicted direction. The negative correlations indicate that internality rather than externality is associated with the attribution of greater responsibility and more severe measures.

Discussion

In the research proposal it was hypothesized that, "the attribution of responsibility is determined in part by the similarity between the actor and the observer, so that higher external or system blame scores will be found in the case of sex and/or social class similarities between the actor described and the respondent." Rather than a simultaneous test of the effects of similarity of the actor and observer, two series of X^2 s were carried out to explore simple differences in the attribution of responsibility as a function of actor characteristics, followed by a test of differences in attribution related to the socioeconomic characteristics of the observer.

There were no significant differences in the attribution of responsibility to the driver, in terms of the sex and social class of this actor, nor were there any differences between the precarious and non-precarious groups in terms of the attributions made. The sex of the observer was the one variable that affected the perception of the situation and the degree of responsibility attributed to the driver. Men attributed more responsibility to the driver than women.

It was also hypothesized that people project their own locus of control beliefs on to others so that internals will have significantly higher individual blame scores than externals. This relationship between locus of control beliefs and the attribution of responsibility was examined by means of correlational analyses.

There was no support found for the hypothesis regarding the relationship between locus of control beliefs and the attribution of responsibility, as none of the correlation coefficients was statistically significant.

The most useful way to interpret all of the above attribution results would appear to be in relation to the stimulus material, that is as a function of the accident described. While the sex and social class of the driver were systematically varied, the overall situation especially as regards the driver was unfamiliar and socially distant from many of the respondents, especially in the case of the women.

The fact that men, some of whom did own and drive cars and nearly all of whom worked outside the immediate residential area,

did attribute more responsibility to the driver, lends support to the general hypothesis that similarity between the actor and observer produce higher blame scores. Additional evidence of this phenomenon is seen in the more frequent attribution of responsibility for the accident to the mother and/or child on the part of women. It appears that the attribution of responsibility reflects personal experience and familiarity with a given situation, which in turn affects observer identification with the actors.

The importance of the sex of the observer in perceiving the relative responsibility of the various actors involved in the accident and then attributing responsibility to the driver in particular, may have overridden the contribution of the locus of control beliefs. The salience of locus of control beliefs may vary according to the degree of identification with the actor. Personal control beliefs, for example, may only affect attribution where perceived similarity exists, whereas control ideology and individual-system beliefs may have a stronger influence in the case of "neutral" others.

Appendix 7

ATTRIBUTION OF RESPONSIBILITY MEASURES:

Spanish and English Versions

(Pilot Study)

ATTRIBUTION OF RESPONSIBILITY MEASURES

Spanish Version

El Lic. Mario Hernández, Jefe de Personal de la fábrica de refrescos "Chorritos" salió ya tarde de la planta el viernes en la tarde. Estaba muy cansado del trabajo y tenía mucha prisa por llegar a su casa. Era su cumpleaños y había prometido regresar temprano a la casa. Su familia preparaba una fiestecita con ilusión de reunir a toda la familia por primera vez en muchos años.

Tomó su Mustang '79 del estacionamiento y se dirigió al Circuito Interior... había mucho tráfico por la hora y por ser viernes y Mario se empezó a poner muy nervioso. Empezó a manejar más rápido y a rebasar peligrosamente a los otros coches -dos veces pasó semáforos que ya cambiaban de amarillo a rojo. Iba mirando su reloj todo el tiempo.

Salió del Circuito Interior y tomó calles más pequeñas. De repente vió rebasar una pelota a 50 metros delante suyo, e inmediatamente después a un niño de unos 6 años. Pisó el freno con todas sus fuerzas pero el coche no se detuvo. Los frenos agarraron apenas, Mario recordó que hacía un mes que su mecánico le había dicho que estaban desgastados, pero no había tenido tiempo de mandarlos a arreglar. Trató de evitar al niño, pero la calle era muy estrecha y no pudo evitar golpearlo.

