An analysis of the double jeopardy hypothesis as it pertains to minority elderly

Richard Henry Coon

Iowa State University
INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.

2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.
An analysis of the double jeopardy hypothesis
as it pertains to minority elderly

by

Richard Henry Coon

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Department: Sociology and Anthropology
Major: Sociology

Approved:
Signature was redacted for privacy.

In Charge of Major Work
Signature was redacted for privacy.

For the Major Department
Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1984
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Explanation of Dissertation Format</td>
<td>1</td>
</tr>
<tr>
<td>Research Overview</td>
<td>1</td>
</tr>
<tr>
<td>SECTION I. A THEORETICAL ANALYSIS OF DOUBLE JEOPARDY</td>
<td>4</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>6</td>
</tr>
<tr>
<td>SECTION ONE: LITERATURE REVIEW</td>
<td>7</td>
</tr>
<tr>
<td>Double Jeopardy</td>
<td>8</td>
</tr>
<tr>
<td>Education</td>
<td>8</td>
</tr>
<tr>
<td>Family</td>
<td>9</td>
</tr>
<tr>
<td>Employment</td>
<td>11</td>
</tr>
<tr>
<td>Income</td>
<td>12</td>
</tr>
<tr>
<td>Health related issues</td>
<td>14</td>
</tr>
<tr>
<td>Concluding Remarks to Section One</td>
<td>15</td>
</tr>
<tr>
<td>SECTION TWO: SOME ALTERNATIVE VIEWS ON MINORITY AGING</td>
<td>17</td>
</tr>
<tr>
<td>SECTION THREE: THEORETICAL IMPLICATIONS</td>
<td>22</td>
</tr>
<tr>
<td>Status inconsistency</td>
<td>25</td>
</tr>
<tr>
<td>Social learning—exchange theory</td>
<td>26</td>
</tr>
<tr>
<td>Status generalization theory</td>
<td>30</td>
</tr>
<tr>
<td>CONCLUDING REMARKS AND DISCUSSION</td>
<td>33</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>35</td>
</tr>
<tr>
<td>SECTION II. AN ANALYSIS OF SUBJECTIVE INDICATORS OF DOUBLE JEOPARDY</td>
<td>39</td>
</tr>
</tbody>
</table>
# Table of Contents

**INTRODUCTION**

- Statement of Problem
- Literature and Theoretical Issues
- Hypotheses
- Data and Methods
  - Dependent variables
  - Independent variables
  - Analysis technique
- Findings
  - Happiness
  - Health
  - Satisfaction with finances
  - Family finances relative to others
- Discussion
- Future Research

**REFERENCES**

**APPENDIX: DEPENDENT VARIABLES**

**SECTION III. AN ANALYSIS OF OBJECTIVE INDICATORS OF DOUBLE JEOPARDY**

**INTRODUCTION**

- Statement of Problem and Review of Literature
- Data and Methods
  - Research sample and design
  - Dependent variables
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>74</td>
</tr>
<tr>
<td>General format of class analysis</td>
<td>74</td>
</tr>
<tr>
<td>Analysis technique</td>
<td>75</td>
</tr>
<tr>
<td>Findings</td>
<td>77</td>
</tr>
<tr>
<td>Total family income</td>
<td>77</td>
</tr>
<tr>
<td>Marital status</td>
<td>79</td>
</tr>
<tr>
<td>Burglary</td>
<td>82</td>
</tr>
<tr>
<td>DISCUSSION AND CONCLUSIONS</td>
<td>84</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>90</td>
</tr>
<tr>
<td>APPENDIX A: CATEGORICAL N's FOR INCOME</td>
<td>93</td>
</tr>
<tr>
<td>APPENDIX B. CATEGORICAL N's FOR MARITAL STATUS</td>
<td>95</td>
</tr>
<tr>
<td>APPENDIX C: CATEGORICAL N's FOR BURGLARY</td>
<td>97</td>
</tr>
<tr>
<td>APPENDIX D. DEPENDENT VARIABLE</td>
<td>99</td>
</tr>
<tr>
<td>APPENDIX E. CODING SCHEME FOR DEPENDENT VARIABLES</td>
<td>100</td>
</tr>
<tr>
<td>GENERAL SUMMARY AND CONCLUSIONS</td>
<td>101</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>104</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>105</td>
</tr>
</tbody>
</table>
GENERAL INTRODUCTION

