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Human Cesspools by Design?: The Inherent Contradiction in Public Housing

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Human Cesspools by Design?

The Inherent Contradiction in Public Housing

" the 'shoddy shiftlessness', the broken windows, the missing light bulbs, the plaster cracking from the walls, the pilfered hardware, the cold, draughty corridors, the doors sagging on the hinges, the acrid smell of sweat and cabbage, the ragged children, the plaintive women, the playgrounds that are seas of muddy clay, the bruised and battered trees, the ragged clumps of grass, the planned absence of art, beauty or taste, the gigantic masses of brick, of concrete, of asphalt, the inhuman genius with which our know how has been perverted to create human cesspools worse than those of yesterday.
(Mayer, 1978, The Builders p184)

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Sociology Honors Thesis
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"Society may have contributed to the victimization of project residents by setting off their dwellings, stigmatizing them with ugliness; saying with every status symbol available in the architectural language of our culture, that living here is falling short of the human state. However architecture is not just a matter of style, image and comfort. Architecture can create encounter and prevent it. Certain kinds of space and spatial layout favor the clandestine activities of criminals. An architect, armed with some understanding of the structure of criminal encounter, can simply avoid providing the space which supports it." (Newman, 1972, p. 12)

Acknowledgments

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they happen to be.

CONTENTS

Many architects and planners neglect the complex relationship between spatial organization and the needs of a particular group. Following notions of Modernism as prescribed by architects such as Le Corbusier and Gropius, they believe instead in architectural determinism or the idea that architecture should dictate the social relationships of the residents through the design itself. This paper will attempt to demonstrate that the "effective environment" or the totality of variables influencing behavior, such as crime and self perception, includes both the physical design and the social factors. The design and the social factors can not be separated from one another. Instead, we must realize that the two are intertwined. Design and social factors are related insofar as the physical environment can influence the development or the expression of certain attitudes or behaviors, as well influence social relationships; (Broady, 1966 and Gutman, 1975) yet, can not determine them. We can find evidence of this interaction of design and social factors in Housing Projects such as Pruitt Igoe.

Using data from the 1990 General Social Survey (GSS) our analysis will probe attitudinal differences between the socio-economic classes that are in part shaped by their environment. It will be demonstrated that the poor and the middle class have different attitudes. The poor tend to be less trustful and more withdrawn as a result.

Introduction

When one reflects on the image of public housing in America, s/he is most likely to conjure images of social malaise, physical decay, filth, and criminals. Public housing is often viewed as a generator of crime and social pathology. Early urban sociologists, influenced by the Chicago School of human ecology, were characterized by determinist notions concerning the physical environment. The idea of architectural determinism or the belief that changes in the environment will effect change in human behavior follows from this. Sociologists postulated that high residential density and dilapidated high-rise buildings were ecologically correlated with crime and poverty; various forms of social disorder and deviance, were presented as the sources of these problems. (Farly, 1982; Michelson, 1976)

Architectural Determinism

Architectural determinism asserts that physical design directly impacts and determines how residents will behave. This is true to the extent that social relationships or whom one meets is affected by physical contact. (Gans 1968; Broady 1968; in Gutman 1972) However, supporters of architectural determinism naively believe human behavior is simply molded solely by the physical environment. (Broady in Gutman, 1972) Moreover, determinists argue that the influence of design is always advantageous to the residents.

Renowned architect Philip Johnson once said "We really believed, in a quasi-religious sense, in the perfectibility of human nature, in the role of architecture as a weapon of social reform." (in Coleman 1990, p. 3) Architecture, in large scale public housing, became preventive medicine. Architectural determinists whole heartedly believed that design could bring salvation to the poor through modern design principles.

In an effort to assert architectural determinism, planners and architects believed that if they eliminated everything the previous slums possessed, such as stoops for residents to sit on, direct access of the dwelling to street corners and the street, an antidote for social malaise would be formulated. The street was eliminated to evade noise, fumes, and danger that it had presented in slum areas. By providing inhabitants with more natural light and air, as well as sprawling green, open grounds, reformers believed that delinquency and immorality would be abated and residents would be compelled to adopt middle class lifestyles. (Franck and Mostoller 1995) Thus,

modernist physical design of projects would allow residents to transcend their slum existence and live better, happier, and more productive lives.

We assume the anti-architectural determinist; we agree with Broady in his assertion that

> "architectural design like music to a film, is complementary to human activity; it does not shape it. Architecture, therefore, has no kind of magic by which men can be redeemed or society transformed." (Broady in Gutman 1972, p. 183)

We do not deny that the environment impacts behavior, we instead deny the assumption that the environment is created uniquely by buildings and physical design; rather environment is comprised by both physical and social reality. We agree with the assertion that the physical environment is relevant to behavior insofar as the environment affects the social system and culture of the residents. (Gans 1968) and Broady 1968)

Gans (1968) theorized that there were two types of environments: potential and effective. Broady (in Gutman, 1972) elaborates on Gan's theory:

> "The physical form is only a potential environment[1] since it simply provides possibilities or clues for social behavior. The effective- or total environment is the product of those physical patterns plus the behavior of people who use them, and that will vary according to their social background and their way of life: to what sociologists, in their technical language call , social structure and culture. (1972, p 181)

A significantly large body of knowledge has followed Gan's (1968) and Broady's (1972) theories on architecture and sociology. The literature on the effect of the design of public housing and crime behavior stems from these theoretical works. There is a general agreement in the literature that there is a relationship between environment and crime. The *effective* environment

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[1] Broady acknowledges that his ideas of architectural determinism were shaped by Gans (see Gutman 1972 introduction to Broady's piece "Social Theory in Architectural Design) Broady "borrows" the terms potential and effective environment from Gans as articulated in *People and Plans* (1968)

is composed of physical design characteristics and social factors which together can potentially deter or enhance criminal activity. Physical design has the ability to facilitate the detection of criminal offenders and conversely to hide them through "built-in" architectural characteristics. These design characteristics also can effect the social behavior of residents in ways that impact crime. The physical aspects of a housing project can create social factors such as the lack of social cohesion, organization and informal groups, which can help deter crime through action or facilitate crime through apathy. Design also can influence residents' perceptions of self and the way in which they view society at large, as well as how other people view them.

The fact that architecture does have some impact on social interaction and community formation cannot disputed. A building, or a group of buildings within a project, has the capacity to be a communications network among residents. The spatial organization of rooms, walls, doors, streets and entranceways do in fact affect people's ability to familiarize themselves with one another, while being able to distinguish neighbors from strangers. These spatial arrangements can in fact provide or prevent opportunities for communication between residents. (Gutman, 1972, Meehan, 1972) Festinger (1951) previously wrote that physical design and spatial organization have the power to generate community. He wrote that living in a house, or in this case a housing project, entails involuntary membership in certain social groups.

> "The decisions of the architect in designing the house, in laying out the site plan for a group of houses, and in deciding who will live in the houses determine to a large extent the nature of the group memberships which will be imposed upon residents of the houses." (Festinger 1951, p. 125)

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High-rise public housing projects of the 1960's and 1970's, projects of modernist thought, used architectural determinism in deciding what model of design to implement for the poor. However, Gans (1968) attests that it cannot be assumed that a particular architectural design will have the same effect on all income/social groups. By examining the demise of Pruitt Igoe, it can be postulated that the needs and circumstances of a particular group should be addressed in the physical design of a building. Pruitt Igoe's design catered to middle class needs, thus, the physical layout was unsuitable for low income minorities. The design of Pruitt Igoe did not facilitate community as was intended and instead facilitated high crime rates through the lack of territoriality and surveillance opportunities.

Methodology

The data for this analysis are derived from the 1990 National Opinion Research Center's General Social Survey. The sample of 1372 respondents includes 1150 white respondents and 222 minority/non-white respondents. Our subsample includes 1363 respondents including 179 poor or low income respondents and 1182 non-poor respondents. The primary focus of the data analysis will be effect of Socio-economic status on attitudinal variants. The data analysis can be used to determine causality between poverty with high levels of anomie, depression, and withdrawal, as well as high levels of negative attitudes about the self, his/her life and surroundings, and others, increased fear, and increased victimization between the poor and the non-poor segments of the United States' population. The secondary focus of our

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data analysis is the relationship of architectural type and attitudinal variants.

What predictions concerning the attitudes of the poor versus the non-poor can be made?. It is reasonable to expect that attitudes such as trust in mankind, anomie, satisfaction variables, feelings of happiness, depression and withdrawal will be contingent upon Socio-economic status (independent variable). The poor are more prone to feel alienated from the larger middle class society, as well as from their fellow man. It is my theory that the underclass respondents will have significantly greater feelings of anomie (H1), depression (H2), and alienation/withdrawal (H3), more intense feelings of fear (H4), distrust (H5), more inclined to believe that people are not helpful (H6), are significantly more unhappy. Further, we hypothesize that there is a significant relationship between socio-economic status attitudes concerning societal difference; we expect the poor to agree with the following statements: "Only if income difference is high enough is there incentive to work" (H7); "personal income shouldn't be determined by work rather all should get what they need" (H8); "one of the biggest problems is that we don't give everyone an equal chance" (H9). I also posit that the poor will be significantly less satisfied with: their lives (H10), their family life (H11), their cities (H12), their children's neighborhood (H13), their children's housing (H13). There also is expected to be causality between the opinion that government expenditure on housing for families with children should be increased (H14) are more likely than those above the poverty line to have a negative feelings about their fellow man. Further, I also hypothesize that the poor will have an increased rate of victimization (H15- four questions posed: victim of

burglary, robbery, physical attack or gun attack.) I postulate that these conditions reflect the lack of community and social cohesion that contribute to crime rates in housing projects. Additionally, compared to the non-poor segment of society, the poor have less education (H16), lower instance of marriage (H17), and higher unemployment rates (H18) - each of which contribute to instability. Analyzing race as an independent variable we hypothesize that non-whites will have significantly higher levels of anomie (H19), withdrawal (H20), and depression (H21), as compared to whites. Race also is utilized as a dependent variable in order to ascertain whether there a relationship between socio-economic status and race (H22); we theorize that non-whites will be significantly more likely than whites to belong to the poor segment of society. Further, we believe that there will be a significant difference among whites in regards to socio-economic status and anomie (H23), depression (H24) , and withdrawal (H25). We use architectural type as both a dependent and a secondary independent variable. In examining architectural type as a dependent variable , we hypothesize that socio-economic status significantly impacts an individual's dwelling type (H26). We employ architectural type as an independent variable to assess a relationship between architectural type and levels of anomie (H27), depression (H28), and withdrawal (H29). Furthermore, we expect that poor high-rise dwellers, (independent variable)will have higher levels of anomie (H30), depression (H31), and withdrawal (H32) then the noon-poor. Using Analysis of Variance, we also surmise that the poor will have greater mean levels of anomie (H33), withdrawal (H34) and depression (H35)

Examining these attitudinal differences is an integral portion of this thesis insofar as explicating the differences that underlie attitudes which give form to personality and lifestyle reveal that architects and planners must take into account these differences in residential design. Essentially, due to these attitudinal differences and their effects, it is our contention, that the literature can be supported; high-rise public housing developments are not sensitive to the needs of the underclass. Rather than assuming that middle class housing styles will be advantageous to the poor, architects must instead consider the underclass' needs, attitudes and lifestyles in their designs.

Architectural type, coded into three categories: Single family house, low-rise apartment building (3 stories or less), and high-rise apartment building (3 stories or more), is used as a both a dependent and a secondary independent variable in the bivariate analysis. ; however, crosstabulations assessing dwelling type and attitudes controlled for by socio-economic status can not be discussed due to the small sample size of poor high-rise dwellers. (See Appendices)

Because for the most part the data on dwelling/architectural type did not accurately portray public housing dwellers, we could not use this data as our principal independent variable; the sample provided inaccurate, non-significant results attributable to the fact that poor high-rise dwellers, had a mere sample size of 9. In recognizing the limitation of sample size, we also must concede that the results of our analyses may not be accurate. (Babbie and Halley 1995; Nourusis 1995)

The independent variable Poverty, recoded into two categories: poor and non-poor, was used to determine the impact of socio-economic class on attitudes. The categories borderline and poor where merged to form the category poor because the majority of public housing residents are either on or near the poverty line. (Demerath 1962) Further, race also was used to determine attitudes. Race was recoded into a dichotomous variable; respondents are classified in two groups white and non-white minority. This variable was recoded collapsing the categories black and other into one group, non-white/minority. Non-white/minority was chosen as a variable because 63% of public housing residents belong to the non-white/minority category. (Public Housing Data Book in *Public Housing Brief*, 1996.)

We measure respondents' level of anomie through the construction of a an additive index of three anomie variables: "The lot of the average man is getting worse."; "It is unfair to bring a child into this world."; and "public officials are disinterested in the problems of the average man." For the three items a 1 indicated agreement and a 2 indicated disagreement. The possible range of scores for the index fell between 3 and 6. *Low* scores demonstrated *high* levels of anomie, while *high* scores indicated *low* levels of anomie. The cronbach's alpha for the measurement of anomie was .5752 indicating that the three variables comprising the index were strongly correlated and the index was reliable. (Noursis, 1995)

A second additive index was constructed to measure the degree to which respondents have withdrawn from the larger society. This index was constructed from the following three variables: "In general do most people try to be helpful or do they just look out for themselves?."; "Do you think most

people would take advantage of you if they had the opportunity?"; "Generally speaking, would you say that most people can be trusted?" For the three items a 1 indicated agreement, a 2 indicated that the respondents believed the situation depended on the person, and a 3 indicated disagreement. The possible range of scores for the index fell between 3 and 9. This index was then recoded by collapsing values 3-5 into Least Withdrawn, which was assigned a value of one; 6-7, assigned a value of two, was merged into moderately withdrawn; 8-9 , assigned a value of 3, was combined to form the category of most withdrawn. *Low* scores established *low* levels of withdrawal, while *high* scores implied *high* levels of withdrawal. The cronbach's alpha for this index was .6311 indicating that the scale is reliable and that a strong relationship exists among the variables comprising the index. (Noursis, 1995).

Depression was assessed through the creation an additive index of two variables: "Taken all together, how would you say things are these days?" and "Generally is life: exciting, routine or dull?". The variables were coded 1-3, 1 being the most positive and 3 being the least positive statement. The index is coded 2-6, with 2 being the least depressive, and 6 being the most depressive. The cronbach's alpha for this measure of depression was .5170 indicating scale reliability, as well as a strong correlation between index variables (Norusis, 1995).

To examine our hypotheses, we began by executing a series of bivariate crosstabulations to demonstrate differences between the socio-economic status and attitudinal variables. In order to assess attitudinal differences between the poor and non-poor (independent variable) the following

crosstabulations were performed: anomie index; withdrawal index; depression (additionally, race was controlled for in separate crosstaculations); attitudes concerning trust; faith or how helpful respondents view their fellow man to be; whether or not they believed people were fair; whether or not the individual was happy; the condition of individual's life; satisfaction with city, marriage, neighborhood, government spending for child housing, the condition of child housing and neighborhood; attitudes concerning societal difference (Only if income difference is large enough there is to work; Personal income shouldn't be determined by work- all should get what they need; One of the biggest problems is that we don't give all equal chance). Bivarate crosstabulations were used to demonstrate differences in regards to architectural type and degree of anomie, withdrawal, and depression. A crosstabulation selecting for high-rise dwellers was employed to compare the anomie, depression of withdrawal levels of the poor and non-poor. Crosstabulations also were employed to demonstrate differences in socioeconomic status and in fear and victimization, as well as in marital and employment statuses, and educational attainment.

During the final stage of the analysis, we utilize a series of Analysis of Variances. Analysis of Variance is used to compare average anomie, withdrawal and depression levels of the two Socio-economic groups. The analysis of variance allows us to ascertain whether or not there is a significant relationship between socio-economic status and the mean levels of anomie, withdrawal and depression.