Mario bajó enseguida del coche, se acercaron muchos curiosos que habían presenciado el accidente. Ahí estaba la madre del niño,

éste se había escapado de su lado mientras ella platicaba con una amiga. Llamaron a una ambulancia que llevó al niño al hospital... dos fracturas graves que lo obligaron a estar hospitalizado dos meses.

En la delegación Mario pensó que se había metido en un buen lío por culpa del niño y su propio descuido... no sólo por la cuestión de los frenos, sino porque no tenía asegurado el coche. También pensó, "Nunca olvidaré este cumpleaños."

1. ¿QUE TAN RESPONSABLE CREE USTED ERA MARIO POR EL ACCIDENTE? _____

NADA POCO ALGO BASTANTE COMPLETAMENTE

- ¿POR QUE? _____

2. ¿CREE QUE DEBE PAGAR LOS GASTOS MEDICOS DEL NIÑO?

SI _____ ¿CUANTO? _____

NO _____

No sabe _____

3. ¿CREE QUE DEBE PAGAR UNA MULTA?

SI _____ ¿CUANTO? _____

NO _____

No sabe _____

4. ¿CREE QUE DEBE IR A LA CARCEL?

SI _____ ¿DURANTE CUANTO TIEMPO? _____

NO _____

No sabe _____

ATTRIBUTION OF RESPONSIBILITY MEASURES

English Version

Mario Hernandez, the Head of Personnel of the "Chorritos" Soft Drinks Factory, left the plant late on Friday afternoon. It was his birthday and he had promised to get home early. His family was preparing a party for him, hoping to reunite all the family for the first time in years.

He got his '79 Mustang out of the parking lot and drove towards the Inner-City Ring Road... there was a good deal of traffic due to the time of day and given it was Friday and Mario began to get very nervous. He then drove faster, passing other cars at a dangerous speed -twice he even went through traffic lights that were changing from amber to red. He kept looking at his watch.

He turned off the Ring Road into smaller streets. Suddenly he saw a ball bouncing about 150 feet ahead of him and a child of about 6 dashing after it. He slammed on the brakes as hard as he could, but the car didn't stop. The brakes failed. Mario remembered that a month earlier his mechanic had told him the brakes were worn, but he hadn't had the time to have them repaired. He tried to avoid the child, but the street was narrow and he was unable to avoid hitting him.

Mario got out of the car immediately and a number of onlookers, who had witnessed the accident, came up. The child's mother was there, the child having run from her side while she was chatting to a

friend. An ambulance was called and the child was taken to hospital ... two serious fractures that kept the child in hospital for a period of two months.

At the police station Mario thought that he was in real trouble and that this was both the child's fault and due to his own negligence, not just because of the brakes but also because he didn't have the car insured. He also thought, "I shall never forget this birthday."

1. TO WHAT EXTENT DO YOU THINK MARIO WAS RESPONSIBLE
FOR THE ACCIDENT? _____

NOT AT ALL A LITTLE SOMEWHAT A GOOD DEAL COMPLETELY

- WHY? _____

2. DO YOU THINK MARIO SHOULD PAY THE CHILD'S MEDICAL
EXPENSES?

YES _____ HOW MUCH? _____

NO _____

Don't know _____

3. DO YOU THINK THAT HE SHOULD PAY A FINE?

YES _____ HOW MUCH? _____

NO _____

Don't know _____

4. DO YOU THINK HE SHOULD GO TO JAIL?

YES _____ FOR HOW LONG? _____

NO _____

Don't know _____

Responsibility Attribution Material

(English Version-Final Instrument)

RESPONSIBILITY ATTRIBUTION MATERIAL

Imagine that you are walking home when you suddenly see something shining in the road, just as a bicycle is about to go over it. You decide to dash to retrieve it before it gets run over by the bicycle. When you pick it up you realize that it is:

- a gold watch, or
- a knife and you've cut yourself picking it up so quickly.

-
- How much were you involved in what happened?