Explanation of Dissertation Format

This three-phase research plan is set within the recently adopted alternate dissertation format. This format provides for the production of a series of papers, suitable for submission to professional journals of appropriate tenor, as a means of satisfying the requirements for the doctoral degree. With regard to the three papers in the present work, this format is ideally suited to the research plan. The three papers all deal with a single topic, but do so from variant means of approach. Each paper is able to stand on its own merit, yet taken together they provide a thorough investigation of the research subject.

A definite strong point of this dissertation format is that it allows the investigator the opportunity to pursue divergent methods of analysis, thereby allowing for a more complete analysis of the topic. Further, in keeping with the pedagogical intent of education, it permits one to explore various research techniques and, hence, aids in keeping the dissertation within the parameters of a true learning experience.

Research Overview

In broad terms, this dissertation deals with examining the ramifications of aging for minority (more specifically in this case, black) residents in the United States of America. In more precise terms, the research focuses on determining the merit of a concept which has developed from the work of numerous social gerontologists who deal with
the aging of minority individuals in this society. The concept (a hypothesized relationship between race and age) has been termed double jeopardy. The notion of double jeopardy refers to the posited negative consequences said to be associated with old age and minority status in American society. The double jeopardy hypothesis is theoretically examined in depth in the first paper, as one other means by which an investigator may determine the applicability of the concept of double jeopardy to minority aging in present day American society. For analytic purposes, this proposed negative association (double jeopardy) is herein examined as the presence or absence of a statistically determined interaction effect.

The flow of this three-paper research series is as follows. In the first paper, the literature related to double jeopardy is reviewed. It is shown that there are inconsistent findings regarding the relationship of age and race across various studies, and then proceeds to articulate a theoretically-based concept evaluation scheme as a method of determining the adequacy of a concept. Finally, the paper lays out a number of theoretical frameworks and in each case the double jeopardy concept is evaluated within the theoretical sketch. This first paper proposes the need for further investigations along two different, but related, lines: (1) an analysis of subjective factors associated with age and race, and (2) an analysis of objective factors of a similar nature.

The second paper, then, takes up the first line of investigation by examining subjective (social psychological—attitudinal) factors
which are considered relevant to the topic. The dependent variables of interest are: (1) general happiness, (2) self-reported health, (3) satisfaction with finances, and (4) finances relative to others. Multiple classification analysis is used as the analytic method.

In the final paper, a logit analysis technique is used to examine the second line of investigation articulated in the first paper — objectively defined factors theoretically associated with double jeopardy. The three dependent variables analyzed in this paper are: (1) marital status, (2) total family income, and (3) burglary.

The data used in the second and third analytic papers are drawn from the NORC cumulative social surveys. As a qualifier to the overall generalizability of this research, it must be pointed out that the number of respondents becomes quite small, once one categorizes the entire sample into subsample characteristics. Thus, rather than being a definite analysis of double jeopardy, this research should be looked upon as simply indicative of recent research trends in minority aging in American society.
SECTION I. A THEORETICAL ANALYSIS OF DOUBLE JEOPARDY
A theoretical analysis of double jeopardy

Richard H. Coon

From the Department of Sociology and Anthropology
Iowa State University
Ames, Iowa 50011
INTRODUCTION

The purpose of this treatise is to critically evaluate the merit of the concept of "double jeopardy" as regards minority aged. The exposition itself will be set forth in four separate but related sections. First, a general review of the literature on double jeopardy will be set forth in an attempt to depict the tenor of much of the research in the field. This review will be structured around five variables which have been used in earlier investigations of double jeopardy.

In section two a reevaluation of the concept will be carried out by looking at some alternative research findings which do not support the double jeopardy concept. Also, in this section an attempt will be made to ground the formulation of the double jeopardy notion within a general historical perspective. This temporal analysis will be underpinned by a diagrammatic representation of the growth of the double jeopardy concept.