Architecture

The History of Modernism

Modernism was born in Europe with the theories of Auguste Perret, who envisioned that by adapting skyscrapers set in park for residential inhabitation, housing problems could be solved. (Plunz 1990) Although Perret conceptualized the tower in the park, it was Le Corbusier, his apprentice, who was given the credit for this "new urban form". (Rybczynski 1993) In 1922, L'Esprit Nouveau, a magazine published by Le Corbusier, published his "Ville-Tours", a modernist interpretation of Perret's proposals for high-rise living. In 1925 he proposed the Plan Voisin for Paris. This called for the leveling of the historic Marais quarter and the construction of enormous X-shaped towers. (Sennett 1990) The Ville Contemporaine, published in 1927, further elaborated on Le Corbusier's ideas of modernism. His plans called for the elimination of the traditional urban element of the street. Gargantuan skyscrapers were to be placed at wide intervals in unbounded park space as to fulfill the socialist goal of providing every resident equal access to "sun, space, and green." (Plunz 1990)

Le Corbusier's dream city was called Radiant City; the vertical city would retain high densities by housing 1200 inhabitants per acre in 24 story high-rise buildings, which would allow for 95% of the ground to remain open. (Jacobs 1961; Coleman 1990) Each high-rise apartment block, called "Unites", would essentially be a neighborhood within itself housing 2,700 residents. (Fishman 1977) Le Corbusier strongly believed that shared buildings and grounds would promote a stellar community and social life.

He also believed, as did his proponents, that the environment could determine behavior. He maintained that if the environment were changed in the ways he prescribed, than human behavior and general satisfaction and happiness levels of the inhabitants would increase. (Fishman 1977; Coleman 1990)

During the 1920's the modernist idea of the "towers in the park" also was adopted by Bauhaus German Architects: Marcel Breuer, Walter Gropius, and Ludwig Hilbersheimer. These men proposed "slab blocks" or high-rise elevator buildings rectangular in form be dispersed throughout a green open area. Breuer was the first to take this idea of the slab block and apply it to low cost housing around 1924. Gropius, expanded on the work of Breuer's low rent towers. In 1930, he recommended that buildings cover approximately 15% of the land area. (Plunz 1990, p. 189)

The combined work of Le Corbusier and Bauhaus Architects "produced a formidable polemic, both social and aesthetic, visual and verbal, which conformed perfectly to the economic realities confronting housing design in Europe and America." (Plunz 1990, p. 190) The slab block in the park was destined to become a major urban building type of the twentieth century. It seemed to many that this form of housing could be the perfect cure for urban malaise.

Application of Modernism to Public Housing Projects

Architects and planners in the 20th century maintained that high-rise tower blocks were ideal for public housing developments. They argued that the high-rise occupied less ground, and provided its inhabitants with the

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unobstructed views and adequate sun light, both of which were absent in traditional slum areas. Rybczynski (1993) alleges that the Housing Authorities in the 1950's began to adopt Modernist architecture for the same reason that commercial developers preferred them- the cost.

> "The truth is that standardized, stripped-down, and undecorated tall buildings can be erected quickly and inexpensively. It also is likely that the plain architecture suited the puritan view of many Americans- and certainly of the housing reformers- who felt that social (public) housing should not be fancied." (Rybczynski 1993, p. 85)

Not only did the housing authority think that high-rise projects were "a visible expression of economic efficiency" (Wright 1981, p. 236) but also an expression of social control. Adhering to the idea of architectural determinism, they believed that the large projects would "discourage regression to slum life". (James Ford in Wright 1981, p. 235)

In 1954, the William Green homes, an extension to the Francis Cabrini Homes in Chicago, became the first public housing project in the United States to employ the modernist style. (Rybczynski 1993) The Francis Cabrini Homes erected in 1941 consisted of 600 units in two and three story brick buildings. The total area occupied was a mere 16 acres and each dwelling had an entrance on the street. In 1954, the project was expanded to 50 acres and 1900 additional units were added in fifteen high-rise buildings, ten and nineteen stories high; in 1962 another eight 15- 16 story buildings were added to the development. Cabrini-Green became a prototype for "how municipal authorities would rehabilitate deteriorated inner-city real estate and provide large amounts of public housing." (Rybczynski 1993, p. 84)

The modernist solution to housing in America seemed simple; implement the process of urban renewal to wipe out "blighted", unsightly

slum areas and replace them with tall slab buildings set in sprawling park-land created by closing off streets to create immense superblocks. This resolution was applied to St. Louis' housing problem in 1955 when Pruitt Igoe, a large scale public housing project, was erected. Throughout this paper we will mention Pruitt Igoe to show that "the modern movement in architecture has created some very distinguishable behavioral sinks, where architectural theory has had catastrophic effects on larger groups of people forced to live out the theory." (Helmer in Helmer and Eddington 1973) In short, we will attempt to demonstrate that the application of modernist ideals of architectural determinism to public housing developments proved to be a failure.

Introduction to Concept of Defensible Space[2]

The concept of Defensible space, devised by Oscar Newman, is used to describe a residential environment, such as a housing project, whose physical characteristics: building layout, site plan, function to:

> "release the latent sense of territoriality and community among inhabitants so as to allow these traits to be translated into inhabitants' assumption of responsibility for preserving a safe and well maintained living environment." (Newman 1976, p. 4)

However, a Housing project is only defensible when residents chose to adhere to this intended role, a choice which is connected to the buildings' design; defensible space is a sociophysical phenomenon. (Newman 1972; 1976; 1980; 1996; Merry, 1981, 1981b)

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[2] Detailed informtion about implementation and prototypes of Defensible Space are in the Appendices.

The Newman's (1972) study looked at isolated groups of properly functioning apartments in Pruitt Igoe that were clean, safe and well tended. These "pockets" only were found where two families shared a landing, as opposed to areas where 20 families shared a corridor and 150 families shared a lobby, an elevator, and stairs. He found that in these areas residents maintained a protective attitude toward public corridor space outside their apartments. (Newman 1972; 1995; 1996) By studying comparing the two areas in Pruitt Igoe, Newman was able to isolate physical mechanisms that enhance residents' perception of security by allowing the residents to become the chief agents in assuring their own security. (Newman 1972, 1971, 1995, 1996; Dunworth and Saiger 1994) These mechanisms include: type of building prototype, grouping and positioning of the buildings and the individual apartment units, positioning of paths within the project, windows, stairwells, doors and elevators. (Newman, 1973)

Newman (1972; 1971; 197; 1996) isolates four categories of architectural mechanisms[3], which independently and in concert significantly contribute to the creation of a safe living environment: defined areas controlled by specific residents or groups of residents. The effect is the adoption of attitudes of territoriality by residents or the idea that the space has meaning for residents, thereby, allowing the environment to be intensively used and monitored by residents. Architectural mechanisms which increase natural surveillance opportunities of exterior and interior public spaces; architectural mechanisms which enhance the safety of adjacent areas through the strategic location of intensively used communal facilities;

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[3] An indepth discussion of these mechanisms will be given in other portions of the paper.

through the use of sensible building materials and through architectural design and site planning the architect can reduce the stigma of peculiarity that allows society to sense the vulnerability, isolation and stigma of housing projects and their inhabitants. (Newman, 1973) These mechanisms are the strongest deterrents to criminal and vandal activity in that through attitudes of territoriality and policing, both residents and non-residents will no longer feel anonymous and consequently, will feel as though they will be easily recognized as friend or foe.

Architecture Review

The literature on public housing and crime begins with Wood (1961). She writes that the physical design of public housing minimizes communication and contact between residents, thus eliminating the chances for community within the project, while decreasing the probability of trust forming among residents. She concluded that the physical design was in part responsible for the perceived powerlessness residents felt over their environment.

Jane Jacobs (1961) agrees that crime and design of the projects are related to one another. She originates the idea that surveillance and continuous and multiple uses of the streets must be employed to maintain safe neighborhoods, and in our case safe housing projects. Jacobs writes that natural surveillance through "eyes on the street" can deter crime. A criminal is less likely to commit a crime if there is a high risk of detection. The more people on the street to observe the crime reduces the probability that a crime will occur. (Jacobs 1961)

Oscar Newman (1972; 1980) used the ideas of Wood (1961) and Jacobs (1961) in his study of crime in housing projects. Newman pioneered the idea of defensible space or a social fabric that protects itself through architectural design. Defensible Space explains the correlation of crime with architectural design through it's assertion that the physical design of residential areas encourages people to extend the social area of territoriality outside the individual dwelling into the public spaces of the building itself. (Newman 1972; 1973; 1980; 1995; 1996; Merry 1981a; 1981b; Brill 1975; Cisneros 1995; 1995b; Taylor, Gottfredson, and Brower 1980; Comerio 1981; Taylor and Harrell 1996)

Newman (1972) found that the number of units sharing a common entry is related to crime rate. The greater the number of households using a lobby, an entry, a corridor, and an elevator increases anonymity and decreases use of public space and the possibility that residents will identify strongly with area outside the unit; thus, increasing the chance that crimes will occur undetected. (Newman, 1972, 1973, 1995, 1996; Cooper and Sarkissian 1980)

Project size, as measured by the number of units, and population density are positively correlated with crime. Newman (1996) found that the larger the concentration of low-income families, the more residents felt isolated from the larger society. Often times the residents overestimated the differences which led to the stigmatization of residents.

Newman (1973) maintains that physical design has the capacity to influence the perception of a project's uniqueness, isolation, and stigma[4]- all of which make it vulnerable to crime. Aesthetics of public housing reveal it to be housing for the poor. Exterior facades are sterile, monotonous and dehumanizing. (Gans 1970) Newman asserts that through the judicious use of building materials, architectural composition and site planning the perception of peculiarity can be reduced. He maintains that the introduction of a large grouping (10-30) of high-rise buildings of distinct height and style into the pre-existing urban fabric calls attention to them as public housing developments. Newman writes that this differentiation contributes in a negative way to single out the project and the residents; consequently, the project will be stigmatized and its inhabitants victimized and chastised. Stigmatization by the physical environment is accompanied by apathy toward one's home and neighbors, which consequently leads to neglect and withdrawal. (Newman 1995) Unable to hide their identities as project dwellers, "they overreact and treat their dwellings as prisoners treat penal institutions in which they are housed. " (Newman 1973, p. 85) Residents show no concern for the maintenance and care of the buildings, further many have no inclination to decorate their apartments.

Placement of projects within superblocks further revealed them to be housing for the poor. Projects were easily recognizable by the layout of buildings within superblocks. These buildings were not positioned in relation to the surrounding streets; most project buildings were not aligned with the street and instead faced inward. This type of building organization became

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[4] This is a discussion of physical stigma of the project. Naturally, we can not separate the social from the

identified with housing projects. (Rowe 1993) The creation of superblocks, stigmatized and isolated residents in that it further separated them from the larger community.

Newman (1972; 1973; 1976; 1980; 1995; 1996; 1997; 1998), Rouse and Rubenstein (1978), Farley (1982) , Meehan (1975; 1979),Yancey (1972), Roche and Burby (1988), Coleman (1990) and Franck and Mosteller (1995) argue that the design of high-rise public housing produces opportunities for criminals to engage in illicit activities without being discovered. The physical environment shapes the offenders' perceptions about a particular crime site, their evaluations of the risks in the area, and allows them to gauge surveillance opportunities. Newman, like Jacobs (1961), assumed that criminals behave with some degree of rationality; criminals chose sites that offer great rewards with little chance of detection. (Cisneros 1995). In order to deter crime, spaces should convey to intruders that upon entrance onto the grounds or into the building they will be detected. (Newman 1972; Newman and Franck 1980) Opportunities to commit crimes manifest themselves five ways: First, there is little or no delineation of private or semi-private space outside the unit; thus, residents seldom assume responsibility for surveillance or upkeep of these areas. They do not regard these public spaces as their own territory and cannot distinguish who belongs in that space and who does not. Second, natural surveillance opportunities are stunted by the architecture of the high rise housing; thereby increasing the likelihood that crimes will not be detected. Third, in high rise projects the distance from the grounds and the lack of surveillance opportunities make parental supervision

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design factors, however, a discussion of the creation of social stigma will be presented later in the paper.

of children playing outdoors difficult. Fourth, the absence of doormen to restrict access to the building, the frequent inadequacy of locks on entrances, and the blocking open of doors to permit children to get in and out of the building allows anyone to enter the building contribute to crime rates. Further, windows that are too low or too close to neighboring dwellings, and the absence of electronic surveillance equipment such as burglar alarms can also be cited as contributors to crime. Fifth, in high-rise buildings the presence of long corridors and multiple stairwells allows intruders the opportunity to freely wander the building without detection, as well as provides multiple routes of escape for criminals when detected. (Farley 1982; Newman 1972; 1976; 1980; 1979; 1995; 1996; 1997; 1998; Brill 1973; Rouse and Rubenstein 1978; Huth 1981; Comerio 1981; Jacobs 1961; Coleman 1990; Taylor and Harrell 1996)

Newman and Franck (1980) and Jacobs (1961) argue that the juxtaposition of projects with institutional and commercial centers of activity allow for a more secure living environment through increased surveillance opportunities, thereby deterring crime. Jacobs (1961) writes that projects must be woven into the urban fabric. She asserts that new streets must be built through projects in order to incorporate the project into the city. She suggests that the streets be laid out in small blocks and have small parks, sports and play areas located on them. These small streets must have some connection to the streets outside the project's boarders. Jacobs (1961) also suggests that the streets near project should contain commercial areas simply because a single function residential area is "the cause(s) of deadness, danger and plain inconvenience." (Jacobs 1961, p. 395)

Studies executed by Newman (1972) demonstrate that large projects situated on superblocks have a higher crime rate than those with city streets running through them. (Newman 1972; 1980; 1995; Cooper Marcus and Sarkissian 1986) He found that the absence of streets dissecting the superblock makes residents more vulnerable to both crime, as well as social isolation from the community. (Newman 1972; 1973; 1980; 1995) Concurring with Jacobs (1961), Newman (1972) writes that streets are of the utmost importance in that their constant flow of vehicular and pedestrian traffic provides the circulation in and around public housing, necessary to reduce crime through increased chances of detection and/or apprehension.

Territoriality

Researchers agree that the physical environment has the capacity to create zones of influence. The lack of this feeling of proprietary interest or "territoriality" among inhabitants is believed to facilitate high crime rates in public housing. (Newman 1972; 1980; 1995; 1996; 1997; 1998; Newman and Franck 1980; Rouse and Rubenstein 1978; Merry 1981; 1981b; Cisneros 1995; 1996; Taylor and Harrell 1996) By proprietary interest we are referring to attitudes which compel residents to take a "stake" in his/her environment, identify with it and willingly attempt to improve the quality of life there.

Defensible space theory posits that residents' control of public space directly outside their apartments is a major contributing factor to the link between physical design and crime. The degree to which residents use the area adjacent to their apartments is contingent upon the number of

apartments sharing this area. (Newman 1972; 1980; 1973; 1971; 1996; Rainwater 1966; Yancey 1971)

Territoriality can be "built" into an environment through the clustering of apartments into groups of 6-9 which share the same vertical access to an entry and 2-4 apartments to the horizontal corridor. This facilitates the creation of small social groups. Residents begin to feel a sort of responsibility or pride in their situation.; thus, have incentive to care for the public areas outside their individual apartments. Additionally, they become familiar with who belongs and who does not, while increasing surveillance opportunities. (Newman 1972 and Newman and Franck 1980) In his study of office complexes, Wells (1965) found where departments were broken down into smaller sections located close to one another informal group formation was facilitated more easily than in an open office setting. He found that a cohesive community could be formed through passive interactions facilitated through the use a common entry and circulation space.