(0) NOT AT ALL (1) A LITTLE (2) SOMEWHAT (3) A GOOD DEAL
(4) COMPLETELY

The 12 versions of the accident were combinations of:

1. the Actor: You
 Mario subsequently coded as same or opposite sex
 Marta
2. the Outcome: gold watch
 cut by knife
3. Alternatives: counterbalanced

Appendix 8

Instrument

Número de Folio: _____

ENCUESTA DE OPINION PUBLICA

(UAMI / PS)

ENTREVISTADOR.:

1
2
3
4
5
6
7
8

COLONIA :

1
2
3
4
5
6
7
8

INSTRUMENTO :

H	SM OS OD	F	N
M		I	T

NUMERO DE ENTREVISTA : _____

1. a. Los niños se meten en dificultades porque sus padres los castigan demasiado.
b. El problema con muchos niños hoy en día es que sus padres los consienten demasiado.
2. a. Mucha de la infelicidad que sufre la gente se debe en parte a la mala suerte.
b. Las desgracias de la gente son consecuencia de sus errores.
3. a. Las guerras se deben a que la gente no tiene suficiente interés en la política.
b. Siempre habrá guerras aunque la gente trate de evitarlas.
4. a. A la larga, en este mundo la gente obtiene el respeto que se merece.
b. Desgraciadamente, es muy común que no se reconozca el valor de una persona a pesar de sus esfuerzos.
5. a. No es verdad que los maestros sean injustos con sus alumnos.
b. Muchos alumnos no se dan cuenta de que sus calificaciones están afectadas por hechos fuera de su control.
6. a. Sin tener las condiciones a su favor, uno no puede ser un buen líder.
b. La gente capaz que no llega a ser líder no ha sabido aprovechar sus oportunidades.
7. a. Aunque uno quiera, no le puede caer bien a todo el mundo.
b. Aquellos que no pueden agradar a otros, es porque no saben cómo llevarse bien con los demás.
8. a. El carácter de una persona se hereda.
b. La forma de ser de la gente es resultado de sus experiencias en la vida.
9. a. Muchas veces he visto que lo que tiene que pasar, pasa.
b. Me va mucho mejor cuando yo tomo las decisiones que cuando dejo que el destino decida.
10. a. Para un alumno bien preparado no existe prueba injusta.
b. En muchas pruebas las preguntas no tienen que ver con lo que se estudió en las clases, así que no vale la pena estudiar antes.
11. a. El éxito se debe al trabajo y nada tiene que ver con la suerte.
b. Conseguir buena chamba es más que nada saber aprovechar el momento.

- 12.a. El ciudadano común y corriente puede tener influencia en las decisiones del gobierno.
- b. Este mundo está manejado por unos cuantos y no hay mucho que los demás puedan hacer.
- 13.a. Cuando planeo las cosas estoy casi seguro de que las voy a hacer.
- b. No siempre es bueno hacer planes a muy largo plazo; muchas cosas dependen de la buena o mala suerte.
- 14.a. Hay gente que de plano no vale nada.
- b. Hay algo bueno en todas las personas.
- 15.a. En mi caso conseguir lo que quiero tiene muy poco que ver con la suerte.
- b. Muchas veces echar un volado es mejor que romperse la cabeza con decisiones.
- 16.a. A veces, si se llega a ser patrón es por pura suerte.
- b. Saber dirigir a la gente es cuestión de habilidad y no de suerte.
- 17.a. En cuanto a asuntos mundiales, la mayoría de nosotros no podemos comprender ni controlar lo que pasa.
- b. Participando en los asuntos políticos y sociales, la gente puede controlar lo que pasa en el mundo.
- 18.a. La mayoría de la gente no se da cuenta hasta qué punto sus vidas están controladas por la suerte.
- b. En realidad la "suerte" no existe.
- 19.a. Uno siempre debe estar dispuesto a admitir sus errores.
- b. Es mejor por lo general esconder sus errores.
- 20.a. Es difícil saber si de veras uno le cae bien a alguien.
- b. El número de amigos que uno tiene depende de que tan buena gente es uno.
- 21.a. A la larga las cosas malas que nos suceden se compensan con las buenas.
- b. En general las desdichas de la gente se deben a una falta de habilidad, a la ignorancia, a la flojera o a las tres cosas.
- 22.a. Con el suficiente esfuerzo podemos eliminar la corrupción política.
- b. Es difícil para la gente tener mucho control sobre lo que hacen los políticos.