Thirdly, a discussion of a more structured approach to concept evaluation will be set forth. By using this strategy, the researcher may make decisions with respect to the fruitfulness, dimensions, and importance of a concept before actually gathering any data. Further, the argument will be implemented that the concept of double jeopardy was not well thought out to begin with, and that had a strategy similar to that depicted here been used, a more well-informed investigation of aging in minority populations could have been carried out, thereby eliminating much of the discord which has arisen with reference to double jeopardy.
Finally, a short discussion of numerous theoretical perspectives and their relationship to double jeopardy will be presented. No one theory will be considered most important, but rather, each theory is presented as adding insight into the understanding of the concept.

SECTION ONE: LITERATURE REVIEW

Over the past few decades, research on the elderly has become more prominent in a number of scientific disciplines. Until recently, however, the vast majority of these investigations have been limited to the aging of whites. Recent studies have begun to rectify this situation although much must still be done to bring about a better understanding of the condition of the minority elderly.

One of the current concepts to grow out of this recent interest in studying nonwhite elderly populations is that of "double jeopardy" (Dowd and Bengtson, 1978; Palmore and Manton, 1973; Jackson, 1972). As observed by Dowd and Bengtson (1978:427), "The plight of minority aged has been characterized by many as one of double jeopardy." In addition to disadvantages imposed by their minority group status, minority aged are said to experience the devaluation in status associated with old age. Hence, when one is in double jeopardy, one has associated with him/herself two statuses which are negatively valued by society. Further, Ward (1979) has suggested that these two negative statuses have a multiplicative interaction which worsens the situation of the status incumbent.
One of the tasks of this study is to critically review the literature in the area of aging which is related to the concept of double jeopardy. This review will be carried out by noting five areas of interest relative to this topic: (1) education, (2) family, (3) employment, (4) income, and (5) health related issues.

Double Jeopardy

Education

In general, aged blacks are less well-educated than aged whites. In 1964, the National Urban League offered the argument that lower education for older blacks results in a "vicious circle." Low education means lower skilled labor potential and unsteady, part-time, low paying jobs. Hence, there are often either no social security benefits or very small social security benefits because of extremely low past earning.

Table 1 presents evidence drawn from the work of Jackson (1974), that as of 1970 minority aged had a lower mean level of education, regardless of sex. Whites are reported to have had at least an eighth grade education, whereas no minority group achieved this level. Aggregating these data across both sex and age categories, the mean level of education for blacks was 6.08 years of school, for Spanish 5.73 years, and for whites 8.85 years of formal education.

As of 1980, Harris and Cole reported that the level of education still differs markedly between whites and blacks. In 1977, 38 percent of white males and 41 percent of white females who were 65 years of
Table 1. Median number of years of education\textsuperscript{a}

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Spanish</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69 years of age</td>
<td>7.0</td>
<td>6.2</td>
<td>9.5</td>
</tr>
<tr>
<td>70-74 years of age</td>
<td>6.7</td>
<td>5.9</td>
<td>8.9</td>
</tr>
<tr>
<td>75+ years of age</td>
<td>6.1</td>
<td>5.4</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69 years of age</td>
<td>6.0</td>
<td>6.1</td>
<td>8.9</td>
</tr>
<tr>
<td>70-74 years of age</td>
<td>5.6</td>
<td>5.9</td>
<td>8.7</td>
</tr>
<tr>
<td>75+ years of age</td>
<td>5.1</td>
<td>4.9</td>
<td>8.4</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Source: U.S. Bureau of Census, 1970. (Quoted in Jackson, 1974: 146).

age or over had at least a high school education. For blacks, however, only 16 percent of the males and 14 percent of the females had a high school diploma. Further, they note that the level of educational attainment of Mexican-Americans is even worse. As of 1976, for Mexican-Americans 65 years of age and over, 70 percent of the females and 64 percent of the males had completed less than 5 years of formal education. Only 4 percent of older Mexican-American males have completed a high school education.