Jacobs (1961) , Newman (1992; 1976; 1980; 1995; 1996; 1997; 1998), Brill (1977), Rouse and Rubenstein (1978), Struyk (1980), and Taylor and Haskell (1996) assert that the existence of "unassigned" open space or public space around buildings that lack defined areas and zones of transition are major contributors to crime. Newman (1972) and Newman and Franck (1980) maintain that physical design barriers either real (fences, gates) or symbolic (shrubbery, change in concrete texture) inform individuals that they are passing from a public to a private space. By law all housing projects are open to the public. Entrance into private spaces needs justification and is easily detected, while access to public spaces needs no

justification. Without clearly defined areas, there is little control over public access to the project. This lack of defined areas leads to a lack of satisfying, stimulating areas where activity could take place; thereby, facilitating increased vandalism of these areas due to the lack of territoriality. (Rouse and Rubenstein 1978)

An example of how increased territoriality decreases crime can be found in Pruitt Igoe. When a play ground facility was being erected adjacent to a building, a fence was placed around the construction site to deter vandalism and robbery,. After the playground was completed residents requested that the fence be left in place. During the next six months crime and vandalism rates in this building dropped significantly. In fact there was 80% less crime in this building compared to the overall project. (Newman 1972) The crime reduction can be attributed to an increased sense of territorially derived from the fence. Residents began to clean up the public spaces of their building; they swept the corridors, replaced broken lights and picked up litter. The vacancy rate of this building varied from 2-5% as compared to a rate of 70% in other buildings. The fence served as a "real" barrier informing criminals that they were not welcomed guests in the apartment complex. (Newman and Franck 1989; Newman 1972)

Surveillance

Jacobs (1961) claims that most crime in public housing occurs in areas with low visibility: the lobbies, halls, elevators and firestairs. Increasing territoriality from the creation of smaller halls reduces the number of people to a single entry. This coupled with the positioning of the windows with the

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stairs and corridors allows for observation of both the interior and exterior of the project; thereby, reducing crime. (Newman 1972, Cisneros 1995) Buildings like Pruitt Igoe had little surveillance opportunities. It's buildings were designed to look in on themselves; thereby, preventing residents from looking out onto the street and at the same time preventing passerby's from looking inward. As a result the street lacked what Jacobs (1961) calls "eyes on the street" or mechanisms of surveillance, thereby, increasing the occurrence of crime on the street. In Pruitt Igoe, residents had to leave the relative safety of the street to venture onto the poorly lit project grounds, which contained many blind, sharp turns and winding paths, which made them more vulnerable to attack while walking to buildings. (Newman 1972 and Yancey 1971)

Lobbies, elevators, corridors and fire stairs, public spaces, are intended to be utilized by all residents of the building; yet, these areas differ from other public areas, such as a city street or park, because activities may not be observed at all times. In defensible space strategy, these public zones are visible from the outside of the building. Thus, surveillance opportunities are increased and the probability of crime in these zones is lower. (Newman 1972)

Surveillance/ Interior Spatial Arrangement

Pruitt Igoe's lobby entrances were located in the interior of the project, rather than along the street. Once the individual entered the lobby he/she had to walk down a hallway in order to reach the elevator waiting area which was screened off to observation. The mailboxes also were hidden from

surveillance opportunities. An example of an ideal lobby following the principles of defensible space is Highbridge Garden Projects. The lobbies were designed so that the entrance was located on the street. The elevators were located opposite the entrance, which was constructed of glass and located along a glass wall; thus, allowing visual access to the street, as well as surveillance opportunities of the elevator waiting area and the mailboxes from the street. (Newman 1972)

Firestairs are often a prime site of crime in housing projects. Stairwells represented an uncontrolled space. (Newman 1972; Yancey 1971) The stairwells were public in that there was unlimited access to them, but private in that no one was held accountable for behavior that took place there. This lack of accountability was especially prevalent in the center staircase, where a small anteroom separated the apartment area from the stairwell. (Yancey 1971) By law, the stairwells, commonly constructed of concrete, were entered through heavy steel doors and were required to be contained in fireproof wells. As a result the stairwells are visually and auditorially cut off from the observation of residents. Thus, it follows that danger is intensified on stairwells. The stairwells, frequently without artificial lighting, provided the perfect environment for robberies, assaults, rapes, and drug deals. It was a common practice for delinquent teens to knock out the lights in an effort to obtain privacy. Because these stairs were seldom used the presence of strangers or intruders would not be detected. (Rainwater 1966, Yancey 1971) Further, landings proved to be hazardous; landings became an unauthorized place for waste disposal. The landings smell of the stench of garbage and fecal matter. (Moore 1970)

At The Breukelelen Houses this situation is thwarted. Stairwells are constructed with glass window wells that are larger then recent building codes allow. These windows allow visual access to the stair well from both the corridor and the grounds. The windows allow patrolling officers to see into the projects and detect trouble.

Many residents avoided using the elevator. Residents felt that the elevator was unsafe. (Meehan 1979, Comerio 1981, Yancey 1971) Newman (1972; 1973; 1996) writes that residents are most vulnerable to attack in elevators. An elevator is a prime example of an area totally devoid of surveillance opportunities. Thirty-one percent of all robberies and muggings in projects occur in the elevator. From the elevator the assailant can then forcibly move the victim to his/her apartment. (Newman 1972; 1996) In Pruitt Igoe the unsanitary elevators also were used by residents to relieve themselves and were sites of hold-ups, physical assaults, molestation and rape. (Schulz 1969; Rainwater 1966)

The absence of defensible space mechanisms posited by Newman (1972) results in housing projects overrun with crime and low levels of social cohesion. The lack of defensible space can lead to the downfall of a project. Such is true of Pruitt Igoe which was completely abandoned in 1974 and eventually destroyed in 1976. (Newman and Franck 1980) Following modern design principles, Pruitt Igoe was doomed from the start.

Public Housing Environment: Case study Pruitt Igoe

Pruitt Igoe is the perfect example of the failure of the application of modernism to public housing. Despite its good intentions this type of design

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principle did not take into account the different values and attitudes needed to "cope" with this design; and it is now the symbol of everything that went wrong with public housing. (Welfeld 1988) Examining life in Pruitt Igoe provides insight on what life in one of the most dangerous, disorganized public housing developments in the United States.

History

The Pruitt Igoe Housing Project, located on a 57 acre tract in St. Louis (Meehan 1975; 1979; Rainwater 1974; 1967), originally was comprised of 400 dwellings, which at the time were considered to be slums. (Comerio 1981) Pruitt Igoe consisted of 33 buildings of 11 stories each. Overall, 13,000 residents were housed in 2762 apartments; 150-500 families were housed in each of the buildings. (Yancey 1971; Rainwater 1967;1970; Newman 1972; 1980; Comerio 1981; Meehan 1975; 1979; Montgomery in Davis 1977) There were no supporting facilities in the area, such as schools, stores, and recreational facilities. (Montgomery in Davis 1977)

Originally the city of St. Louis had planned to divide the project in two; one part Pruitt (opened September 1955) would be used to house black families and Igoe, located across the street, (opened May 1956) would be used to house white families. (Meehan 1975) The Supreme Court ruled this unconstitutional and the housing segregation never occurred. After a brief period of integration following it's opening in 1955, Pruitt Igoe became occupied almost entirely by Blacks. (Rainwater 1970; 1967; 1974 and Yancey 1971; 1979) By 1965, 98% of the inhabitants were black. (Schulz 1969; Rainwater 1966)

In 1951, Architectural Forum lauded the "ingenious" design of Pruitt Igoe by architects Leinweber, Minoru Yamasaki, and Hellmuth. (Montgomery in Davis 1977; Rainwater 1967; 1974; Comerio 1981) The design was praised for bringing 'row house convenience' to high-rise dwellers, as well as it's for construction efficiencies. Architectural Forum claimed that it would be "the jewel of modern housing". (Comerio 1981) Furthermore, the design won an award from the American Institute of Architects. (Welfeld 1988) However, by 1972, 70% of the buildings were left vacant and some of the project's buildings were so hazardous that several were closed down completely. By 1976, the project was torn down and today the land remains vacant.

Social Demographics of Residents

In 1965, 10,736 people lived in Pruitt Igoe: 7,532 minors under the age of twenty one, 2223 adult women and 990 adult males. (Schulz 1969) The adult male inhabitants accounted for a mere 10% of the total resident population. (Comerio 1981) Female headed households were the most common familial form accounting for 57% of all families. 30% of the families were traditional nuclear families with both a mother and a father present A large percentage of the inhabitants received some sort of public assistance: 38% had no income other than public assistance, while 55% of those who were employed depended on some state or federal assistance. Of the employed 50% had unskilled jobs, 30% semi-skilled and 10% had skilled or white collared professions. (Comerio 1981)

Design/Image

Minoru Yamasaki designed Pruitt Igoe with modern design principles. (Gutman 1975) Pruitt Igoe fulfilled the Corbusian vision of the Radiant City of "high-rise hives of steel, glass, and concrete separated by open spaces of green lawn." (Wolf 1981, p.61-62) Ingraham (1986) wrote that the modern architecture of public housing manifested itself in Pruitt Igoe as an undifferentiated box. The buildings in the Pruitt Igoe project were simple reinforced concrete slab buildings faced with brick; the windows were steel sash. (Meehan 1975)

Pruitt Igoe was the architectural manifestation of the national housing policy whose goal was simply housing without regard to community. (Yancey 1979) Unlike traditional slum areas, Pruitt Igoe lacked streets and alleys that served as semi- private space where neighborhood friendships could blossom. Pruitt Igoe was situated on a "superblock" or an amalgamation of 4-6 city blocks , isolated from the street and closed off to traffic. The buildings were organized on a rectangular grid which opened up; each of the eleven buildings entrances were located in the interior of the project facing one other without access to the street. The grounds were one huge continuous sprawl of space that ran between and around buildings.

Tradition dictates that public housing reflect the income levels of those who inhabit it. The buildings were poorly designed, inadequately equipped, insufficient in size, poorly located, unventilated and practically impossible to maintain. In terms of maintenance, the buildings were destined to deteriorate in that the walls and floors were constructed of plain uncovered concrete that easily crumbled under pressure. (Meehan 1975;

1979) Goodman (1972) asserts that if public housing conditions were superior to middle/working class housing, there would be no impetus for the poor to work hard in order to live better. Pruitt Igoe was built solely to provide living quarters, not luxury apartments that would encourage lengthy occupancies. (Newman 1972; Cisneros 1995) Surprisingly, research shows that Pruitt Igoe cost 60 % more to build than the average housing project and 15% less than top grade luxury apartments. (Meehan 1975; 1979) Thus, Meehan is correct in his assertion that "the economies practiced in Pruitt and Igoe and afterward did not produce "cheap" housing in the sense of housing that cost very little; however, they did produce "cheap" housing in the sense of housing that was of poor quality." (Meehan 1979, p. 73)

According to Meehan (1979) in the process of decreasing construction costs shoddy materials were utilized in the building of Pruitt Igoe.

> "The quality of the hardware was so poor that doorknobs and locks were broken on initial use, often before actual occupancy began. Windowpanes were blown from inadequate frames by wind pressure. In the kitchens, cabinets were made of the thinnest plywood possible, counter surfaces originally specified as heat resistant became plain wood, sinks were extremely small, there were no exhaust fans, stoves and refrigerators were of the smallest size and cheapest construction available. Even bathrooms were slightly smaller than standard." (Meehan 1979 p. 71-72)

Galleries, the open space of "vertical neighborhoods" , lacked paint and window screens to prevent children from falling to their deaths. Inadequate coverings on steam pipes frequently inflicted children with severe burns. (Meehan 1975; 1979; Comerio 1981) Waterproofing was omitted from basement walls, countertops were neither resistant to heat nor soil, and skip stop elevators or elevators which stopped only on the fourth, seventh and

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tenth floors, were installed. (Meehan 1975; 1979; Comerio 1981) Further, the elevators were not designed to accommodate large families and constant use, thus, the elevators required constant repair from the first week of occupancy. Moreover, the elevators were of such poor quality that one was inoperable on opening day.

To make matters worse not only were the materials shoddy and of poor quality but they were ugly and institutional in appearance. Projects, such as Pruitt Igoe, were designed with resilient, vandal proof materials that often were used in the interior design of hospitals and prisons. Corridor lights in Pruitt Igoe were encased in unbreakable plastic shells, as were outdoor light fixtures which cast an eerie purple light. (Newman 1972) Glazed tiles lined the floor and walls of projects because they are easy to clean; graffiti can be washed away with little effort. These tiles were designed to be unbreakable and vandal proof. (Newman 1972) However, residents of Pruitt Igoe proved otherwise. They took special efforts to destroy and deface the tiles. (Newman 1972, Schultz 1969)

In his design Yamasaki did not include what architects consider "wasted space" or space within complexes that does not constitute individual dwellings. He eliminated wasted space in an effort to free up the ground. Yancey (1971) argues the lack of "wasted space" is actually a lack of defensible space. He asserts that in lower class projects semi-public space and facilities allow for the development of social networks. The design of Pruitt Igoe lends itself to increased conflicts between neighbors, and numerous fears concerning the human elements of the environment causing residents to finally withdraw from the community into individual dwellings.

The lack of "wasted" space creates a sense of insecurity and distrust among residents simply because they are never given the opportunity to forge alliances through congregating in safe "semi public areas". (Newman 1972)

Life in Pruitt Igoe

Pruitt Igoe was plagued with vandalism. The project's lawns, once grassy, became a muddy "wasteland" covered with shards of glass. Boards covered the windows on the ground floor which had been broken either from pressure or from forced entries. The surrounding streets and parking lots were full of trash, beer cans and broken bottles. Abandoned and stripped cars filled the surrounding area. The fences around the play ground facilities, rendered broken and unusable, were torn down. Swings, slides and merry-go-rounds were visibly unpainted, rusted and unusable. Within the interior of the buildings the neglect and vandalism were more apparent. The stairwells were "adorned" with garbage, while the stench of urine and excrement tingled the nose and colorful graffiti covered the unfinished, unpainted cinder block walls. (Yancey 1971)

It must be stressed that "while opportunities provided by the physical environment will not in themselves cause people to behave in a certain way, they will tend to produce an increase in behaviors toward which people are already inclined." (Farley, 1982, p446) Comerio agrees:

> "The sense of alienation, isolation, and powerlessness felt by the residents, and the social problems attendant on those feelings, may be reinforced by building design but is not caused by modern architecture." (Comerio, 1981 p28)

Thus, we see that design is not an isolated factor in causing crime in public housing, rather, social factors also play an important role.

According to Rainwater (1970), crime and fear of crime caused residents of Pruitt Igoe to feel that the buildings were unsafe. Residents claimed that the laundry rooms were unsafe; clothes were stolen and people were attacked. This lack of security prompted many residents to do laundry in their own apartments, rather than put themselves at risk. This reduced contact between building occupants and further isolated residents from one another. (Rainwater 1970; 1966)

"The corridors of the usual high-rise, low-income housing building are like corridors in a bad dream: creepily lit, narrow, smelly, blind. They feel like traps and they are." (Jacobs 1961, p. 399) The double-loaded corridors of Pruitt Igoe came to be known as the "gauntlet" . (Schultz 1969) Residents took there life into their own hands whenever they ventured outside their apartments into the hall, where they likely to come between a ball game or fight, but most often became the object of obscene remarks. (Schultz 1969) Furthermore, Yancey writes of residents ultimate fear of being attacked.

> "Residents of Pruitt Igoe continually expressed concern with being assaulted, beaten, or raped. We were frequently warned of such dangers and told that we should never enter buildings alone and should stay out of the elevators, especially after dark. We were told stories about people being cut with bottles thrown from the buildings and warned never to stand immediately outside of a building. In addition to the physical violence there was also the danger to one's self- verbal hostility, the shaming and exploitation from children, neighbors, and outsiders." (Yancey 1971, p. 11)

Because of these threats to their safety residents were suspicious of their neighbors, even those to whom they were well aquatinted. It was this fear of hostility, harassment, and crime, coupled with a strong distrust of their

fellow man that forced residents into isolation. With the lack of safe public facilities residents found privacy and safety only within the confines of their own individual apartments; (Yancey 1971; 1979, Rainwater 1966; 1970; and Newman 1972; 1980) thereby, preventing social networks from forming in the corridors and stairwells of Pruitt Igoe.