- 23. a. Algunas veces no entiendo cómo ponen los maestros las calificaciones.
b. Hay una relación directa entre cuánto se estudia y las calificaciones.
- 24. a. Un buen líder espera que las personas decidan por sí mismas qué deben hacer.
b. Un buen líder explica a cada quien lo que debe hacer.
- 25. a. Muchas veces yo siento que tengo poca influencia sobre las cosas que me pasan.
b. No puedo creer que mi vida dependa de la suerte o del destino.
- 26. a. La gente se siente sola porque no trata de hacerse amigos.
b. No tiene caso hacer muchos esfuerzos por caerle bien a todo el mundo, las amistades se hacen solas.
- 27. a. Se le da demasiada importancia a los deportes en la escuela.
b. Los deportes en equipo son excelentes para formar un buen carácter.
- 28. a. Lo que pasa en mi vida es obra mía.
b. A veces siento que no tengo suficiente control sobre mi vida.
- 29. a. Casi nunca entiendo lo que hacen los políticos.
b. A fin de cuentas la gente es responsable de los malos gobiernos.
- 30. a. Vivir, comer y educarse bien es cuestión de nacer rico.
b. Vivir, comer y educarse bien sólo se logra trabajando duro.
- 31. a. Es por falta de preparación que gente de pocos recursos no consigue buenos empleos.
b. Hay muy pocos empleos y hasta muchos que están preparados no consiguen trabajo.
- 32. a. Yo prefiero utilizar mis propias ideas en vez de las ideas de otros.
b. Yo prefiero utilizar las ideas de otras personas.
- 33. a. La mayoría de la gente que no tiene éxito en la vida es sencillamente porque es floja.
b. El que uno trabaje duro no garantiza que vaya a tener éxito.
- 34. a. La gente de dinero se lo debe a su trabajo.
b. Mucha gente que tiene dinero se lo debe al trabajo de los demás.

- 35.a. Cada día hay menos oportunidades para que la gente humilde salga adelante.
b. La mala situación de muchas personas se debe a que no saben aprovechar las oportunidades que existen.
- 36.a. Cuando hay algún problema, lo mejor es hacer algo.
b. Cuando hay algún problema, lo mejor es esperar y ver qué sucede.
- 37.a. Mucha gente no consigue empleo porque no tiene palancas.
b. Mucha gente no consigue trabajo porque ni siquiera lo busca.

-
38. Imagínese que va caminando hacia su casa, cuando de repente ve brillar algo en la calle al tiempo que una bicicleta va a pasar. Usted decide lanzarse a recogerlo antes de que la bicicleta lo aplaste. Cuando lo levanta se da cuenta de que se trataba de un reloj de oro.

¿Qué tanto tuvo que ver usted con lo que le pasó? _____

TOTALMENTE (4) MUCHO (3) BASTANTE (2) POCO (1) NADA (0)

¿Por qué? _____

 DATOS PERSONALES

39. Sexo: Masculino 1
Femenino 2
40. Estado Civil:
Soltero/a 1
* Casado/a o 2
* Unión Libre 2
* Separado/a o 3
* Divorciado/a 4
Viudo/a 5
Otro 8
NR 8
*subrayar la alternativa apropiada
41. Edad: Número de años _____
42. Escolaridad:
Hasta qué año de la escuela
llegó usted?

