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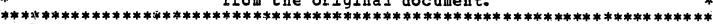
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ABSTRACT

The study of families who escaped poverty examined the relationship between possession of selected demographic, resource, social, and value characteristics and economic situation and attempted to determine which traits most significantly affected the ability to escape poverty. From personal interviews with a stratified cross-sectional unrestricted sampling of household heads of 943 families representing 19 primarily rural Middle Georgia counties, 2 sub-groups were used for the analysis: 112 "poverty cycle" families and 116 "escaped poverty" families. Persons who had escaped poverty had lived in the community for a longer period of time, were in middle and maturing age brackets, and were significantly better educated than families with similar histories who remained in poverty. Other significant factors were perceived control over events in their lives, as measured by feelings of powerlessness and alienation, and the social-structural factors of race and education. Also, economic factors alone clearly did not account for one's ability to escape poverty. Thus, programs designed to eliminate the consequences of long-term impoverishment should not only provide economic assistance but also focus attention on elimination of psychological and structural restrictors to achievement and upward mobility. (JD)

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Escape from Poverty: A Study of Social-Structural and Psychological Factors that Facilitate
Upward Mobility Among the Poor*

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Abstract

Poverty cycle and escaped poverty families representing 19 primarily rural Middle Georgia counties were compared to determine the extent to which families escaping poverty (1) differ from families with similar histories who remain in poverty and (2) possess characteristics which are generally assumed to be associated with achievement-oriented strategies and values as reflected in upwardly mobile behavior. The data suggest that factors which were most significantly control over events in their lives as measured by feelings of powerlessness and alienation, and the social-structural factors of race and education.

Traditionally, studies of the poor have focused mainly on descriptions of their economic, social, physical and psychological characteristics.

Less attention has been given to those persons who, by traditionally accepted definitions of poverty, have managed to break or escape a history of long-term impoverishment. Consequently, little is known about persons who escape poverty or about how they manage to do it. For a great number of people, the mere word "poverty" has a tendency to evoke negative throughts.

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For many, poverty is synonomous with the "culture of poverty" which implies an environment in which deviant forms of behavior are systematically integrated into patterns of living, and are transmitted from one generation of poor to the next.

In many instances, the poor are also subjected to other generalizations about their character and lifestyles as compared with those of middle-class society. The poor are often viewed as shiftless, lazy, dependent, and lacking the motivation to successfully direct their energies away from the futility of their present conditions. These generalizations seem to become automatic when it is determined that one's income falls below that level which is deemed the minimum necessary to sustain and provide for the necessities of life for oneself and for those other persons for whom one assumes financial responsibility.

To escape poverty then, suggests that one not only has evidenced substantial improvement in economic situation (level of income), but has also managed to embrace and assume those values that are necessary for an improved quality of life. To escape poverty suggests a form of upward mobility where one is moving away from the characteristics of the long-term poor and toward those of the always affluent members of society.

In this paper, we examined selected characteristics representing the major dimensions of family life. Our purpose was to test the extent to which persons who are successful in escaping poverty demonstrate possession of those characteristics which are generally assumed to be associated with achievement-oriented strategies and values, and which are subsequently reflected in upwardly mobile behavior. Our goal was to try to determine the factors or combination of factors which enable persons with histories of poverty not to accept their environmental conditions as part of the



normal order of things and to eventually break away from poverty.

Theoretical Framework

A review of the literature yielded little evidence of research which focused explicitly on factors associated with escape from poverty or on families managing to break histories of long-term impoverishment. But when escape from poverty was broadly conceptualized as a form of upward mobility, there were several documentations in the literature of factors associated with achievement and motivational strategies that facilitate upward mobility.

There appear to be several generally accepted explanations for upward mobility. These include different mental and physical characteristics, such as more intelligence, better health, greater physical attraction, and relative opportunities available in the social structure (which might include increased opportunities made possible through money, specialized training, or social contacts). Other factors which are also thought to be significantly associated with upward mobility include psychological and cultural factors which influence individual willingness to develop and exploit talents, intelligence, and all other available resources.