Residents not only were concerned with the human sources of danger but with the non- human sources as well. Rainwater (1966) wrote that residents were concerned with rats, cockroaches, poor plumbing, poorly fused electrical circuits, and toxins, such as lead based paint. He wrote that the inability of project dwellers to control the non-human problems of the project caused residents to perceive themselves as failures as "autonomous individuals." This physical disorder coupled with the resulting social disorder derived from both human and non-human problems prompted residents to either give up or retaliate in a criminal way. (Rainwater 1966)

SOCIAL FACTORS[5]

This chapter will examine lower class lifestyle as manifested through patterns of behavior and values. We define value system as beliefs or attitudes held by the individual which play a primary part is his/her interactions and behaviors. (Rainwater 1966) There is much debate among sociologists as to what causes the divergent attitudes of the lower class. The Culturist perspective articulates that the lower class exhibits behaviors and value systems which are characteristically different from those of the middle class. Culturists, such as Oscar Lewis and Lee Rainwater, believe that the poor's unique value system is intergenerationally transmitted through the socialization process. The opposing viewpoint, the situational or structural perspective, maintains that the poor share in the dominant value system but behave differently as a consequence of their occupation of an unfavorable economic position in the restrictive social structure. (Waxman 1983) In short, a paradox exists for situationalists insofar as the poor *do not* possess their own distinct value system, but, can not realize these values. The poor have internalized these societal values and consequently feel powerless in the face of dominant societal forces, thus, they adopt divergent attitudes and behaviors in an effort to cope with its deprivation.

We reject the situational or structural perspective on the basis that it maintains that the only thing the poor share as compared to the non-poor is their economic situation. (Waxman 1983) We also reject the cultural perspective or "The Culture of Poverty" as coined by Oscar Lewis, which argues that patterns of life in public housing take on a life of their own and

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[5] It must be stressed that at times it is impossible to talk of social factors with out mentioning architectural

are to a great extent self-generating and self perpetuating. (Waxman 1983)

We instead support the relational perspective, a reconciliation of the cultural

and situational perspectives. The relational perspective claims that the

tenacity of poverty and the behavior and attitudes of the

> "poor cannot be attributed to solely internal or external sources.
> Rather, they have both internal and external sources which are
> reciprocally related, in that the patterns and attitudes of the poor are
> adjustments to the stigma of poverty (situational), and these
> adjustments are transmitted intergenerationally through
> socialization." (Waxman 1983, p. 100)

Socialization, the internal aspect, teaches children how to behave in stressful

situations produced by the stigma of poverty, the external aspect. The stigma

of poverty is derived from the feelings of alienation from the larger world,

deprivation, and from self perception, which is to a large extent the product of

the individual's interactions with others.

This chapter endeavors to reveal that there is a definite attitudinal

difference between socio-economic groups. We will attempt through pre-

existing literature and data analysis to demonstrate that poverty is

correlated with feelings of powerlessness. Powerlessness manifests itself

through negative attitudes, fear, and high levels of anomie, depression and

withdrawal. These feelings of impotence are intensified by the public

housing environment and create social conditions which prevent social

cohesion and facilitates criminal behavior.

Lower Class Behavior

Rainwater (1970) writes that the following behaviors frequently

manifest themselves in the lower class as a result of their inability to realize

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features and vice versa.

middle class opportunities: hold-ups/robbery; alcoholism or drug addiction; teenagers cursing at adults; breaking windows; throwing bottles and other dangerous things from the window; loitering on the street while drinking or engaging in illicit activities; fights; promiscuity. Furthermore, the inventory of behavior dubbed the "tangle of pathology" of public housing residents includes: high rates of high school dropouts; poor academic performance; inability to establish stable employment habits; high rates of dropping out of the work force; apathy and passive resistance in contacts with people attempting to help, i.e. social workers and teachers; hostility and distrust toward neighbors; carelessness spending habits; high rates of mental illness; marital disruptions and female- headed households; illegitimacy; child abuse or neglect; crime; destructiveness or carelessness toward one's own and other people's property. (Rainwater 1970) The aforementioned behaviors are disturbing not only to the middle class, but also to the lower class who can not escape it. Although, these behaviors are not exhibited by all members of the public housing community, residents must adapt to living in an environment where it is highly probable that they will either become involved in or be victimized by these behaviors.

These behaviors that encompass the "tangle of pathology" can be attributed in part to income and constraint. The poor feel powerless because of their inability to earn enough money to live like average American working class citizens. Unemployment and settling for low paying jobs makes the lower class individual feel as though s/he can reasonably expect are despised housing and a poor diet.

Their socio-economic status constrains them to live in a homogeneous population of low income poverty stricken minorities. Bauer (in Moller 1968) argues that "social health" cannot be realized in an area entirely occupied by people of the same socio-economic status. Gans (1961) argues that a heterogeneous population is preferable to a homogeneous population insofar as it enriches that inhabitants lives through a diversity of resources, both financial and social. The lower class can expect inferior institutional service and protection from the schools, the police force, the sanitation department, the courts, the landlords, and the neighborhood merchants. (Rainwater 1970) Gans (1961) argues that spatial proximity to the middle class allows access to role models, better living standards, better educational facilities and better services. Gans also argues that homogeneity promotes social isolation between housing residents and the general population. (Gans 1961)

The Reality of Modernist High-Rise Public Housing Design

The Modernist approach to housing had many flaws. Catherine Bauer (1957) argued that this type of lifestyle was not how Americans really lived, nor was it how they would choose to live; rather, it was how idealistic reformers thought they should live. She contended that high density and monotonous standardization in design produced projects that appeared harshly institutional, which in turn demeaned the inhabitants with a "charity stigma." (Wright 1981) This type of development was suited for the middle class, who could afford to subsidize doormen, repairmen, janitors, and baby-sitters- none of which public housing occupants had access to. (Rybczynski 1993; Rainwater 1966, 1970) With unrestricted access buildings

were easy prey to vandals and criminals. Without proper maintenance the halls became trash receptacles, the elevators broke down frequently, graffiti stained the walls, roofs leaked, broken windows were covered with wood and cardboard in place of glass. Without baby-sitters, mothers were confined to their apartments and children roomed throughout the building without adult supervision. Thus, because the high-rise Modernist building was intended for middle class lifestyles, it is not suitable for underclass lifestyles. (Rainwater 1974)

Meaning of Housing

In the lower class there are many threats to an individual's security.

"The threatening world of the lower class comes to be absorbed into a world view which generalizes the belief that the environment is more threatening than it is rewarding- that rewards reflect the infrequent workings of good luck and that danger is endemic." (Rainwater 1966, p. 191)

This attitude leads lower class individuals to alienate themselves from the world, the middle class, and their peers. Rainwater (1966) asserts that danger is one of the major focuses in the lower class world view. A home to which one could retreat from a dangerous, insecure world would be of great value, however, for lower-class individuals such a home is seldom found. It is difficult to participate in an environment which does not impede danger.

Rainwater (1966) writes that symbolic attitudes toward housing are different for "slum" dwellers/lower class and the middle class. Among the underclass, a safe home is the ultimate end. (Michelson 1970) Drawing on the work of Rainwater, Gutman (1975) writes that the lower class, " are emphatic in their concern that the house serve as a haven because they inhabit a

world in which homicide, burglary, and social pathology are commonplace." (Gutman 1972, p. 300) It follows that for the poor primary goal of housing is shelter; thus, the most basic evaluation of the quality of housing for the poor would be how adequately it shelters the inhabitants from noxious societal ills. Gutman (1972) maintains that once an individual's biological needs for light, air, warmth and protection from harm are met, they can branch out in search of attainment of pleasure. Individuals in the middle and working class can expect their houses to provide a secure living environment; thus, favor dwellings that offer comfort, modern conveniences, and opportunities for recreation. (Rainwater 1966; 1974)

Rainwater (1966) writes that divergent meanings of the house for different social groups should impact housing design. He claims that in regards to public housing, as in the case of Pruitt Igoe, there often is a structural mismatch with the intended inhabitants. Many architects, who are themselves drawn from the middle class, attempt to impose physical features significant to the needs of the middle class on lower class. (Rainwater 1966; Cooper-Marcus in Davis 1977) In the application of middle class designs in underclass housing, architects fail to respond to the lower class' need for a safe and healthy environment. (Rainwater 1966; Gutman 1972)

In Pruitt Igoe, a majority of the recreational facilities went unused by children because the need for safety in these areas was not met; instead, the facilities were utilized by criminals and other wrong doers. (Rainwater 1966). Parents feared allowing their unsupervised children to play in areas they could not observe through windows. The distance of the buildings from the grounds was too great and the interior public areas or galleries of the

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apartment tower were too dangerous for a child to venture through alone. A

resident of a Chicago project told Edward Hall (1966) the following:

> "It's no place to raise a family. A mother can't look out for her kids if
> they are fifteen floors down in the playground. They get beaten up by
> the rough ones."   (Hall 1966, p. 159)

As a result, the children played inside the confines of the apartment, or in the

corridors adjacent to their apartment; consequently, contributing to the

rapid deterioration of the buildings. (Newman 1972; 1980; 1981; 1996).

The Stigma of Residence

In the book *Stigma* (1963), Irving Goffman, renowned social

psychologist, studied the stigmatization process, which he found to be

debilitating to discredited groups, such as the underclass. Stigmatization

occurs because of the stereotypes of public housing residents. (Gans 1967;

Rainwater 1970; Rowe 1993; Moore 1970)   Residents, according to Schulz

(1969), are labeled indiscriminately as "disreputable or undeserving" because

they "enjoy living in filth" and "won't work" or "keep a man" and have

"children outside of wedlock". (Schulz 1969, p. 4) Public housing residents are

aware of this image, as well as their "undesirability" in the eyes of the public.

Many internalize the undesirable image and consequently view themselves

as " loose people or, less negatively, simply not like the man." (Schulz 1969, p.

4) Placing negative labels on people increases the likelihood that they will

engage negative behavior. (Goffman 1963; Waxman 1983; Newman 1972;

Rainwater 1970; Farley 1982) Goffman (1963) writes that stigma is a major

factor influencing the criminal behavior of public housing residents. Further,

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the stigma of public housing results in poor self image, withdrawal, pessimism, and anomie. (Waxman 1983; Hayes 1990).

Residents are socially victimized by their housing in that many people living outside the project refuse to associate with them, nor will they allow their children to. They are both hurt by and resentful of this attitude: "All most people have to know is you live in the projects. Right away they think you're some kind of criminal or something." (Moore 1970, p. 30) As a result of the this social stigma, as well as the physical ignominy, many residents are ashamed of where they live. Some teens meet their dates at relatives houses; people do not invite friends to their apartments; job applicants are reluctant to give their addresses to potential employers.

Deprivation

"Criminal and victim alike come from the strata of the population without the power of choice." (Newman 1972, p. 13) Crime is positively correlated with poverty in the United States. This strata has traditionally been denied access to educational and social institutions that would allow them to advance out of poverty. Rainwater (1966) writes that because housing projects lack security, the feelings of insecurity about their residential environment seeps into other aspects of their lives. Residents adopt a negative defeatist self perception, express cynicism toward other people, become ambivalent in regards to finding employment, and express a general impotence in the ability to effectively deal with the larger world. (Rainwater 1966)

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Newman (1972) contends that the number of residents receiving public assistance or the socioeconomic class of residents, family structure, teen to adult ratio also can predict crime. Lack of security personnel and lack of employment opportunities are also correlated with high crime rates. (Brill 1975; Rouse and Rubenstein 1979) Researchers have consistently demonstrated a strong, positive correlation between unemployment and crime; "crime serves as one of the primary means of earning a livelihood for the urban poor in the absence of employment opportunities." (Huth 1981, p. 595)

Public housing developments are often located in low-income areas of the city where crime rates are higher than average. This precarious location has a two fold effect: first, many neighborhood thieves are drawn into the anonymous project; second, residents feel as though they are second class citizens, unfit to live among the middle class. Their environmental isolation from the middle class informs them that they are the dregs of society. This social isolation is a major factor in undermining motivation and reducing social mobility and perpetuating a sense of inferiority, defeatism, and neurosis among inhabitants. (Moller 1968)

Social Cohesion

The social factors most frequently cited in the literature as contributors to crime are the lack of social organization, social cohesion, and informal social controls on the part of residents. (Rouse and Rubenstein 1978) Social organization can be assessed through examining the number of group activities in which housing project occupants participate, the existence

of community leaders, the amount of interaction between residents, and the distrust and isolation from other residents. Social Cohesion is defined by HUD's Review of Crime in Public Housing (Rouse and Rubenstein 1978) as "the number and intensity of friendships among residents, the real and perceived levels of actual and potential helping behavior, and the levels of social isolation felt by residents." (Rouse and Rubenstein 1978, p. 26) Finally, informal social controls are behavior inducing mechanisms which promote norms , roles and tacit knowledge among residents. The writings of Yancey (1971; 1979) and Rainwater (1966; 1970) consistently demonstrate that low levels of social organization, cohesion and social controls are in part caused by physical design and do influence crime.

Brill (1975) writes that often times social relations in projects are marked by distrust. Few residents depend on one another and attitudes tend to be defensive, rather than friendly. Residents' lifestyles are oriented toward defense against the dangers in their world. Defensiveness, the key to survival, permeates every aspect of their lives. Residents are constantly attempting to manipulate and exploit others, while at the same time defending themselves. Defensiveness also influences the "self system" of the underclass, encouraging them "not to care too much" about other people or their possessions because the threat that it may taken away or destroyed always lingers. (Rainwater 1970)

In the case of Pruitt Igoe, Yancey (1971) found that residents maintained a general dislike of one another. One woman explained the following about her neighbors,

"they are selfish. I've got no friends here. There's none of this door-to-door coffee business of being friends here or anything like that. Down here, if you are sick you just go to the hospital. There are no friends to help you. I don't think my neighbors would help me and I wouldn't ask them to anyway. I don't have trouble with my neighbors because I never visit them. The rule of the game here is go for yourself." (Yancey 1971, p. 13).

This in part is attributable to the lack of defensible space in physical environment. Large anonymous buildings and filthy halls allow little room for social interaction. (Yancey 1971; Rainwater 1966; and Newman 1972)

Distrust is quite prevalent among those inhabitants receiving public assistance/welfare. (Newman and Franck 1980) A high proportion of residents on public assistance decreases the likelihood that residents will interact with others outside the confines of their apartments. They fear that revealing too much about their personal lives will make them more vulnerable to crime and insolence. Further, many welfare recipients fear that their neighbors will turn them in to officials for welfare fraud.

High density, high-rise living in conjunction with absence of trust and friendships among neighbors in public housing decreases the sense of solidarity which in turn can cause anomie to develop. Anomie is "a sense of normlessless[6], a lack of attachment to any moral code at the individual level." (Merry 1981, p. 234) Similarly, Fischer (1976) maintains that anomie refers to the feeling that one is detached from social norms and rules; thus, s/he feel as though s/he has no obligation to obey those rules. Beyer(1965) contends that anomie is the product of weak group integration, and a lack of social cohesion. He believes the anomie arises due to decreased levels of security in the lives of the under class. Anomie results in further loss of intimacy,

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[6] Norms are the rules and conventions of proper and permissible behavior. (Fischer (1976)

anonymity and significantly contributes to crime, mental breakdowns, and suicide.