Primaria _____
Secundaria/Comercial _____
Bachillerato/Prepa _____
Profesional _____
Otro _____
NR _____
(marcar número de años o
I=incompleto, C=completo)
-

VIVIENDA

43. Respecto a su Vivienda, usted:
- está rentando 1
 - está cuidando 2
 - ocupación ilegal 3
 - está comprando 4
 - es dueño (con escrituras) 5
 - otro _____ 6
 - NR _____ 8
44. Servicios en la casa:
- | | Si | No |
|-------------------------|----------|----------|
| - luz | <u>1</u> | <u>2</u> |
| - agua potable | <u>1</u> | <u>2</u> |
| - drenaje | <u>1</u> | <u>2</u> |
| - teléfono | <u>1</u> | <u>2</u> |
| - recolección de basura | <u>1</u> | <u>2</u> |
45. Construcción:
- particular 1
 - masiva 2
 - otro _____ 3
-

Entrevistado:HOMBRE:

46. ¿En qué trabaja usted?

(Si desempleado pasar a la pregunta número 51)

47. ¿Es de Planta o Eventual?

De planta	<u>1</u>
Eventual	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

48. ¿Tiene Seguro Social?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

49. ¿Pertenece a un Sindicato?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

50. ¿Cuánto gana usted aproximadamente? _____ (día, semana, quincena, mes)

- Menos del mínimo	<u>1</u>
- el mínimo hasta \$5,000	<u>2</u>
- \$5,000 y más	<u>3</u>
- NR	<u>8</u>
- Inapropiado	<u>9</u>

(Salario Mínimo = 138 pesos por día ó 3,312 pesos al mes)

TRABAJO (Males)ESPOSA:

51. ¿Trabaja su esposa?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

52. ¿En qué trabaja?

53. ¿Es de Planta o Eventual?

De planta	<u>1</u>
Eventual	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

54. ¿Tiene Seguro Social?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

55. ¿Pertenece a un Sindicato?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

56. ¿Cuánto gana aproximadamente? _____ (día, semana, quincena, mes)

- Menos del mínimo	<u>1</u>
- el mínimo hasta \$5,000	<u>2</u>
- \$5,000 y más	<u>3</u>
- NR	<u>8</u>
- Inapropiado	<u>9</u>

Entrevistado:MUJER:

46. ¿Trabaja usted?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>

(Si no trabaja pasar a la pregunta número 52)

47. ¿En qué trabaja? _____

48. ¿Es de Planta o Eventual?

De planta	<u>1</u>
Eventual	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

49. ¿Tiene Seguro Social?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

50. ¿Pertenece a un Sindicato?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

51. ¿Cuánto gana usted aproximadamente? _____ (día, semana, quincena, mes)

- Menos del mínimo	<u>1</u>
- el mínimo hasta \$5,000	<u>2</u>
- \$5,000 y más	<u>3</u>
- NR	<u>8</u>
- Inapropiado	<u>9</u>

(Salario Mínimo = 138 pesos por día ó 3,312 pesos al mes)

TRABAJO (Females)ESPOSO:

52. ¿En qué trabaja su esposo?

53. ¿Es de Planta o Eventual?

De planta	<u>1</u>
Eventual	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

54. ¿Tiene Seguro Social?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

55. ¿Pertenece a un Sindicato?

Si	<u>1</u>
No	<u>2</u>
NR	<u>8</u>
Inaprop	<u>9</u>

56. ¿Cuanto gana aproximadamente? _____ (día, semana, quincena, mes)

- Menos del mínimo	<u>1</u>
- el mínimo hasta \$5,000	<u>2</u>
- \$5,000 y más	<u>3</u>
- NR	<u>8</u>
- Inapropiado	<u>9</u>

57. Después de hacerle todas estas preguntas, ahora le podré dar algunas opiniones mías. A ver... si cambiáramos de que ahora usted me pregunta, cómo piensa que yo contestaría a la pregunta:

- a. Muchas veces yo siento que tengo poca influencia sobre las cosas que me pasan.
- b. No puedo creer que mi vida dependa de la suerte o del destino.
O:
- a. El éxito se debe al trabajo y nada tiene que ver con la suerte.
- b. Conseguir buena chamba es más que nada saber aprovechar el momento.

¿Por qué cree usted que contestaría así? _____

(Contestar preguntas, aclarar dudas, dar información acerca del estudio, opiniones, etc.)