Rosen, Kluckhohn and Parsons have suggested that the degree to which an individual is willing to exploit available resources and to achieve is to a large extent, also determined by attitudinal and value oreintations of the individual (Rosen, 1956, 1959; Kluckhohn, 1950, 1961; Parsons, 1951).

Rosen (1956, 1959) has further suggested that the incidences of two key factors which are essential to achievement are found with greater frequency among middle-class than among lower-class persons. These key factors suggested by Rosen are (1) the psychological factors of achievement motivation or the impetus to excell and (2) cultural factors which



include value orientations which define and implement achievement motivated behavior. It was Rosen's contention that

middle class children are more likely to be taught not only to believe in success, but also to be willing to take those steps that make achievement possible...to embrace the achievement value system which states that given the willingness to work hard, plan and make proper sacrifices, an individual should be able to manipulate his environment so as to assure eventual success.

Another approach to the study of upward mobility is offered by Kerckhoff (1976) in the "allocation Model" (as opposed to the socialization mechanisms assumed by the "Wisconsin model") of status attainment. Both the allocation and Wisconsin models have to do with social influences on achievement and status attainment. Whereas the Wisconsin Model emphasizes the influence of significant others on the development of goals that are instrumental in the attainment process, the allocation model emphasizes the importance of societal forces which "identify, select, process, classify and assign individuals according to externally imposed criteria." Another way of differentiating between the two is that in the Wisconsin or socialization model, one's attainments are determined by what one chooses to do and how well one does it within a social system that allows for free movement of all individuals. On the other hand, in the allocation model, the individual is relatively constrained by the social structure and one's attainments are determined by what one is permitted to do (Kerckhoff, 1976).

What these models of achievement seem to imply is that movement within the social system is a key and integral factor in fostering the attainment or upwardly mobile process. Within the social structure of one's
environment are many influences which can serve to either facilitate or
restrict the attainment process. Social-Structural influences which can
serve as "restrictors" to achievement may include the ascribed status



characteristics of socio-economic status, race, age, and sex, because they imply notions of discrimination, racism, sexism, and differential opportunities for success and achievement (Picou and Howard, 1978).

Other studies seem to confirm the notion that certain attitudes and values may also serve as facilitators or restrictors to the achievement process. Among these are the various dimensions of alienation and anomie, and the underlying notion that an individual's perceived control over his destiny plays a significant role in his ability to advance economically (Bullough, 1967; Coleman, 1964; Meier and Bell, 1959; Middleton, 1963; Strodtbeck, 1958; Walker, 1978).

The factors associated with the process of achievement and upward mobility appear to be numerous and complex. And as the literature suggests, while physical and mental characteristics of the individual may be important aspects of achievement-oriented behavior and consequently of upward mobility, social-structural and psychological factors may be of even greater significance.

Objectives

The objectives of this paper are (1) to examine the relationship between possession of selected demographic, resource, social, and value characteristics and economic situation and (2) to determine which traits most significantly affect one's ability to escape poverty.

Research Design

Data for this study were obtained through personal interviews from a stratified cross-sectional unrestricted sampling of household heads of 943 families representing nineteen primarily rural Middle Georgia Counties. 1

According to the 1970 Census of Population, sixty-four percent (64%) of the respondents lived in rural areas; the largest city represented in the sample had a population of 10,024.



Completed usuable schedules were obtained from 730 families or approximately 77 percent of those contacted. Families (heads) were stratified on the basis of their current economic situation and the determined economic situation of the respondent's (head's) parents and grandparents. Four groups emerged: (1) The always affluent group, which included families currently out of poverty for whom no evidence existed that either their parents or grandparents had ever experienced poverty for a prolonged period. (2) The escaped poverty group included families that were currently out of poverty, but evidence existed that both the parents and the grandparents of the respondent had experienced poverty for a prolonged period. (3) The became poverty group included families currently in poverty, but neither the parents nor the grandparents of the respondent showed traces of poverty histories (families in this category were poor mainly as a result of old age or illness). (4) The poverty cycle group included families currently in poverty for whom evidence existed that both the parents and grandparents of the respondent were also poverty-stricken. This analysis involves two sub-groups of the usable sample. They are: poverty cycle (112 families) and escaped poverty (116 families). This dichotomy is to be our principal dependent variable.