Pathology can result from anomie. Rainwater (1970) attributes pathological behaviors to the emergence of a subculture particular to public housing. This subculture is defined by values which stand in opposition to dominant societal values. Although, Rainwater, a culturalist, would argue that this subculture emerges from socialization; we contend that this subculture is derived from residents' alienation from and failure to succeed in dominant society. Merton (in Waxman 1983) writes of Strain Theory or the readjustment of values and social norms in the absence of realistic opportunities for advancement. Residents resort to deviant behavior as a means to their desired end. MacLeod (1987) writes of a public housing complex in Colorado, where a group of adolescent boys, alienated from dominant societal values, have redefined their social norms to include delinquency, truancy, and drugs in an effort to realize self esteem. These deviant behaviors are a manifestation of their exclusion from the larger society.

Overcrowding

Public housing projects are often overcrowded. This overcrowdedness often results from individual apartments housing more people than there is adequate room for. (Liston 1974; Moore 1970) Given this fact there is little privacy for residents. It is not uncommon for children to share beds and even the same room as their parents. Further, every additional space in the apartment is utilized for sleeping accommodations, including couches, and

cots or mats on the floor. The bathroom is often occupied by multiple people at once. (Moore 1970) One resident of a Midwestern housing project said the following about the overcrowded living conditions:

> "You feel like you can't breathe. People are everywhere. Children are in the bathroom when you are using the toilet, somebody's sitting on every chair in the   house, you've got to eat in shifts...Sometimes you feel like you're going to bust wide open if you don't get a chance to turn around and nobody be there. Often I just have to close my eyes and put my hands over my ears to be by myself."   (Moore 1970, p. 27)

This crowding has an effect on residents. Baum and Valins (1977) and Fischer (1976) contend that uncontrolled crowding results in "crowding stress" which refers to constant forced interaction with other persons. "Crowding stress" instigates withdrawal oriented coping responses or " a blasé reserved attitude or hostility toward others." (Verbrugge and Taylor, 1980, p. 136) If these coping behaviors fail, then stress persists and may lead to the formation of pathology.

Gans (1971) asserts that when room or apartment overcrowding can be detrimental to the mental health of residents in that they cannot escape the group to gain a little privacy at necessary moments, i.e. sexual intercourse. Crowding has a substantial affect on child development; psychologically, children need privacy so that they may take some time to shut others out and listen to themselves. (Moore 1970) Greenfield and Lewis (1969) assert that tenacious overcrowding from a young age destroys individuality, which is fostered by privacy. Schwartz (in Gutman 1972) and Scobie (1975) would agree with this idea; they assert that individuals need privacy in order to develop their personalities and that the opportunity to withdraw from the group allows the individual to be more effective upon returning to group life.

Further, Schwartz (in Gutman 1972) contends that when privacy is lost, the maintenance of "harmonious social relations" among members of the group is lost. Further, as a result of crowding, children in high rise buildings have a poorly developed perception of and respect for individual property and territory. This lack of awareness of personal space and property can lead to future criminal behavior. (Newman 1972)

Effects of Public Housing on Children

Parents in public housing fear the affects of the environment on their children. They feel powerless against the dangers of the environment in that they are unable to protect their children from the perils of decaying hazardous housing; from violence; from symbolic violence or shaming on the part of caretakers, children at school, or other residents; and the temptations of an immoral streetlife luring them away from living respectable lives.

Project dweller's deep pessimism about human nature affects their child rearing practices. In an attempt to insulate their children from the physical and moral dangers of project life, parents attempt to keep their children in apartment as much as possible and worry whenever the child are outside. Children are harshly reprimanded for frightening or irritating behavior as a calculated method of parental control. Parents also resort to telling their children "horror" stories about the outside world to prevent them from engaging in dangerous or immoral behavior. These stories instead inform the child that the avoidance of trouble is hopeless; thus, they feel compelled to tolerate and to manipulate the negative aspects of the outside

world, rather than avoid them. (Rainwater 1970) Thus, parents can not prevent their children from either engaging in or becoming a victim of crime.

As project children grow up they are socialized to believe that are forever intermeshed in the cycle of poverty and public housing and can expect nothing better. From infancy, project residents begin to adapt to their environment in ways that allow them to sustain and protect themselves, but at the same time this interferes with the possibility of adjusting to a the middle class environment, should an opportunity become available to them. Many people lack the motivational skills to seek out or even to recognize opportunity when it becomes available. This lack of opportunity or perceived lack of opportunity results in apathy, despair, and rejection. (Gans 1970)

Children learn at an early age what it means to be an adult. They are constantly concerned with being assaulted, being drawn into fights, and being sexually molested. (Rainwater 1974) They see violence and conflict, and acts of disrespect on a daily basis. (Merry 1981) Rainwater (1970) contends that project children, aware that they cannot avoid risk of violence and humiliation, learn to manipulate them to their own advantages. A woman described to Rainwater that she instilled in her children the ability to control risks; when her children were beaten by school mates, she would then beat them herself. She was pleased to report that this lesson had taught them to assault the other children before they themselves could be victimized. (Rainwater 1970)

Gans (1971) theorizes that the prevalence of female headed households in public housing may have a detrimental effect on young men. Growing up without a male role model, boys may assume feelings of uselessness and

despair that they attribute to their absent fathers. Children living in poverty often lack positive role models or better said people who have transcended poverty. Because of both economic and racial reasons few members of the underclass have had the opportunity to advance through well paying, stable careers and decent education; thus, children do not have the opportunity to witness that there is a chance for them to rise out of poverty.

Fear of Crime

Sociologists assert that the fear of crime contributes to actual crime rates. Newman (1972; 1976; 1980; 1995; 1996; 1997; 1998) contends that this fear of crime can be reduced through "Defensible Space. He believes building design can improve social interaction, foster a sense of territoriality, and provide surveillance opportunities, thereby reducing crime. (Newman 1972; 1976; 1980; 1995; 1996; 1997; 1998; Yancey; 1971) However, it can be argued that in order for there to be defensible space as propounded by Newman, there must first be people willing to defend those spaces. Fear of crime breaks down social cohesion within the housing project, undermines interpersonal relationships of neighbors, eliminates concern for neighbors, and instills feelings of distrust and suspicion among neighbors. (Merry 1981; 1981b) As project solidarity dissolves, residents are less willing to intervene to stop a crime, to help a neighbor, or to recognize or interrogate outsiders. Consequently, residents fear leaving their apartments resulting in fewer "eyes on the street", people who observe street life, and decrease the probability of the detection and the intervention of criminals. (Jacobs, 1961; Merry, 1981; Coleman, 1990) However, "even observing a crime does no good

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if the witness fails to act because of fear, uncertainty, apathy or inability to do anything." (Merry 1981) Many residents fear retaliation for reporting a crime to police. If called to be witnesses the residents are subject to severe threats and at times violent attacks in order to discourage them from testifying. This possibility frightens residents to the point where many refuse to intervene to help neighbors, report crimes to police, or serve as witnesses in trials.

Quantitative Findings

Table 1 (p. 72) demonstrates that there is a significant relationship between race and socio-economic class. Non-white/minorities are significantly more likely to be poor , as compared to whites. Table 1[7] reveals that 23.2% of non-whites are poor, whereas a mere 11.2% of whites are considered poor. We also find a statistically significant relationship between dwelling type and socio-economic class. In looking at high-rises, we find that 5.3% of poor respondents lived in buildings with more than three stories, as compared to 4.3% of whites. (Table 2 p.72)

Tables 3, 4, and 5 provide evidence of the affect of architectural type on individual levels of anomie, withdrawal, and depression respectively. Originally, we controlled for poverty status; however, no significant relationships were obtained attributable to the small sample size of the poor residing in high-rises. (See appendices) We find that there is no significant impact of dwelling on anomie levels; however, Table 3 (p.72) demonstrates

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[7] All tables located in the appendices.

that respondents who inhabit high rises hold the highest levels of anomie. Dwelling type significantly impacts both withdrawal and depression levels. Table 4 (p.73) reveals that low rise dwellers are the most withdrawn (31.2%). We do not believe this finding to be accurate due to the small sample size of high rise dwellers (N=38). High-rise dwellers maintained the greatest levels of depression. 10.7% of high-rise dwellers, as compared to 1.8% of low-rise dwellers and 1.9% of single family dwellers obtained a depression index score of 6 indicating the highest level of depression (Table 5 p.73). Among high-rise dwellers, there is no causality between socioeconomic status and levels of anomie, depression, and withdrawal. (see appendices)

Socioeconomic class significantly impacts attitudes. In our sample the poor were more likely to hold negative attitudes concerning other people and their lives. Referring to Table 6 (p.74), we find that the poor are significantly more likely than the non-poor: to believe that they can not be too careful in trusting other people; to be unhappy; to believe that most people would take advantage rather than be fair; to agree that people are just looking out for themselves, rather than attempting to be helpful; to believe that life is dull.

In regards to attitudes concerning societal differences our original hypothesis predicted that there would be a significant relationship between socio-economic class and the following statements: "Only if income is large enough is there incentive to work"; "personal income shouldn't be determined by work, everyone should get what they need"; "one of the biggest problems is that we don't give everyone an equal chance". In postulating that the poor would answer in the affirmative significantly more often than the non-poor we were correct on two counts. 67.8% of poor respondents, as compared to

56.8% of non-poor respondents agreed that there was incentive to work, only if the income rewards were high enough (Table 7 p. 75). 62.8% of the poor were inclined to agree that personal income should not be determined by work and instead people should be given what they need; whereas 38.1% of the non-poor agreed with the same question. Table 7 demonstrates that the majority of both poor (78.9%) and non-poor (24.8%) believed that one of the biggest problems concerning societal difference was that not everyone was given an equal chance; thus, no statistical significance was found.

We originally hypothesized that overall the poor would be less satisfied than the non-poor; however, we find statistical significance in only 2 of the 5 questions posed (Table 8 p. 76). The poor are more likely to be less satisfied with the condition of child housing compared to ten years ago and with the amount of money the government expenditure on housing for families with children. In looking at Table 8, we find that there is no significant relationship between socioeconomic class and satisfaction with family, city, or child's neighborhood.

We posited that levels of anomie would be higher among the poor and non-whites. We can support our hypotheses by the information presented in Tables 9 and 10 respectively. Table 9 (p. 77) provides evidence that a significant difference between socioeconomic class and anomie levels does exist in the population. 44.3% of poor respondents obtained a score of 3, indicating the strongest level of anomie, while 23.7% of non-poor respondents obtained the same score. Non-whites are also significantly more inclined to hold high levels of anomie than non-whites (Table 10 p. 77). 47.6% of non-whites were grouped in the most anomic category, as compared to 22.2% of

whites. Clearly, we find that typically disenfranchised people, in this case non-whites and the underclass, will be more inclined to feel detached from the social norms which define society; therefore, less likely to identify with the larger world. In examining the affects of both race and socio-economic class we find a significant difference among poor and non-poor whites. the poor hold high levels of anomie among the white; however, among non-whites, socioeconomic status does not impact anomie levels. (see appendices) and both socioeconomic class and race indicating that these relationships can be found in the US population. Table 11 (p. 78) clearly gives evidence that there is a significant relationship between poverty and high levels of withdrawal. 39.3% of the poor, as compared to 23.5% of the non-poor obtained a score of 3 indicating that they are the most withdrawn. As in the case of anomie, non-whites also are significantly more likely to hold high levels of withdrawal than whites (Table 12 p. 78). 47.7% of non-whites fell into the category of most withdrawn, whereas 21.2% of whites can be categorized as most withdrawn. In looking at withdrawal levels crosstabulated with socio-economic status and controlled by race, we find (see appendices) that among whites there is a relationship between socio-economic status and withdrawal; poor whites were significantly more prone to withdrawal than the non-poor. Again, we find that among blacks there is no statistically significant relationship between socio-economic status and withdrawal level. (See Appendices)

Table 13 (p.79) reveals that socio-economic class impacts levels of depression. The poor are significantly more disposed to depression than the non-poor: 8 or 7% of poor respondents held the strongest levels of depression,

while 12 or 1.5% of non-poor respondents were seriously depressed. There is

an absence of statistical significance in regards to the impact of race on levels

of depression. Although there is no statistical significance, Table 14

(p. 79) gives evidence that blacks have greater frequencies of a strong

depressive disposition. As in the cases of anomie and withdrawal, we find

that there is no significant relationship among blacks in regards to socio-

economic status and depression; however, once again we expose a significant

difference between depression levels of poor and non-poor white

respondents.(see appendices)

There is an absence of a statistically significant relationship between

socioeconomic status and frequency of victimization. Although, Table 15 (p.

80) reveals that in each instance of victimization (victim of : burglary,

robbery, physical attack, gun attack), the poor more frequently responded in

the affirmative than the non-poor there is no substantial difference between

the two groups. There is however relationship between fear of crime and

socio-economic class. Table 16 (p. 80) demonstrates that the poor are

significantly more afraid to walk alone at night within a mile of their

dwelling. 60.3% of poor respondents were consumed by fear, however a mere

38.4% of non-poor respondents expressed the same fear.

It is our belief that low educational attainment, higher incidences of

divorce and separation, and unemployment contribute to instability which

may exacerbate feelings of anomie, isolation, depression, withdrawal and

negative attitudes concerning the self and the larger world. Socio-economic

class significantly impacts educational attainment (Table 17 p. 81), marital

status (Table 18 p. 81), and workstatus (Table 19 p. 82). Table 17 reveals

that the poor had significantly lower levels of educational attainment than the non-poor. We also find that the poor had significantly lower marriage rates and higher divorce, separation, widowed, and single than the non-poor. A mere 27.9% of poor respondents were married, whereas 57% of non-poor respondents were married (Table 18). We also find causality between poverty and workstatus (Table 19). Only a minority of the poor maintained full-time jobs (23.1%), while 56.4% of the non-poor called to hold full-time jobs.

Table 20 (p.82) summarizes the results of our Analysis of Variance. There is a significant mean difference between socioeconomic class and levels of anomie, withdrawal, and depression. This tells us that it is highly probable that this relationship will exist in the population. Referring to Table 20, we find that the mean anomie level for the poor was 4.01, while the mean for the non-poor was 4.433 indicating that since lower scores indicate higher levels of anomie that on average the poor are more anomic. In looking at withdrawal, we also find that it is affected by poverty status. The poor obtained a mean withdrawal score of 2.03, as compared to the non-poor that scored 1.69. Since high withdrawal scores indicate high levels the information presented in Table 17 reveals that on average the poor hold more intense feelings of withdrawal. Similarly, the poor hold greater feeling of depression than the non-poor. The poor obtained an average score of 3.76, while the non-poor obtained a score of 3.31; thereby, indicating that on average the poor are more depressive.

Quantitative Conclusion

Our quantitative findings indicate that poverty acts as a structural force which impacts individual perceptions of self and the larger world. Thus, we can deduce that poverty in and of itself contributes to the generation of pathology. Adhering to the relational perspective of poverty, we attribute attitudinal differences between the socioeconomic groups to both stigma of poverty or the internalization stereotypes and socialization.

In accordance with Rainwater's (1966) theories of the meaning of the home, we originally posited that attitudinal differences between the poor and non-poor result in different housing needs. In assessing attitudes we find a strong causality between negative attitudes and the underclass. We found that the poor have significantly higher levels of dissatisfaction with their lives, distrust, negative attitudes/cynicism concerning self and their fellow man, anomie, withdrawal, depression, and fear. Our analysis also demonstrates that the poor have significantly higher rates of marital disruption, low educational attainment, and unemployment each of which positively impacts pathological behavior. (Newman 1972) Thus, because these attitudinal and lifestyle differences are statistically demonstrated in the population, we assume that universal design schemes, such as Modernist high-rise developments, can not be expected to determine the behavior of all groups. Because the poor have statistically different attitudes from those of the middle class it is impossible to assume that both would prosper under the same living conditions.