Appendix 9
Coding Guide

TARJETA 1GUIA DE CODIFICACION

I. ESCALA DE ROTTER:

- llenar "I-E Score Sheet":
- marcar las respuestas a, b, ó ambas a los items 1 a 37
- calcular los puntajes del Total IE, PC, CI, (IE-PC), (IE-CI) y IS escalas
- transferir los puntajes de los items 1 a 37 a las columnas 1 a 37 de las hojas de codificación:

a = 1
 b = 2
 a + b = 3

Columnas 1 a 37

- transferir los puntajes de las escalas:

Total IE =	puntaje entre	<u>00.0 y 23.0</u>	Columnas	<u>38 - 41</u>
PC =	" "	<u>00.0 y 05.0</u>	"	<u>42 - 45</u>
CI =	" "	<u>00.0 y 09.0</u>	"	<u>46 - 49</u>
(IE-PC) =	" "	<u>00.0 y 18.0</u>	"	<u>50 - 53</u>
(IE-CI) =	" "	<u>00.0 y 14.0</u>	"	<u>54 - 57</u>
IS =	" "	<u>00.0 y 06.0</u>	"	<u>58 - 61</u>

II. ATRIBUCION:

1. Relación con el Actor (Portada del cuestionario):

SM = 1
 OS = 2
 OD = 3
 NR = 8

Columna 622. Resultado/Outcome (Portada):

F = 1
 I = 2
 NR = 8

Columna 63

3. Actor: (página 3)

Usted = 1

Marta = 2

Mario = 3

NR = 8

Columna 644. Responsabilidad (página 3)

Nada = 0

Poco = 1

Bastante = 2

Mucho = 3

Totalmente = 4

NR = 8

Columna 65

III. CARACTERISTICAS DE DEMANDA : (página 4, pregunta 57)

5. a = 1

b = 2

a + b = 3

NR = 8

Columna 66

6. a = 1

b = 2

a + b = 3

NR = 8

Columna 677. Razones:

- Características del entrevistador
(educación, preparación, experiencia,
etc.) = 1

- razones propias atribuidas al entre-
vistador = 2 " 68

- explicación de la respuesta sin atri-
bución = 3

- otro = 4

- no sabe, pero sí respondió a los 2
items (o no hay razón especificada) = 5

- inapropiado (no se preguntó el No. 57) = 9

ENTREVISTADOR (Portada) :

8. <u>Número del Entrevistador</u> :	1	
	2	
	3	
	4	Columna <u>69</u>
	5	
	6	
	7	
	8	

9. Sexo del Entrevistador :

Hombre (números 1 a 3) =	1	
Mujer (números 4 a 8) =	2	Columna <u>70</u>

IV. IDENTIFICACION :

10. Colonia :

Ejército de Oriente	= 1	
1° Victoria	= 2	Columna <u>74</u>
Hogar y Redención	= 3	

11. Preclarismo :

Bajo / número 1	= 1	
Alto/ número 2 y 3	= 2	Columna <u>75</u>

12. Sexo del Sujeto:

H	= 1	
M	= 2	Columna <u>76</u>

13. No. de Ident - 3 columnasColumnas 77-7914. No. de Tarjeta = 1Columna 80

TARJETA 2GUIA DE CODIFICACIONColumna

- | | | |
|----|------------------------------------------------------------------------------------------------------------------------------------|-----|
| 1. | SEXO : Masculino = 1
Femenino = 2 | 1 |
| 2. | ESTADO CIVIL :
Soltero/a = 1
Casado/a = 2
o Unión L.
Separado/a = 3
o Divorciado
Viudo = 4
Otro = 5
NR = 8 | 2 |
| 3. | EDAD : número de años
NR = 88 | 3-4 |
| 4. | ESCOLARIDAD: Número de años (00-15)
NR = 88 | 5-6 |
| 5. | VIVIENDA:
rentando = 1
cuidando = 2
oc. ilegal = 3
comprando = 4
dueño = 5
otro = 6
NR = 8 | 7 |