In addition to economic situation, the study design called for the measurement of selected physical, demographic, social, and cultural factors, as well as the measurement of selected attitudinal and value traits. In some instances it was possible to examine the relationship between economic situation and a particular characteristic by comparing the percentages of persons responding to a particular item. This was the case with race, educational and income levels. In other instances, however, it was more appropriate to compute composite measures, such as scales and indexes, for purposes of analysis. This was the case with housing conditions and all



of the factors that were included in the categories of attitudinal traits and value orientations, communication levels, and degree of social participation. Items included in the scales were chosen on the basis of face validity, factor analysis, and comparisons with other similar scales reported in the literature. Only the powerlessness scale, however, was subjected to the Guttman procedures and other tests of validity and reliability. The Likert technique of scoring was used for the items for which scales or indexes were computed and the score range was from 5 points for strongly agree to 1 point for strongly disagree. Item scores were summed to get a total scale score. The resulting scale score was divided to reflect respectively high, medium or low demostration of or belief in the particular characteristic.

The measure of association used to examine the relationships between variables was Kendall's Tau and the alpha level was .05.

Findings

Results of preliminary analysis of data are reported in Tables 1 and 2. A total of 23 characteristics were examined (Table 1). When the relationship between the selected characteristic and economic situation was tested, significant relationships were found for 15 of the 23 characteristics examined.

With regard to the immediate environment (demographic characteristics) of the respondents - how they live - the data indicate that persons who had escaped poverty lived in the community for a longer period of time, were in the middle and maturing age brackets, and were significantly better educated.

There were significant inverse relationships for the sex and age of the household head, and for the number of persons in the household who



were not members of the immediate family. Poverty cycle families were much more likely to have female headed households, and though not to an important degree, grown children who were also in poverty.

As would be expected, there was a direct relationship between level of income and economic situation as well as between index of housing conditions and economic situation. There was no significant relationship, however, between economic situation and the number of persons in the household who were employed.

In the area of social structure and processes, a significant relationship was found for only one of the three items tested - level of communication. There was a direct relationship between level of communication
and economic situation. Among the value orientations examined, a significant positive relationship was found for willingness to defer gratification,
and strong inverse relationships for feelings of alienation, powerlessness,
helplessness, and dependency.

In an effort to determine what characteristics or factors were most significantly associated with escape from poverty, in the more detailed analyses, we did not consider those characteristics which could be determined or influenced almost entirely by level of income since income was also the major determinant of economic situation. For example, one would normally expect persons with higher incomes to also score higher on the index of housing conditions. Therefore, more attention was devoted to those factors which were not so closely related to level of income. These factors included the value orientations related to motivation and achievement orientation, such as the willingness to work, to plan for the future, to defer gratification, as well as attitudinal factors which could facilitate or restrict the achievement process such as feelings of helplessness,



powerlessness, alienation, dependency, and the social-structural factors of race, sex, age, and education.

When race was controlled, significant inverse relationships were found for feelings of powerlessness, helplessness, and dependency among both blacks and whites, and for feelings of alienation among blacks. At the .05 alpha level, no significant relationships were found for willingness to plan for the future, to work or to defer gratification.

Significant inverse relationships were also found for the age categories of 26 to 40 and 41 to 60 for feelings of powerlessness and willingness to defer gratification, and for feelings of alienation for the age category 41 to 60.

When education was controlled, significant inverse relationships were found among persons with less than 12 years of schooling for feelings of alienation, and among persons with less than 8 years of school and some college for feelings of powerlessness. Controlling for sex, significant inverse relationships were found for both males and females for feelings of powerlessness and alienation and among males for willingness to defer gratification.