Our data demonstrates that the poor are more likely to inhabit high-rises and that high-rise dwellers are significantly more likely to exhibit

withdrawal and depression. (see appendices) However, we found no relationship between levels of anomie, withdrawal and depression among the socio-economic classes living in high-rises attributable to the small sample of poor high-rise dwellers. Thus, we see that the poor and high-rise dwellers are most prone to negative attitudes. Clearly then the poor are already predisposed to negative attitudes then it is safe to assume that high-rise dwellings would exacerbate these feelings of negativity and possibly contribute to the formation of pathological behaviors

Public Housing Today

Public Housing currently provides homes to about 3.5 million people, and its 1.2 million units represent less than 1.5% of the national housing stock. (*One Strike and You're Out*, 1996.") Public housing projects continue to be characterized as enormous, dilapidated, high rises in central cities typically inhabited by minority, female headed families who receive federal assistance. (Bratt 1986) These assumptions are valid; only 36% of households are white; however, 70% of white tenants are among the elderly. Statistically the majority of public housing is inhabited by racial minorities (63%): 47% are black, 13% Hispanic, 3% Asian, and 1% Native American. (Public Housing Data Book in *Public Housing Brief*, 1996.) Comparatively black and Hispanic households are younger; a mere 30% of minority households are among the elderly. Forty-nine percent of households are comprised of children and more specifically, 50% of the black families and 60% of the Hispanic families have more than two children. Three-quarters of all households are headed by single adults, usually a single mother (Bratt, 1986) and 34% are among the elderly and 8% are disabled.

Contrary to public perception, Cisneros stipulates that the image of public housing as " a large concentration of run-down high-rise buildings in a major city- crime ridden and inhabited by the poorest of poor." (Cisneros 1995, p. 9) is not true for all projects. The data shows that the majority of public housing residents are not dependent on public assistance. Thirty-tree Percent of households are dependent on public assistance as their primary income source. The median public assistance granted was $4,728. (Public Housing Data Book in *Public Housing Brief*, 1996.) Two-thirds of public

housing households obtain their primary income from sources other than public assistance; 40% of residents derive their income from social security and pensions (median $6,360), 21% derive income from wages (median $10,300), and 6% obtain income from assets and other methods. (Public Housing Data Book in *Public Housing Brief*, 1996.)

The median length of stay in public housing is 4 years. However 40% of households stay less than three years, while 31% reside in public housing for 3-10 years and 29% remain there for more than 10 years. (Public Housing Data Book in *Public Housing Brief*, 1996)

In 1989 scattered site and single family homes accounted for about one-third of the 1.4 million public housing units across the country. Further, low-rise projects accounted for another quarter of the public housing stock; high-rise buildings accounted for about 40% of housing units.

Demolition

The Clinton Administration recognizes that public housing "is plagued by a series of deeply-rooted and systemic problems". (Cisneros 1996, p. 1) The work of architects and sociologists in the 1960's and 1970's has shown the administration that there is a definite correlation between crime and building size, as well as a relationship between crime and social factors and pathologies that arise from and/or are intensified by the distinctive design of public housing. The Department of Housing and Urban Development (HUD) has developed strategies aimed at alleviating the most threatening aspects in housing projects, with crime as a top priority. The Clinton administration holds that the best way to cure social malaise and crime in housing projects is

to simply demolish that which is "infected" and start again. New public housing projects, smaller in scale and less distinct in appearance, have been and will be constructed.

Prior to the Clinton administration 1,600 units of public housing were torn done annually. In 1996, the administration set up a four year plan which would call for 24,000 units of inferior public housing stock to be torn down. This unprecedented demolition of public housing exceeds the 20,000 units that were in total demolished in the previous ten years. The Department of Housing and Urban Development has followed two tracks to physically redesign public housing. First, HUD has aggressively implemented HOPE VI, a program which provides localities with funds to reshape public housing neighborhoods, increase availability of education and vocational courses, job placement, and other support services. Second, HUD successfully repealed the "one for one replacement law" which forced housing authorities to replace each demolished unit with a new one. Recognizing that high-rise projects do influence crime rates and assist the formation of social ills, high-rises are being torn down and replaced with townhouses and garden apartments; urban street grids are being reconfigured; and defensible space mechanisms are being considered in new designs, as well as in neighborhood safety. (Cisneros 1996)

Plans provide more suitable residential environments began in the 1980's. The 1984 Newark Master Plan called for the demolition of many of the 46 high-rise buildings constructed between 1953 and 1962 remaining in the city. The Master Plan advocates the new construction of townhouses, and the conversion of other high-rise buildings to adult only housing, to replace

the old public housing stock. Newark, still as of today, has not completed much of the 1984 plan for new construction and renovation.

Extensive "renovations" were implemented at eight projects in 1996, among them was the infamous Cabrini Green in Chicago. Three of Cabrini Green's high-rise buildings were torn done; HUD is currently in search of private sector partners to rebuild on the site. At the Henry Horner Homes in Chicago HUD has demolished two high-rises with a total of 466 units and plans to demolish another three midsize buildings. These five buildings are to be replaced by over 700 townhouses throughout Chicago's west side. In August 1996 the six high-rise buildings and seventeen low-rise buildings that together formed Lafayette Courts in Baltimore were torn done; the construction of townhouses, low-rise family apartments and senior housing (total development: 400 units) followed soon after. (Cisneros 1996) In Newark, the demolition of four buildings of the Christopher Columbus Homes, the epitome of bad housing, comprised of rows of dilapidated 13 story slab high-rise buildings, inhabited by 1500 families on 14 acres of land, took place in March 1994. (Cisneros 1996; Franck and Mostoller 1995) The remaining four buildings also are slated for demolition. (Franck and Mostoller 1995) Construction of 2000 townhouse apartments both within the neighborhood and around Newark began in 1994. (Cisneros 1996)

Newly constructed public housing in New York and San Francisco consist of row houses or low rise apartment complexes which open onto the city streets and are surrounded by enclosed courtyards, accessible only from individual dwellings. (Franck and Mostoller 1995)

Reemergence of Defensible Space

Henry Cisneros, Secretary of Housing and Urban Development, articulates that in addition to demolishing public housing, defensible space mechanisms are being employed in existing housing. Part of HUD's Community Partnership Against Crime (COMPAC) strongly advocates security fencing and other techniques of defensible space. HUD also is involved in an information campaign to increase housing authority directors' awareness of the concept of defensible space and its application. Further, HUD requires that housing authorities submit an assessment of their project's security needs, including a defensible space analysis, in order to be eligible to receive COMPAC assistance. (Cisneros 1995)

Bratt (1986) and Dunworth and Saiger (1994) assert that since its inception, the concept of Defensible Space has been highly acclaimed and accepted; it has led to a significant reduction in the incidence of high-rise public housing developments constructed after the 1960's. Despite its effectiveness in decreasing crime, few housing projects incorporated "defensible" features predominantly on account of fiscal stringency. (Dunworth and Saiger 1994) However, in the 1990's the crime rate has become so extreme that local housing authorities are willing to again use defensible space techniques to alleviate the crime epidemic. Crime and vandalism, long endemic in public housing, have been exacerbated by the crack cocaine epidemic, the increased availability of inexpensive guns, and the rise of gangs. (Dunworth and Saiger 1994; Cisneros 1995) Many of the older, high density urban projects have become environments of such peril that even police fear for their lives upon entering. (Cisneros 1995) "Residents

have become prisoners in their own apartments, cringing behind darkened windows and hoping to avoid the next spray of random gunfire" (Cisneros 1995b, p. 4) Cisneros contends that because Defensible Space has had impressive past success in dramatically reducing criminal activity in housing projects, it has the capacity to help halt the spread of urban decay in housing projects. (Cisneros 1995)

Defensible space principles recently have been used to modify the Outhwaite Homes in Cleveland, a high- rise development (Newman 1972; Cisneros 1995), The Renaissance Homes, also in Cleveland, and Potomac Gardens in Washington DC. In the Renaissance Homes the long interior hallways on the ground floor were eliminated by adding hall space to adjacent apartments. Additionally each apartment was provided with an outside entrance. Evidence of the success of defensible space in deterring crime can be found at Potomac Gardens. In 1992 Potomac Gardens erected eight foot perimeter fences around the buildings, consequently, the number of drug related arrests significantly decreased from 150 in 1991 to 7 in 1992. (Cisneros 1995)

Defensible Space mechanisms also have been successfully employed in other cities. In San Francisco and Boston unassigned public spaces are being redefined as to enclose outdoor space, and in many cases to create private yards or patios assigned to individual apartments on the first floor. Also in many cases, the streets within the superblocks are being reopened to traffic and attempts have been made to orient buildings and building entrances to the street. (Franck and Mostoller 1995)

New Construction Guidelines

Architects, realizing that the physical design can not determine behavior, are abandoning the public housing design schemes of the 60's and 70's. They no longer believe that the physical well being of the inhabitant can "determined" through the allocation of open space, as well as light and air. Light and air are no longer the primary goal in housing the poor; instead, security and the reduction of the fear of crime are principal focus in building design and site organization. Crime and fear of crime are the most compelling factors in vacancy rates and building deterioration. (Newman 1972; 1973; 1976; 1995; 1996; Merry 1981a, 1981b; Franck and Mostoller 1995) Thus, now we find that the open, undefined sites of the modernist high-rises, once praised for the light and air they afforded, have been rejected for the creation of fear and crime. Architecture now calls for public housing developments consisting of row houses fronting the street with enclosed spaces on the interior of the site. The new design guide lines for public housing advocate private front and back yards or fully enclosed common areas with defined uses. By allocating the large unused tracts of open space into programically defined areas and private yards security will be improved.

The new design guidelines also advocate the integration of the project into the surrounding urban fabric. Variations of building types, facade treatments, building materials, arrangement of buildings are recommended in order to produce projects that are less identifiable, less obtrusive, and less institutional in appearance. Further, the individuality of households, rather than the commonality associated with high-rise living, should be emphasized with private entrances opening onto the street. (Franck and Mostoller, 1995)

CONCLUSION

Why should modernist high-rise public housing developments be considered such an all-pervading failure, when they were conceived as a form of national salvation? Modernism, rooted in architectural determinism, sought to liberate the populace from the slums, but created an even worse form of bondage. It is our conclusion that the application of architectural determinism will inevitably lead to failure.

Modernists were incorrect in their assertion that middle class environments providing light, air and space could ameliorate social ills prevalent in slums. Architecture alone can not determine behavior. Social and physical factors of a particular environment together create one total human environment in which crime occurs (Rouse and Rubenstein 1978). In housing projects not only are the crime rates different from those of other developments, but the social and physical factors which contribute to crime also differ. Physical factors such as the lack of surveillance opportunities and lack of territoriality reduce the risk of apprehension, thereby, make crime more desirable in these areas. Additionally, social factors such as the lack of social cohesion and identification as a community contribute to the motivations behind the lack of territoriality and surveillance.

Universal designs can not be applied to the lower class simply because as both the literature and our data analysis have demonstrated the poor and non-poor have different attitudes concerning self and other. These attitudes comprise a value system or beliefs or attitudes held by the individual which play a primary part is his/her interactions and behaviors. It follows that since the socio-economic classes have different value systems architects and

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planners must design housing that meets their individual group needs. In the case of high-rises, the design was appropriate for the middle class; however due to the divergent attitudes of the poor this design could not provide a suitable, secure residential environment for the lower class.

There is now an acknowledgment of the need for designs specific to the needs of the lower class. The 1990's reveals a new movement, one of reform and redemption. The Clinton Administration is attempting to aggressively tackle the ailments of public housing through implementation of defensible space and the demolition of crime ridden high-rise buildings. In atonement for the horrors of public housing life in the past, new housing types better suited to the lifestyles of the lower class are being constructed. Hopefully, in the design of new housing projects, a broader sociological approach will be assumed, allowing for the formation of community and the deterrence of crime through design.

Cochran Gardens: Defensible Space Modifications

A good example of the success of the implementation of defensible space strategies is Cochran Gardens in St. Louis. This project, comprised of 13 high rise buildings adhering to the Modernist Design Theory, was slated to be demolished in 1976. At that time, there was a 50% vacancy rate, the buildings themselves and the individual units were severely deteriorated, and the housing authority and the police were scared to enter the project. The need for security led to the creation of "portholes" which allowed for increased surveillance opportunities. Portholes were cut into the brick shielding of the fire escape staircases. The portholes mirror those of the Columbus Square housing development, market rate housing for the middle class, located adjacent to Cochran Gardens. Thus, the portholes had two effects: first, they allowed guards to monitor the arrivals and departures of people; second, they helped diminish the differences between lower and middle class housing; thereby, allowing public housing to enter "the real world" through architectural simulation leading to resident empowerment. (Ingrahm, 1986)

Riverbend Houses: Prototype of Defensible Space

Riverbend Houses, one of the first and only high-rise prototypes of defensible space design, opened in October 1968. The project density totaled 624 units per 3.7 acre tract. In its first 4 years of operation 6 burglaries and muggings were committed there, despite the fact that there were insufficient funds to hire a doorman and it is located in Harlem, which suffers a felony rate of three times the New York City average. Newman (1972) predicates that the low crime rate of this project is attributable to a variety of security features incorporated into the design that allow the space to be defensible. The two principal components of the Riverbend houses: the positioning of the individual apartment relative to the access corridor and the positioning of the "high-rise, single-loaded corridor slabs in relation to each other, the intervening shared grounds, and the surrounding urban fabric" (Newman, 1972, p. 122) allow for maximum defensible space. The development is split into three residential archetypes: single loaded corridor high-rise buildings; traditional high-rise double corridor building; and two 10 story buildings consisting of 2 story duplex apartments. From the defensible space point of view, the duplex apartment building is the most successful. The access corridor is seen as semi-public space by the 10 apartments along it; thus, there is a sense of territoriality which breeds responsibility and care for the area. The duplex apartments, located in two 10 story high-rise slab buildings, are arranged in such a way that their outside corridors face one another across the common play area (situated between the two buildings on the top of a roof deck located above a two story garage which is accessible only from within the project via elevator), allowing residents to easily

monitor those entering and exiting the building on all floors of the opposite

building. Further, the number of entrances has been limited to four, which

open onto the public street. Three entrances front fifth avenue, an

intensively used area, thereby, allowing for maximum surveillance.