**Family**

In 1964, the National Urban League posited the notion that due to extremely poor wages, more black men than white men never marry. Thus, they face the prospect of retirement alone, with no help from wife or children. In 1974, Jackson argued that this pattern was still the case for the elderly black male.
Dowd and Bengtson (1978) have avered that the family is an important life resource for the minority aged. This is said to be the case because they are frequently in contact with other family members. Kalish (1975), as well as Ragan (1978), argue against this notion of family as a resource for minority elders. For instance, Kalish (1975: 19-29) points out that:

It is a common assumption, perhaps with some basis in truth, that blacks and other minority group members offer greater acceptance to their elderly and that both the older minority members and their families prefer that they remain within the home. This assumption has been attacked in recent years as an excuse on the part of the "white establishment" for not providing adequate long-term care facilities for nonwhites. The claim is made that nonwhites are underrepresented in these care facilities because of overt racial discrimination and because of serious economic limitations.

Beyond this, if Dowd and Bengtson are correct and "frequency of contact with children" is a buffer against the vicissitudes and anguish of old age, why does Ragan (1978) indicate that Mexican-American women (an ethnic group said to be very family oriented) are the most unhappy category in her research sample? Is this a mere anomaly or are there other, unseen factors? The following is an extensive quote from her report:

It is frequently suggested that older Mexican-Americans may enjoy some of the advantages of aging in a more traditional subculture in which elders are honored and strong family ties provide emotional support. In contrast, out of all the race-by-sex categories in our sample, it was the Mexican-American women (45-75) who were the unhappiest. More than any other group, they reported feelings of sadness, and that life is hard. The empty nest period in the lives of women is often discussed in terms of loss and adjustment, although those assumptions are

\[1\] Note, however, that this may be due to restricted mobility rather than familial affinity.
under re-examination. The corollary assumption is that women in an environment in which important motherly roles are not interrupted will show fewer problems of adjustment. We found that the Mexican-American women in our sample indeed were much more likely to have a child under 18 in the home with them. ... Mexican-American women in this age group have had more children and have continued to bear them at later ages, so some of the young children still in the home were the women's own children, but about one-half of these 'full nests' were so defined by the presence of other children, such as grandchildren, nieces, nephews, and children of relatives and friends. The Mexican-American women were not happier than the white women, and were somewhat less happy in certain respects; there was no clear association between the empty nest and morale in these two groups. The highest percentage of Mexican-American women reporting that they felt less useful as they grew older was actually found among those older (65-75) women with a child in the home (1978:2-3).

Ragan's work implies that there are factors involved in one's family relations other than mere proximity. Family proximity may be due to a number of underlying causes. Poverty, due to discrimination for example, may make family mobility impossible, thus adding a strain to an elder's already meager income. Hence, without further analysis, it is difficult to say whether close family proximity is a resource or a liability for minority aged.

Employment

Table 2 presents the 1970 employment statuses of blacks, Spanish, and whites in the United States. In spite of the relative similarities in percent of working individuals, there remains a great disparity in the type of work performed by those individuals. As Jackson (1974) notes, the modal male occupation in the United States is craftsman and kindred worker followed by service worker. For black men though, service work is the modal occupation; only 13.6 percent of blacks worked
as craftsman or kindred workers. "Scanty or inferior education, fewer job opportunities, less steady work, a high rate of unemployment and low pay scales make inevitable the insecurity and poverty of aging Negroes" (National Urban League, 1964:13).

Table 2. Employment status, by percent

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Spanish</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female, 65+ years of age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in labor force</td>
<td>13.2</td>
<td>7.9</td>
<td>9.8</td>
</tr>
<tr>
<td>full-time civilian labor force</td>
<td>41.6</td>
<td>58.1</td>
<td>49.0</td>
</tr>
<tr>
<td>part-time civilian labor force</td>
<td>48.6</td>
<td>30.9</td>
<td>41.5</td>
</tr>
<tr>
<td>unemployed civilian labor force</td>
<td>5.1</td>
<td>7.0</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Male, 65+ years of age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in labor force</td>
<td>23.5</td>
<td>24.8</td>
<td>24.9</td>
</tr>
<tr>
<td>full-time civilian labor force</td>
<td>56.6</td>
<td>62.7</td>
<td>56.9</td>
</tr>
<tr>
<td>part-time civilian labor force</td>
<td>33.7</td>
<td>26.9</td>
<td>34.7</td>
</tr>
<tr>
<td>unemployed civilian labor force</td>
<td>5.6</td>
<td>6.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>