The data seem to suggest, therefore, that social-structural factors (race, age, sex, and education) and value orientations account for many of the differences between poverty cycle and escaped poverty families. Of the factors related to motivation and achievement orientations (willingness to work, plan for the future and defer gratification), a significant relationship with economic situation was found only for willingness to defer gratification.



Table 1.

Relationship between selected demographic, resource, social structure and value traits and economic situation.

		Situation	
•	Poverty Cycle		
Characteristics	N=112	N=116	Statistics
DEMOGRAPHIC			
Race			•
Black White	88.4 11.6	70.7 29.3	Ťau C = .1177 p<= .0000
TOTAL	100.0	100.0	
Sex of household head			
Male Female	44.6 55.4	77.6 22.4	Tau C =32933 p<= .0000
TOTAL	100.0	100.0	
Years lived in community			
Less than 10 years	41.7	25.2	Tau $C = .154$
10 to 20 years	14.8	20.7	p<= .0003
More than 20 years	43.5	54.1	
TOTAL	100.0	100.0	
Stability			
Stable_	95.5	94.8	Tau C = .007
Unstable	4.5	5.2	p<= .437
TOTAL	100.0	100.0	
Age of household head			
18 to 25 years	2.7	4.3	Tau $C =153$
26 to 40 years	18.8	22.6	p<= .0003
41 to 60 years	38.4	47.8	
Over 60 years old	40.2	25.2	
TOTAL	100.0	100.0	•
Educational level of household	head		
Less than 8 years	73.2	62.9	Tau C = .124
More than 8 but less than 12	24.1	25.9	p<= .0027
High school graduate	0.0	0.0	•
Some college	2.7	8.6	
College graduate	0.0	0.9	
Advanced study	0.0	1.7	
TOTAL	100.0	100.0	
·			

ERICe: Some totals may be off by .01 because of rounding

Table 1 cont'd

Relationship between selected demographic, resource, social structure and value traits and economic situation.

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Table 1 cont'd

Relationship between selected demographic, resource, social structure and value traits and economic situation.

	Econo	mic Situation	 1	
		le Escaped		
	N≐112	N=1		
Characteristics	<u>%</u>	<u> </u>		<u>Statistics</u>
Number of employed person household	ns in			
1 to 2 persons	94.9	85	5.9	Tau C = .085
3 to 4 persons	5.1	14	1.1	p<= .057
More than 4 persons	0.0	C	0.0	•
TOTAL	100.0	100	0.0	
Index of housing condition	nne			
Low	44.6	25	5.9	Tau C = .159
Medium	16.1		5.7	p<= .0002
High	39.3		7.4	p - 10001
TOTAL	100.0	100	0.0	
SOCIAL STRUCTURE AND PRO	CESSES			
Total communication inde	x			
Low	42.9		5.2	Tau C = .141
Medium	51.8		1.8	p<= .0008
High	5.4	19	9.0	
TOTAL	100.0	100	0.0	
Total social participation	on scale			
Low	40.2	Δf	5.6	Tau C =064
High	59.8	•	3.4	p<= .076
ii gii	33. 0	5 0	, . .	p = .070
TOTAL	100.0	100	0.0	-
Knowledge and use of sel agencies	ected public			
Low	33.0		3.4	ĩau C = .060
Medium	20.5		9.8	p<= .088
High	46.4	51	L .7	
TOTAL	100.0	100	0.0	
VALUE ORIENTATIONS	***			
Ecolings of alienstics				
Feelings of alienation Low	4.5	13	2.1	Tau C =263
Medium	35.7).5	p<= .0004
inga raili CDTC gh	59.8		7.4	μ · •υυυτ
TOTAL.	100.0	13 100	0.0	

Relationship between selected demographic, resource, social structure and value traits and economic situation.