Additionally, an intercom system was installed to prohibit access to the lobby

area and elevators. There also are closed circuit television cameras installed

in elevators to provide surveillance. The video footage can be viewed on

televisions in the lobby and on empty channels on cable TV from residents'

apartments. (Newman 1972, 1973; Newman and Franck 1980)

	Poor	Non-Poor	Chi-SQ
White	128 11.2%	1015 88.8%	
Black	51 23.2%	169 76.8%	23.222*** DF=1

*p< .05, **p<.01, *** p< .001   "Percentages represent the count within race

Table 2: Dwelling Type by Socio-Economic Class

	Poor	Non-Poor	Chi-SQ
Single Family	91 53.5%	783 67.7%	
Low-Rise (Less than 3 stories)	70 41.2%	324 28%	
High-Rise (Greater than 3 stories)	9 5.3%	50 4.3%	13.481** DF=2

*p< .05, **p< .01, ***p< .001

Table 3: Anomie Index By Dwelling Type

	Single Family	Low-rise	High-rise	Chi Sq
Additive Anomie Score Indicates level of anomie				
3 Most Anomic	137 25.7%	66 26%	10 34.5%	
4	144 27%	79 31.1%	4 13.8%	
5	149 27.9%	72 28.3%	9 31.0%	
6	104 19.5%	37 14.6%	6 20.7%	6.529 DF=6

*p< .05, **p< .01, ***p< .001

Table 4: Withdrawal Index By Dwelling Type

	Single Family	Low-rise	High-rise	Chi Sq
Additive Withdrawal Score indicates level of withdrawal				
1 Least Withdrawn	311 54.9%	117 44.5%	18 47.4%	
2 Moderately Withdrawn	121 21.4%	64 24.3%	13 34.2%	
3 Most Withdrawn	134 23.7%	82 31.2%	7 18.4%	11.640* DF=4

*p< .05, **p< .01, ***p< .001

Table 5: Depression Index By Dwelling Type

	Single Family	Low-rise	High-rise	Chi Sq
Additive Depression Score indicates level of depression				
2 Most Depressed	133 23.2%	52 18.9%	3 10.7%	
3	189 32.9%	81 29.5%	9 32.1%	
4	210 36.6%	103 37.5%	10 35.7%	
5	31 5.4%	34 12.4%	3 10.7%	
6 Least Depressed	11 1.9%	5 1.8%	3 10.7%	25.595*** DF=8

*p< .05, **p< .01, ***p< .001

Table 6: Attitudes By Economic Status

	Poor	Non-Poor	Chi-Square
Can People Be Trusted?			
Most can be.	31 25.0%	310 40.4%	
Can't be too careful.	89 71.8%	424 55.2%	
Depends.	4 3.2%	34 4.4%	12.049** DF= 2
Are You Happy These Days?			
Very happy.	43 24.2%	409 34.8%	
Pretty happy.	113 63.5%	668 56.9%	
Not too happy.	22 12.4%	98 8.3%	9.243** DF=2
Are People Fair?			
Would be fair.	56 45.9%	456 59.6%	
Would take advantage.	60 49.2%	262 34.2%	
Depends.	6 4.9%	47 6.1%	10.151** DF=2
Are People Helpful?			
Helpful.	50 40.3%	413 54.3%	
Just looking out for selves.	67 54.0%	300 39.4%	
Depends.	7 5.6%	48 6.3%	9.529** DF=2
In General Life is:			
Exciting	36 31.3%	371 47.1%	
Routine	62 53.9%	388 49.3%	
Dull	17 14.8%	28 3.6%	31.345*** DF=2

*p< .05, **p< .01, ***p< .001

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Table 7: Attitudes Concerning Societal Difference by Socio-Economic Status

		Poor	Non-Poor	Chi-Sq
Only if income difference is large enough there is incentive to work.	Agree	99 67.8%	610 56.8%	
	Disagree	47 32.2%	464 43.2%	6.402** DF=1
Personal income shouldn't be determined by work-all should get what they need.	Agree	108 62.8%	435 38.1%	
	Disagree	64 37.2%	706 61.9%	37.497*** DF=1
One of the biggest problems is that we don't give all an equal chance.	Agree	138 78.9%	876 75.2%	
	Disagree	37 21.1%	289 24.8%	2.554 DF=1

*p< .05, **p< .01, ***p< .001

Table 8: Satisfaction Variables by Socio-Economic Class

		Poor	Non-Poor	Chi-Sq
Satisfied with family life?	**A great deal**	98 82.4%	663 87.8%	
	Somewhat	19 16%	77 10.2%	
	No	2 1.7%	15 2.0%	3.515 DF= 2
Satisfied with city you live in?	**A great deal**	71 59.2%	521 68.6%	
	Somewhat	42 35%	209 27.5%	
	No	7 5.8%	30 3.9%	4.278 DF=2
Satisfaction with child's neighborhood: Compared to 10 yrs ago safety of child's neighborhood is?	**Better**	20 11.4%	95 8.2%	
	Same	40 22.9%	284 24.5%	
	Worse	115 65.7%	781 67.2%	2.076 DF=2
Satisfaction with child housing- compared to 10 yrs ago housing is	**Better**	70 40.5%	437 38.1%	
	Same	62 35.8%	535 46.6%	
	Worse	41 23.7%	175 15.3%	10.647** DF=2
Satisfaction with child housing- should the government spend more for families w/ children?	**Spend more**	115 74.2%	495 49.7%	
	Spend the same	34 21.9%	424 42.6%	
	Spend less	6 3.9%	77 7.7%	32.30*** DF=2

*p< .05, **p< .01, ***p< .001

Table 9: Anomie Index By Socio-Economic Class

Additive Anomie Score Indicates level of anomie	Poor	Non-Poor	Chi-SQ
3 Most Anomic	44 42.3%	174 23.7%	
4	27 26%	208 28.3%	
5	20 19.2%	212 28.9%	
6 Least Anomic	13 12.5%	140 19.1%	17.522** DF=3

*p< .05, **p< .01, ***p< .001

Table 10: Anomie Index By Race

Additive Anomie Score Indicates level of anomie	White	Non-White	Chi-SQ
3 Most Anomic	159 22.2%	60 47.6%	
4	206 28.8%	29 23%	
5	205 28.7%	28 22.2%	
6 Least Anomic	145 20.3%	9 7.1%	39.492*** DF=3

*p< .05, **p< .01, ***p< .001

Table 11: Withdrawal from Society by Socio-Economic Status

Additive Index of level of individual withdrawal from society.	Poor	Non-Poor	Chi-SQ
1 Least Withdrawn	44 36.1%	411 54.3%	
2 Moderately withdrawn	30 24.6%	168 22.2%	
3 Most Withdrawn	48 39.3%	178 23.5%	17.253*** DF=2

*p< .05, **p< .01, ***p< .001

Table 12: Withdrawal from Society by Race

Additive Index of level of individual withdrawal from society.	White	Non-White	Chi-SQ
1 Least Withdrawn	418 57.1%	38 24.8%	
2 Moderately withdrawn	159 21.7%	42 27.5%	
3 Most Withdrawn	155 21.2%	73 47.7%	61.994*** DF=2

*p< .05, **p< .01, ***p< .001

Table 13: Depression by Socio-Economic Class

Additive Index of level of Depression	Poor	Non-Poor	Chi-SQ
2- Least Depressive	12 10.5%	183 23.4%	
3	34 9.8%	248 31.7%	
4	45 39.5%	284 36.3%	
5	15 13.2%	56 7.2%	
6 Most Depressive	8 7.0%	12 1.5%	25.902*** DF=4

*p< .05, **p< .01, ***p< .001

Table 14: Depression by Race

Additive Index of level of Depression	White	Non-White	Chi-SQ
2- Least Depressive	173 22.6%	22 15.9%	
3	247 32.3%	38 27.5%	
4	271 35.5%	60 43.5%	
5	58 7.6%	13 9.4%	
6 Most Depressive	15 2.0%	5 3,6%	7.270 DF=4

*p< .05, **p< .01, ***p< .001

Table 15: Victimization by Socio-Economic Class

	Poor		Non-Poor		Chi-SQ
	Yes	No	Yes	No	
Victim of Burglary (Had something taken from home)	10 8.6%	106 91.4%	45 5.7%	749 94.3%	1.554
Victim of Robbery (Had something taken directly from your person, i.e. mugging)	3 2.6%	113 97.4%	10 1.3%	784 98.7%	1.265
Victim of Physical Attack (punched or beaten by someone)	46	78 37.1% 62.9%	279	488 36.4% 63.6%	.024
Victim of Gun Attack (threatened or shot with a gun)	28 22.6%	96 77.4%	145 18.9%	622 81.1%	.922

*p< .05, **p< .01, ***p < .001

Table 16: Fear of Crime by Socio-Economic Class

	Poor	Non-Poor	Chi-SQ
Afraid walking alone at night w/in a mile of home.	70 60.3%	301 38.4%	
Not afraid walking alone at night w/in a mile of home.	46 39.7%	483 61.6%	20.097*** DF=1

*p< .05, **p< .01, ***p< .001

Table: 17 Highest Level of Educational Attainment by Socio-Economic Class

	Poor	Non-Poor	Chi-SQ
No formal schooling	1 .6%	2 .2%	
Grade School	34 19.1%	78 6.6%	
Some High School	48 27%	137 11.6%	
Graduated High School	46 25.8%	385 32.5%	
Some College	32 18%	302 25.5%	
Graduated College	8 4.5%	154 13%	
Graduate Study	9 5.1%	125 10.6%	77.443*** DF=6

*p< .05, **p< .01, ***p< .001

Table 18: Marital Status By Socio-Economic Class

	Poor	Non-Poor	Chi-SQ
Married	50 27.9%	674 57%	
Widowed	35 19.6%	135 11.4%	
Divorced	36 20.1%	133 11.2%	
Separated	10 5.6%	26 2.2%	
Never Married	48 26.8%	215 18.2%	55.547*** DF=4

*p< .05, **p< .01, ***p< .001

Table 19: Workstatus by Socio-Economic Class

	Poor	Non-Poor	Chi-SQ
Full Time	39 23.1%	661 56.4%	
Part Time	29 17.2%	117 10%	
With job; currently on vacation, strike, temp. illness	2 1.2%	24 2%	
Unemployed	7 4.1%	25 2.1%	
Retired	29 17.2%	164 14%	
In School	17 10.1%	31 2.6%	
Keeping House	46 27.2%	151 12.9%	85.9*** DF=6

*p< .05, **p< .01, ***p< .001

Table 20: Analysis of Variance of the Sums of Anomie ,Withdrawal, and Depression Indexes by Socio-Economic Status

	Poor	Non-Poor	F Ratio
Mean Sum: Anomie^	4.01 (1.06)^	4.4332 (1.05)	14.124***
Mean Sum: Withdrawal^^	2.03 (.871)	1.69 (.827)	17.546***
Mean Sum: Depression^^	3.76 (1.04)	3.31 (.959)	20.950***

*p< .05, **p< .01, ***p< .001 ^ denotes standard deviation.
^ Low scores=high levels, ^^High scores= high levels.

Dwelling Type by Anomie Level
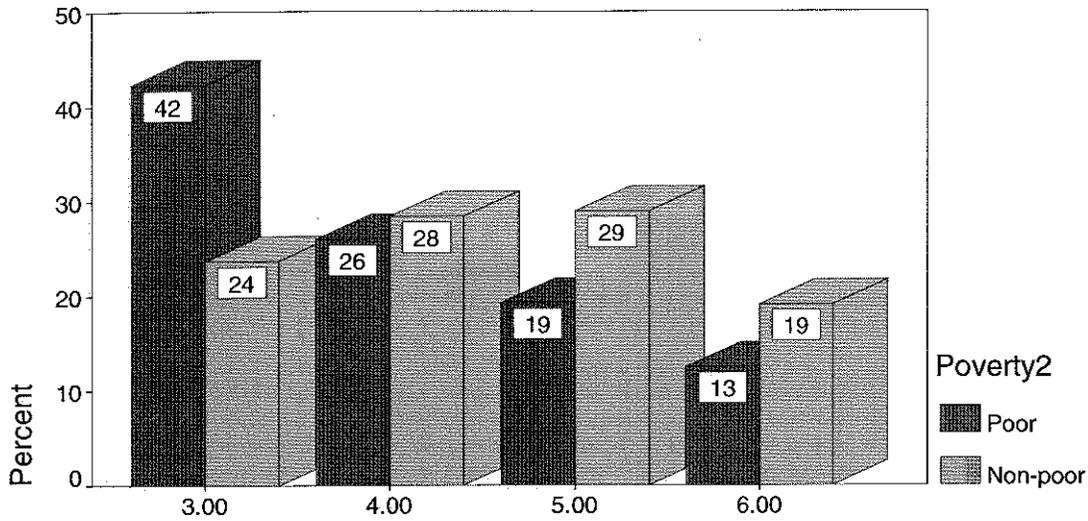
Anomia Index

F= 6.529

*p<.05, **p<.01, ***p<.001 low anomie scores= high anomie

Dwelling Type by Depression Level
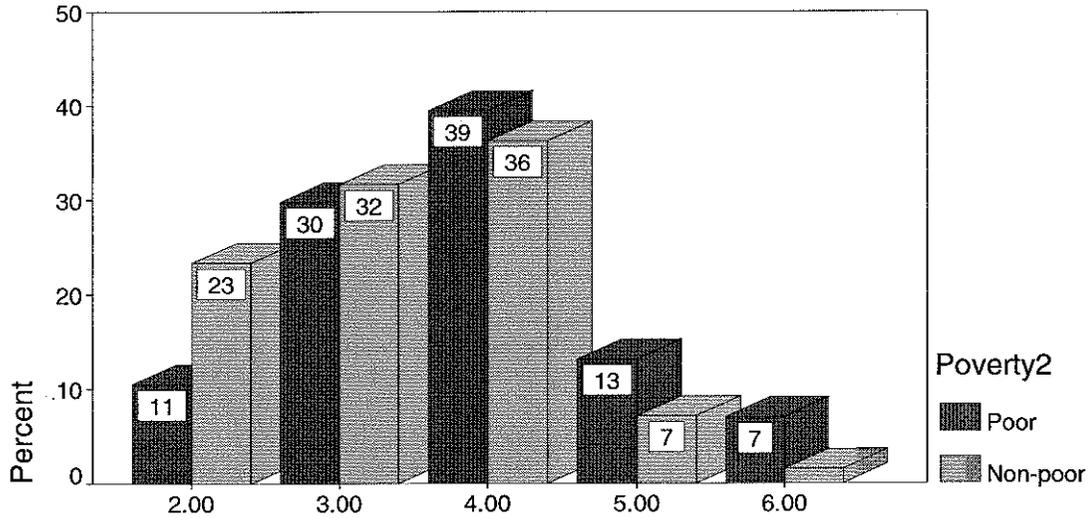
DEPRESSION

F= 25.595***

*p<.05, **p<.01, ***p<.001

Dwelling Type by Withdrawl Level
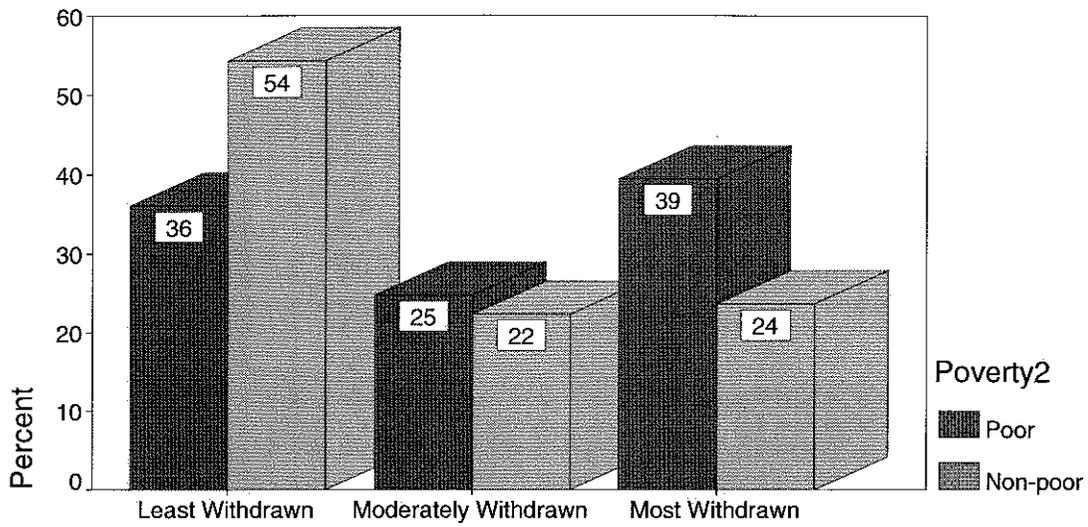
withdrawl index