Income

Table 3 demonstrates the difference in income for minority and white aged. Both older black and Mexican-Americans have a much lower income level than their white counterparts (Dowd and Bengtson, 1978). Not only do minorities start with lower incomes, they also have a much greater decline in wages over a 30 year span. In Dowd and Bengtson's (1978) research, there was a 55 percent decline in wages for blacks across the three age categories and a 62 percent decline for Mexican-Americans. For whites at the lowest income level, income was still nearly double that of either blacks or Mexican-Americans.
Table 3. Income characteristics

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Spanish</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median individual income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69 years of age</td>
<td>$1,170</td>
<td>$1,270</td>
<td>$2,594</td>
</tr>
<tr>
<td>70-74 years of age</td>
<td>1,098</td>
<td>1,248</td>
<td>2,305</td>
</tr>
<tr>
<td>75+ years of age</td>
<td>974</td>
<td>1,189</td>
<td>2,032</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69 years of age</td>
<td>1,956</td>
<td>2,659</td>
<td>5,959</td>
</tr>
<tr>
<td>70-74 years of age</td>
<td>1,711</td>
<td>2,101</td>
<td>4,630</td>
</tr>
<tr>
<td>75+ years of age</td>
<td>1,503</td>
<td>1,738</td>
<td>3,621</td>
</tr>
</tbody>
</table>


Jackson (1974) points out that an income gap between black and white elders is now greater than it has previously been. The lowest income stratum usually is black females, which is complicated by the fact that black females, in many instances, are family heads.

Both Jackson (1974) and the National Urban League (1964) suggest that even when education is controlled, there is still a radical divergence between black and white income. "For example, the mean difference between black and white female college graduates in 1969 was $1,729..." (Jackson, 1974:147).

Robert Hill (1978) points out that black families whose household head is 65 years of age or over have a much lower income level than white families whose household head is 65 or older. "The median income or elderly husband-wife black families in 1976 was $6,457, whereas the
median income of similar white families was $8,902" (1978:4-5). Harris and Cole (1980) argue that a similar circumstance is found with Mexican-American aged.

**Health related issues**

Dowd and Bengtson (1978) report that minority aged feel they are in poorer health than whites. They note also that minority aged reported more ill health with increasing age. This also is true for white aged, although the increase is not as significant. Thus, at each age stratum (45-54, 55-64, 65-74) the self-perceived health of minority aged is poorer than that of whites, with the disparity occurring among those 65 years of age and over.

They go on to suggest that as racial or ethnic groups age their life expectancy becomes more similar to that of whites. Although minority group mortality begins to converge with that of whites, subjectively, minority members do not seem to align their self-perceptions with this objective fact. Jackson (1974) posits that this convergence may be due to the operation of "survival of the fittest" among blacks.

Cooper and Simonin (1978) investigated attitudes toward death and found that Mexican-Americans and blacks, aged 45-54, were more afraid of death than whites, while Mexican-Americans and blacks, aged 65-74, were less afraid than whites. One possible reason for the difference in attitudes toward death held by old minority members is that they may feel they have accomplished a great deal simply by reaching an advanced age. As Ragan (1978:4) emphasized, one "can appreciate this
expression of having survived to old age against greater odds than most of us face." Hence, their feelings of accomplishment help to buffer their fear of dying. Marshall (1976) noted a similar finding in his investigation of aged minorities.

Bengtson (1977) indicates that both Mexican-Americans and blacks define themselves as old well before whites do. Over 30 percent of Mexican-Americans studied by Bengtson indicated that they defined themselves as old by age 57. The same percentage of blacks defined themselves as old by the age of 63, whites, on the other hand, did not define themselves as old until nearly age 70. Jackson (1970) points out that this sort of early identification with old age may be due to the hardships with which minority members have to deal throughout their lives. One might think of this as relating to the common sense notion that people "educated in the school of hard knocks" grow up faster.