	Economic	Situation	
	Poverty Cycle	Escaped Poverty	
Chausadaudadd -	N=112	N=116	<u> </u>
Characteristics	%	<u> </u>	Statistics
Feelings of powerlessness			
Low	24.1	41.4	Tau C =226
Medium	27.1	28.4	p<= .0000
High	48.8	30.2	
TOTAL	100.0	100.0	
Millingness to work			
Low	6.3	5.2	Tau C = .050
Medium	16.1	12.1	p<= .1305
High	77.7	82.8	
TOTAL	100.0	100.0	
Millingness to plan for the futu	ire		
Low	26.8	28.4	Tau $C =011$
Medium	67.9	65.5	p<= .404
High	5.4	6.0	
TOTAL	100.0	100.0	
willingness to defer gratificati	on		
Low	5.4	0.9	Tau $C = .100$
Medium	50.9	47.4	p<= .012
High	43.8	51.7	
TOTAL	100.0	100.0	
Feelings of helplessness			
Low	27.7	47.4	Tau C =203
Medium	53.6	39.7	p<= .0000
High	18.6	12.9	•
TOTAL	100.0	100.0	
Taalimaa af Jamas Jawas			
Feelings of dependency Low	17.9	41.4	Tau C =242
Medium	78.6	56.9	p<= .0000
High	3.6	1.7	F .0000
-	100.0	100 0	
TOTAL	100.0	100.0	



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Table 2.

The relationship between economic situation when race, age, sex and education were controlled.

Characteristics and Controls	Kendall's Tau C	Significance
RACE CONTROLLED	<u> </u>	<u> </u>
Alienation	·	
Black	114	.0115
White	083	N.S.
delplessnes s		
Black	171	.0000
White	185	.0333
Dependen cy		
Black	176	.0002
White	324	.0007
Powerlessness		
Black	173	.0003
White	300	.001
fillingness to plan for the future		
Black	.04518	N.S.
White	16297	N.S.
dillingness to work		
Black	.07326	N.S.
White	.01811	N.S.
dillingness to defer gratification		
Black	.04273	N.S.
White	.14486	N.S.

N.S. indicates that the relationship was not significant at the .05 level or less.



Table 2 cont'd

Characteristics and Controls	Kendall's Tau C	Significance
AGE CONTROLLED		
Powerlessness		
18-25	.06250	-
26-40	27162	.0035
41-60	 30 737	.0000
0ver 60	06282	N.S.
Alienation		
18-25	37500	•
26-40	04165	N.S.
41-60	32403	.0000
Over 60	.06355	N.S.
Willingness to defer gratification	·	•
18-25	.37500	-
26-40	.27524	.0032
41-60	. 14577	.0167
Over 60	08985	N.S.
EDUCATION CONTROLLED		
Powerlessness.		•
Less than 8 years	19496	.0002
8 to 12 years	05663	N.S.
Some college	42604	.0213
Alienation	•	•
Less than 8 years	-,10622	.0249
8 to 12 years	22899	.0059
Some college	. 21302	N.S.
Villingness to defer gratification		
Less than 8 years	.06793	N.S.
8 to 12 years	.05171	N.S.
Some college	. 23699	N.S.
SEX CONTROLLED		
Powerle: ess		
Male	26510	.0000
Fema`.	13068	.0357
lienation		
Male	18204	0007
Female .	11932	.0007 .0499
	11/36	.0433



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Table 2 cont'd

Characteristics and Controls	Kendall's Tau C	Significance
Willingness to defer gratification		
Male	.13286	.009 9
Female .	.00930	N.S.



Summary and Discussion

This study of poverty cycle and escaped poverty Middle Georgia families has yielded data which seem to suggest that it is the interaction of a combination of social-structural and psychological factors that most significantly account for the differences among persons escaping poverty and those with similar histories who remain in poverty. Preliminary analysis of the data revealed that factors which were most consistently associated with families escaping poverty were perceived control over events in their lives as measured by feelings of powerlessness and alienation, and the social-structural factors of race and education. These findings are also consistent with those of others who have conducted similar studies.