F= 11.640*

*p<.05, **p<.01, ***p<.001

High-Rise Dwellers Anomie Levels
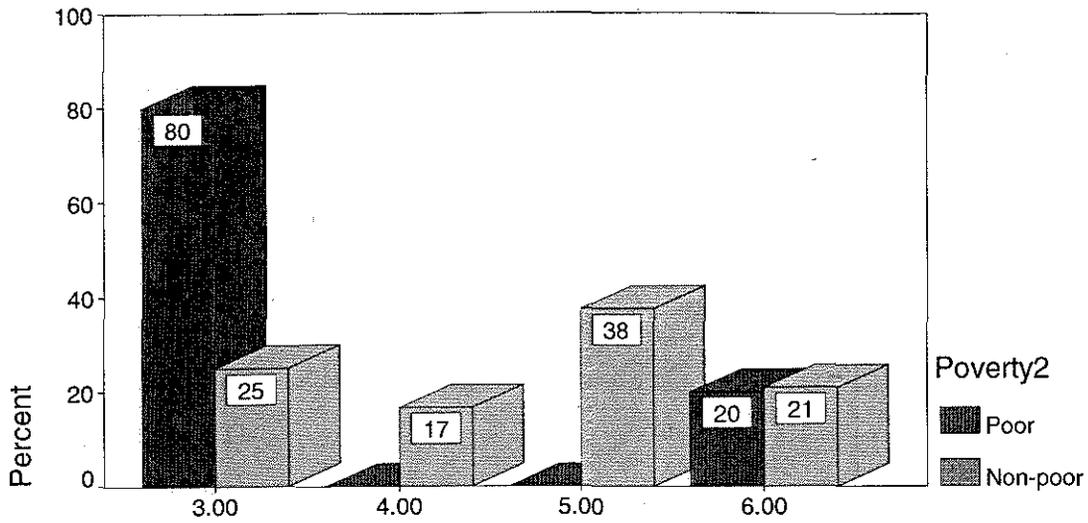
Anomia Index

F=6.349

*p<.05, **p<.01, ***p<.001 low scores=l high anomie

High-Rise Dwellers' Depression Levels
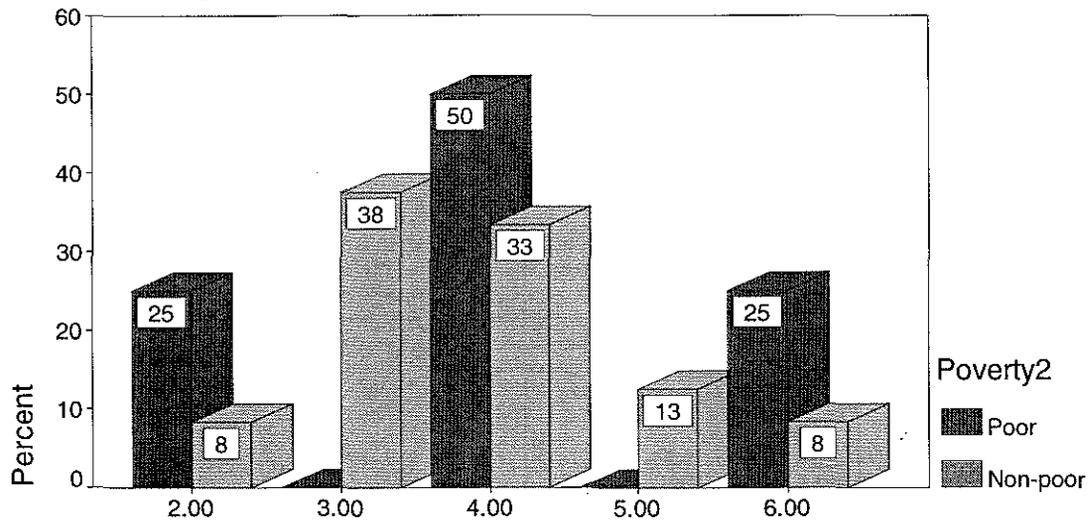
DEPRESSI

F=4.044

*p<.05, **p<.01, ***p<.001 high scores=high levels

High-Rise Dwellers' Withdrawl Levels
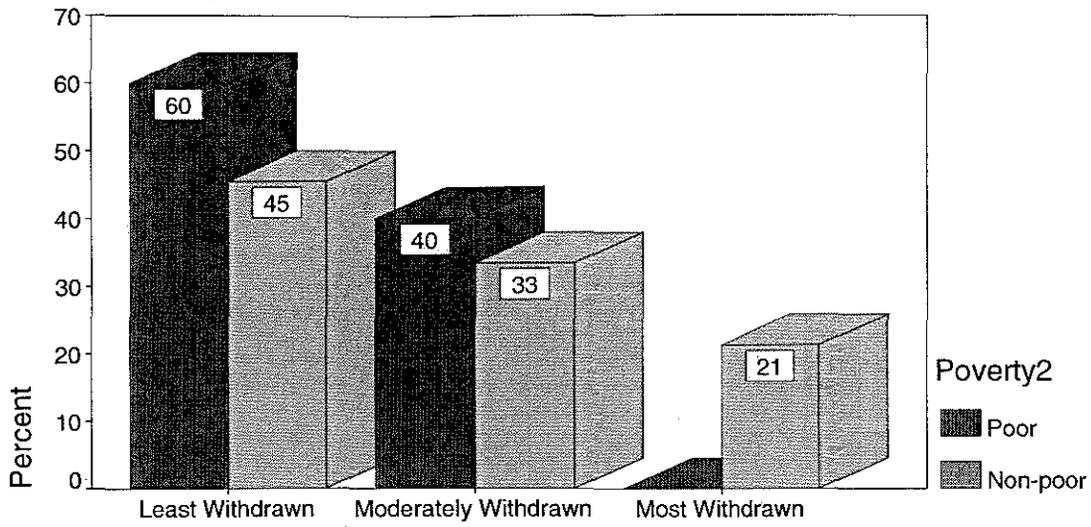
withdrawl index

F=1.311

*p<.05, **p<.01, ***p<.001 high scores=high levels

Whites' Anomie Levels
by Socio-Economic Class
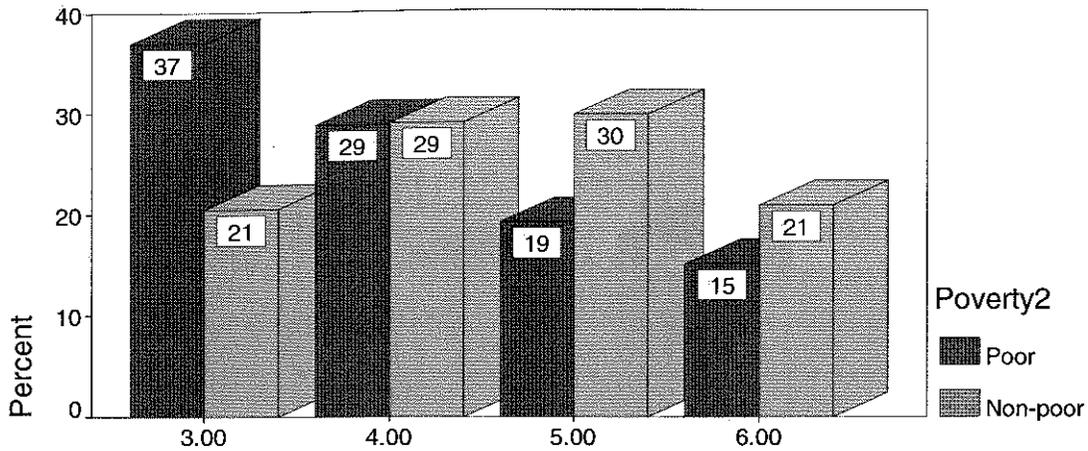
Anomia Index

F=11.642***

*p<.05, **p<.01, ***p<.001 low scores=high anomie

Whites' Depression Levels
by Socio-Economic Class
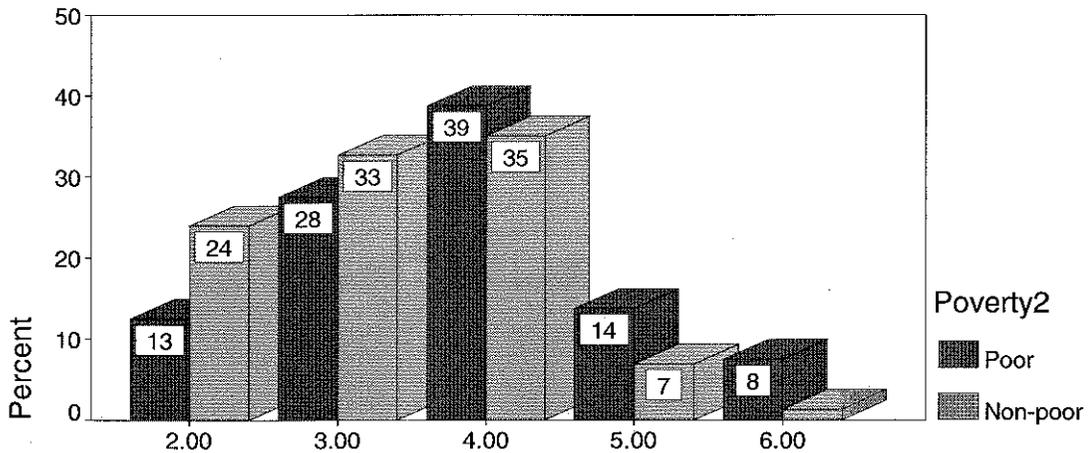
DEPRESSION

F=23.206***

*p<.05, **p<.01, ***p<.001

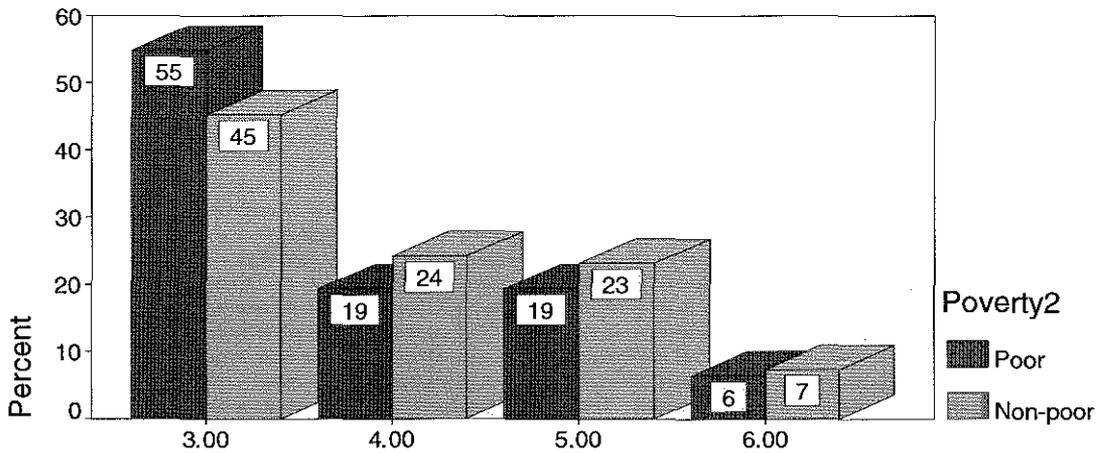# Whites' Withdrawl Levels
by Socio-Economic Class
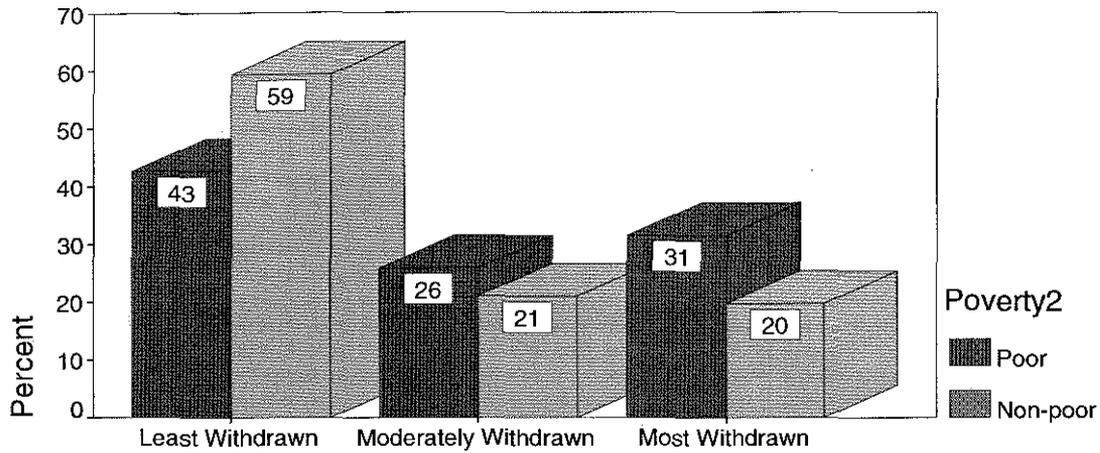
withdrawl index

F=9.717**

*p<.05, **p<.01, ***p<.001

Blacks' Anomie Levels
by Socio-Economic Class

Anomia Index

F=.869

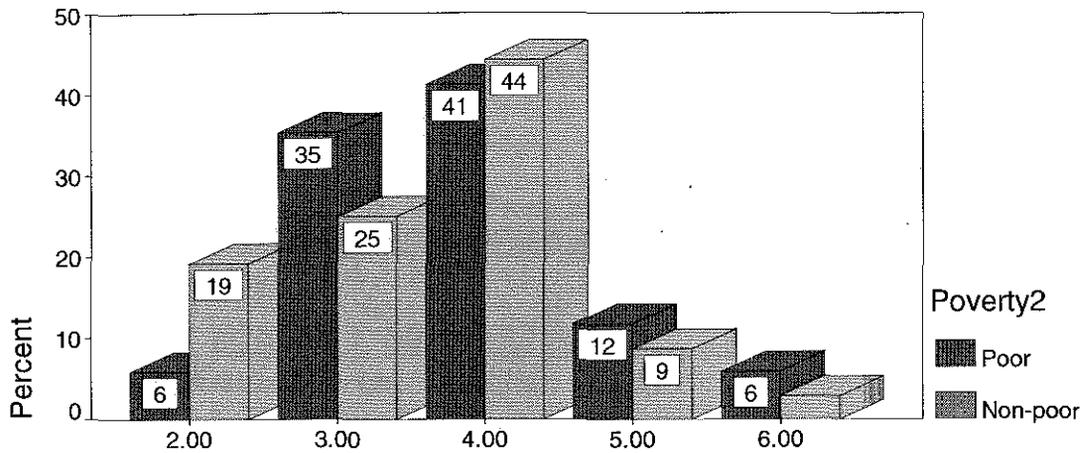*p<.05, **p<.01, ***p<.001

Blacks' Depression Levels
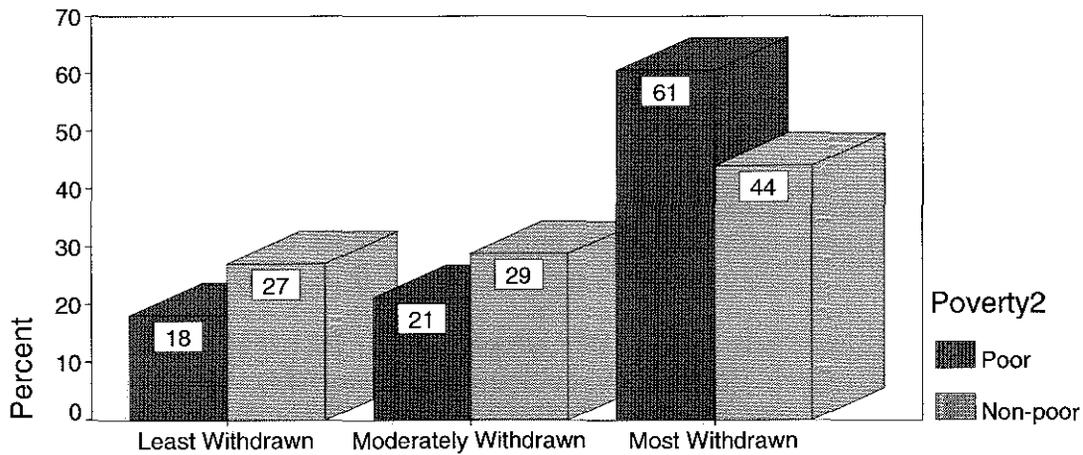## by Socio-Economic Class

DEPRESSION

F=4.804

*p<.05, **p<.01, ***p<.001

Blacks' Withdrawl Levels
by Socio-Economic Class

withdrawl index

F= 2.846

*p<.05, **p<.01, ***p<.001

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