Concluding Remarks to Section One

As indicated by the data reviewed herein, minority aged find themselves in an unenviable predicament. Due to earlier discrimination, it is argued that they have fewer resources in old age and thus many find themselves in a position of dependence. However, this is not to say that the data presented above are necessarily supportive of the notion of double jeopardy. Rather, it may only demonstrate that discrimination towards minorities is widespread in our society at all points of the life span. Or it may be that some areas of minority members' lives are more affected by negative status than are others, thus producing
double jeopardy in one facet of the individual's life but not in another. We, for example, might conjecture that the sphere of objective characteristics might more readily produce such outcomes. Yet, we do tend to find that research using variables which are objective in nature produce varied findings. Hence, even predicting double jeopardy at this very abstract level is quite problematic. It is because of this uncertainty that further research in this area is needed.

Although minority members are discriminated against in old age, this does not necessarily mean they are discriminated against more so as they get older. In fact, some have submitted (Dowd and Bengtson, 1978; Kent, 1971; Pampel, 1981) that age may act as a leveler.

As Chappell and Havens (1980) have pointed out, double jeopardy may well not exist in a unidimensional form as seems to be implied in the extant literature. There would appear to be at least two dimensions to this concept; specifically, an objective element and a more (social psychological) subjective element. An important issue to be explored here is whether this hypothesized objective loss said to characterize the elderly minority member may be balanced off by a gain in subjective elements.

Furthermore, the data marshalled with respect to double jeopardy have at times appeared to be contradictory. Dowd and Bengtson (1978) indicate that the minority family is closely knit and serves to insulate the aging from the loss of status due to old age. Moore (1971) also comments on the coping function of the minority family. Yet, Ragan (1978) notes that there are a number of factors which bear on the
situation and which must be dealt with before we are able to make any
hard and fast statements about family relations acting as a buffer for
the minority aged. Seelbach (1978) and Jackson (1972) both argue that
race does not seem to be a significant determinant of family structure,
denoting instead, the importance of class as a determinant of family
relations.

SECTION TWO: SOME ALTERNATIVE VIEWS ON MINORITY AGING

Within the recent past, a number of investigations have presented
evidence which leads one to question the validity of double jeopardy.
For instance, Neugarten and Moore (1968) observe that Rose, as early
as 1962, had argued for the notion that age acts as a leveler with
respect to diverse status characteristics. They suggest that retire­
ment communities produce subcultures in which the age status overrides
all other statuses. Such that, "social class, sex, and ethnic consider­
ations play less role in the social relationships of the inhabitants..."
(1968:21). Dowd and Bengtson (1978) also indicate that in certain
respects age may act as a leveler when they point out that "(V)ariables
such as frequency of interaction with relatives as well as, for black
respondents, the life satisfaction factors of tranquility and optimism
all evidence a certain decline in the extent of ethnic variation across
age strata" (1978:434). Moore (1971:89), also states that for minori­
ties "...in almost all cases (whether in reservation, ghetto, or barrio)
substructures have developed, and have often been institutionalized,
that could very loosely be termed 'coping structure'." This notion of
coping refers to several issues, such as, helping to meet survival needs, means of social participation, foundations of prestige and power, and the simple fact of a feeling of belonging to some type of collectivity or group (Moore, 1971).

Elam (1971) has also suggested that the upsurge in minority self-pride may improve the chances of the minority elder reaching a position of ego integrity. This (the recent restructuring of black price) re-evaluation of the past may provide blacks with more positive integrity support than would be the case for the nonminority elder. Kent (1971) has also argued that age offsets racial difference due to the exigencies of survival in old age. Hence, the immensity of the problems in old age pale the issues of racial differentiation.

Further, recent research by Ward (1979) has indicated that age seems to have little or no impact on the relative status of blacks as compared to whites. Ward (1979:14) reports that

"(T)his research found racial differences on a variety of dimensions to be comparatively small in all three age groups once the socioeconomic consequences of race were controlled, supporting Jackson and Wall's (1978) contention that socioeconomic controls show that 'the significant differences between aged blacks and whites typically stressed by advocates for aged blacks are largely myths'" (p. 112).