From this study, we were not able to determine which of the factors is without a doubt the most significant factor in determining one's ability to escape poverty. But we are not pursuing this problem in our continuing effort to better understand the linkages and relationships between these factors and economic situation as a matter of both practical and theoretical importance.

As a result of the preliminary findings that we have reported in this study, we intend to follow-up this study with more refined analyses, including multiple regression in combination with partial correlation methods, to further examine the relationship between the escape variable and social-structural and psychological factors.

One of the things that comes out very clearly in this study, and which seems relevant to the development of public policy on the poor, is that economic factors alone <u>do not</u> account for one's ability to escape poverty. The results of this study would seem to indicate that programs



designed to eliminate the consequences of long-term impoverishment should, in addition to providing economic assistance, also focus considerable attention on elimination of psychological and structural restrictors to achievement and upward mobility.



References

- Bullough, Bonnie
 1967 "Alienation in the Ghetto." American Journal of Sociology
 72(March): 469-478.
- Coleman, James
 1964 "Implications of the Findings on Alienation." American
 Journal of Sociology 70(July): 76-78.
- Haller, A. O. and A. Portes
 1973 "Status Attainment Processes." Sociology of Education
 46(Winter): 51-91.
- Kahl, Joseph. A. and James A. Davis
 1955 "A Comparison of Indexes of Socio-Economic Status." American
 Sociological Review 20(June): 317-325.
- Kerckhoff, Alan C.

 1974

 Ambition and Attainment: A Study of Four Samples of American
 Boys. Washington: American Sociological Association.
- 1976 "The Status Attainment Process: Socialization or Allocation?" Social Forces 55.2(December): 368-381.
- Kluckhohn, Florence
 1950 "Dominant and Substitute Profiles of Cultural Orientations:
 Their Significance for the Analysis of Social Stratification." Social Forces 28(May): 376-393.
- Kluckhohn, Florence and Fred L. Strodtbeck
 1961 <u>Variations in Value Orientations</u>. Evanston, Ill.: Row,
 Peterson.
- Meier, Dorothy and Wendell Bell
 1959 "Anomia and Differential Access to the Achievement of Life
 Goals." American Sociological Review 24(April): 189-202.
- Middleton, Russell
 1963 "Alienation, Race and Education." American Sociological
 Review 28(December): 973-977.
- Mizruchi, Ephriam H.
 1964 Success and Opportunity. New York: Free Press of Glencoe.
- Parsons, Talcott
 1940 "An Analytical Approach to the Theory of Social Stratification." American Journal of Sociology XLV(May): 841-862.



- 1951 The Social System. Glencoe, Ill.: Free Press.
- Picou, J. Steven and William G. Howard

 "Determinants of Career Orientations and Early Educational Attainments: Evaluation of a Causal Model in Arthur G.

 Cosby and Ivan Charner (eds.) Education and Work in Rural America: The Social Context of Early Career Decision and Achievement. Houston, Texas: Stafford-Lowdon.
- Rosen, Bernard C.
 1956 "The Achievement Syndrome." American Sociological Review 21(April): 203-211.
- 1959 "Race, Ethnicity and the Achievement Syndrome." American Sociological Review 24(February): 47-61.
- "Family Structure and Achievement Motivation," in Jack Roach and Orville Gureslin (eds.) Social Stratification in the United States. Englewood Cliffs, N. J.: Prentice-Hall
- Sewell, W. H., A. O. Haller and G. W. Ohlendorf
 1970 "The Education and Early Occupational Attainment Process:
 Replications and Revisions." American Sociological Review
 35(December): 1014-1027.
- Strodtbeck, Fred L.

 1958 "Family Interaction, Values and Achievement," in David C.

 McClelland, et al., <u>Talent and Society</u>. Princeton, N. J.:

 Aan Nostrand.
- Walker, Melvin E. and E. Yvonne Beauford
 1978 "Alienation and Poverty." <u>Journal of Social and Behavioral</u>
 Sciences 24.2(Spring): 47-57.