TRABAJO : HOMBRES

- | | | |
|----|------------------------------------------------------------------------------------------------------------------------|---|
| 6. | ESTABILIDAD :
Planta = 1
Eventual = 2
NR = 8
Inaprop = 9
(hombres desempleados, solteras, viudas, etc.) | 8 |
| 7. | SEGURO SOCIAL :
Si = 1
No = 2
NR = 8
Inaprop = 9 (desempleados, solteras, etc.) | 9 |

8. SINDICATO :

Si	= 1	
No	= 2	Columna 10
NR	= 8	
Inaprop	= 9	

9. INGRESOS : Mensuales en pesos = 5 columnas 11 - 15
(Inaprop = 99999)

TRABAJO : MUJERES

10. TRABAJA LA MUJER :

Si	= 1	
No	= 2	16
NR	= 8	
Inaprop	= 9 (solteros, viudos, etc.)	

11. ESTABILIDAD :

Planta	= 1	
Eventual	= 2	17
NR	= 8	
Inaprop	= 9 (mujeres que no trabajan)	

12. SEGURO SOCIAL :

Si	= 1	
No	= 2	18
NR	= 8	
Inaprop	= 9	

14. INGRESOS: Mensuales en pesos = 5 columnas 20-24
(Inaprop = 99999)

IDENTIFICACION :

15. Número de Identificación - 3 columnas 77-79

16. Número de tarjeta = 2 80

Appendix 10

Correlation Coefficients

Correlation Coefficients:

Total Population

IE	PC	CI	PCPART	CIPART	IS	RESPONS- IBILITY	PRECAR- IOUSNESS	SEX
IE	.74***	.79***	.93***	.89***	.03	-.14	.23**	.24**
PC		.49***	.47***	.75***	-.06	-.15*	.36***	.26**
CI			.80***	.47***	.08	-.13	.20**	.09
PCPART				.79***	.09	-.09	.15	.17*
CIPART					-.02	-.12	.24**	.27***
IS						.08	-.06	-.01
RESPONSIBILITY							-.08	-.07
PRECARIOUSNESS								.00
SEX								

* $p < .05$ ** $p < .01$ *** $p < .001$

IE = Total Rotter I-E Scale

PC = Personal Control Subscale

CI = Control Ideology Subscale

PC Part = Total I-E minus PC items

CI Part = Total I-E minus CI items

IS = Individual-System Blame Scale

Secure Population

	IE	PC	CI	PCPART	CIPART	IS	RESPONS
IE		.69**	.80**	.94**	.90**	-.46	-.14
PC			.54**	.43**	.64**	-.10	-.15*
CI				.79**	.52**	.06	-.13
PCPART					.84**	.01	-.08
CIPART						.11	-.12
IS							.08
RESPONS							

* $p < .05$ ** $p < .001$

Precarious Population

IE	PC	CI	PCPART	CIPART	IS	RESPONS
IE	.76**	.75**	.93**	.89**	.14	-.00
PC		.39**	.47**	.80**	.00	-.12
CI			.80**	.37**	.12	.06
PCPART				.76**	.19	.07
CIPART					.10	-.05
IS						.18
RESPONS						

* $p < .05$
 ** $p < .001$

Men

	IE	PC	CI	PCPART	CIPART	IS	RESPONS
IE		.77**	.89**	.96**	.92**	.07	-.25*
PC			.65**	.56**	.74**	-.06	-.21
CI				.87**	.68**	.11	-.23*
PCPART					.87**	.11	-.22*
CIPART						-.01	-.23*
IS							.03
RESPONS							

* $p < .05$
 ** $p < .001$

Women

IE	PC	CI	PCPART	CIPART	IS	RESPONS
IE	.70***	.64***	.89***	.88***	-.02	.03
PC		.32**	.33**	.73***	-.07	-.08
CI			.69***	.27*	.02	-.00
PCPART				.72***	.06	.10
CIPART					-.02	.00
IS						.15
RESPONS						

* $p < .05$
 ** $p < .005$
 *** $p < .001$