Taking these investigations into consideration, it is plain to see that the integrity of the double jeopardy concept is being brought into question. One of the pressing needs to be fulfilled in the double jeopardy literature is to place the notion within a larger frame of reference and to begin to articulate those instances (scope conditions) which do or do not produce double jeopardy outcomes. The main task of
this treatise is to partially fill this need by placing the construct within several different frames of reference so as to denote how these different theory structures correspond to double jeopardy. This should allow us to better understand what it is we are investigating and thereby help us to ask better and more well-informed questions and to carry out more complete research. As depicted in Diagram 1, early on the National Urban League implied that there was an interactive type of relationship between the statuses of age and race and that this interaction concludes in a negative outcome. This postulate was then investigated by Jackson (1972, 1974) and Palmore and Manton (1973) by studying the objective differences between minority members and nonminority members with cross-sectional data. Although the data upheld the suggestion of racial differentiation, the research on the concept did not stop there. Others, such as Dowd and Bengtson (1978) reported findings of racial differences but began to question the adequacy of the concept as a unidimensional construct. Even before this, numerous other researchers (such as, Kent and others discussed above) began to point toward other interpretations of the effects of aging in minority populations. However, the Dowd and Bengtson (1978) piece is especially important because of the prominence of the authors in the field of gerontology.

With this growing diversity of research findings, an implicit re-evaluation of double jeopardy has begun to take place. Jackson and Walls (1978) assert that double jeopardy may be a myth, albeit a myth which Jackson had earlier fostered. Ward (1979) posits the findings of comparatively no effect of age-race interaction and the interpretation
Diagram 1. The general flow of research and concept formulation related to work on the concept of double jeopardy.
Defining Characteristics After Re-evaluation

- Diversity of Postulated Age-Race Interaction
  - Age as Leveler
  - Double Jeopardy
  - No Interaction Effect

Dimensions of Concept to be Analyzed

Expanded Operationalization

- Objective Characteristics
- Subjective Characteristics

Present Acceptance of Double Jeopardy Still Being Analyzed

Diagram 1 (continued)
still goes on. Diagram 2 illustrates that the research is becoming more sophisticated and well-informed with each additional step. Present research is at the point of looking at both objective and subjective levels and entertaining a variety of alternative explanations relative to minority aging. As portrayed in Diagram 3, we are not at the point of having three alternative hypotheses with regard to age-race interaction.

Even with this growing sophistication, however, most investigators still have not used theory to guide their research program, using only empirical generalizations as a guide to further research. It will be asserted here that this is a real weakness of the extant literature in the area of double jeopardy. Hence, one of the major contributions of this paper will be to look at some of the possible implications certain theories might have to offer in regard to the interaction of multiple statuses.

SECTION THREE: THEORETICAL IMPLICATIONS

It needs to be made clear at this point that this paper is not intended to be a test of any of the following theories. Rather, each of the frameworks is depicted as simply adding direction to the thought flow underpinning double jeopardy. The theories to be drawn upon here are as follows: 1) status inconsistency; 2) social learning — exchange theory; and 3) status generalization theory.
Diagram 2. Elements to be considered in conceptualizing double jeopardy

Narrowing the focus of the concept and going down in levels of abstraction
Diagram 3. Three alternative hypotheses which are to be investigated in this research.
Status Inconsistency

Status inconsistency has been referred to by numerous authors (Hughes, 1945; Lenski, 1954; Homans, 1974; Geschwender, 1967; Lebowitz, 1975; and others). As stated by Strieb (1976:181) "(s)tatus inconsistency can be defined as the dissimilar ranking on different dimensions of stratification. It deals with the horizontal or nonvertical aspects of stratification."¹

The general point of status inconsistency theory is that status incongruence causes stress for those in the position of incongruence. As formulated by Lenski (1954:412)

(A)pparently the individual with a poorly crystalized status is a particular type of marginal man, and is subjected to certain pressures by the social order which are not felt (at least to the same degree) by individuals with a more highly crystallized status.

Geschwender (1967:170) argues that status inconsistency may bring about at least five types of "emotional reactions:" 1) anger; 2) guilt; 3) definitions of failure; 4) definitions of success; and 5) ambiguity. House and Harkins (1975) also point out that status inconsistency should be closely related to this notion of emotional stress, however, they observe that this link has yet to be empirically tested.

More pertinent to our concerns is the statement by House and Harkins (1975) that age is a highly relevant variable as regards the

¹It should be pointed out that there is a certain amount of discord with respect to the usefulness of this theory. Yet Strieb (1976) has argued that it is a useful concept in the area of aging and stratification. Even though there is uncertainty, as indicated earlier, this will not concern us here, for we are not testing the theory but are simply using it as an aid for direction.
matter of status inconsistency. They suggest that as the individual ages, inconsistency becomes more of a problem to deal with, since due to increased age the hopes of eliminating incongruence diminish.

This brings us to the importance of the status inconsistency literature relative to double jeopardy. Following House and Harkins (1975), it is believed that the inconsistent status of the old white would seem to place the white elder in a stressful position, whereas, the consistency of the statuses held by the aged black would not indicate stress of this nature. The old black may well be in a position of stress due to his/her low status but the addition of a second, consistent status would not appear to add to this stress, at least within the framework of this theory.

Hence, a balance may be struck between the aged black and aged white. The black is in a position of stress to begin with and this remains stable into old age. The old white moves into a situation of stress from a situation of stability. Thus, although their social worlds may be somewhat different, they share a similar disability -- social stress. As an outgrowth of this status convergence, there would appear to be balance versus double jeopardy for old blacks. The aged black has remained basically stable and the old white has lost status. Ergo, it does not appear from this theoretical perspective, that one would predict double jeopardy for elderly blacks.

Social learning -- exchange theory

No attempt will be made to explicate the theories of social exchange or social learning herein, except to say that in each case the
theory deals with rewards-reinforcers, costs-punishments, and their relationship to human interaction. Each of these theories is grounded upon the belief that behavior is directly related to reinforcement contingencies and that an individual's status or power is a function of the resources one has at hand that enable him/her to form contingencies which are beneficial to one's self.

Blau (1964) states that if one cannot reciprocate in an exchange relation with equally needed resources, he/she is in a position of dependence. In this position, the dependent actor may use one of four general classes of rewards: 1) money; 2) social approval; 3) esteem; or 4) compliance. Money is considered the least valuable of these generalized rewards followed in ascending order by social approval, esteem, and compliance, respectively. Dowd (1975:587) quotes Blau as stating that whoever "commands services others need, and who is independent of any at their command, attains power over others by making the satisfaction of their need contingent on their compliance." Dowd's emphasis is that the exchange relationship between the broader society and those elderly within it takes a form very similar to the above. He goes on to note that:

(In the case of the aged, decreased social interaction is the eventual result of a series of exchange relationships in which the relative power of the aged vis-a-vis their social environment is gradually diminished until all that remains of their power resources is the humble capacity to comply. Where once the now-retired worker was able to exchange expertise for needed wages, the final exchange required of most older workers would be their compliance (in the form of acquiescence to mandatory retirement) as exchange for sustenance (Social Security, Medicare, etc.) (Dowd, 1975:587).
This is important in that it indicates a drop in power and prestige for the older individual, and hence, a feeling of loss. Now, this feeling of loss would logically seem to be mediated by the amount of power lost. Those who have the most to lose would reasonably seem to be the ones most effected by the loss, and since in many cases blacks have very little social prestige to begin with, they would probably be least affected by this turn of events. Generally speaking, the elderly white, on the other hand, may have moved from a position of relatively high social prestige, relative to blacks in United States society, to one considerably lower. Hence, he/she experiences a noticeable drop in exchange power compared to blacks. Once again, if this is in fact the case, a prediction of double jeopardy for old blacks does not seem warranted.

With respect to the learning theory approach, Hollon and Beck (1979:165) report that "(t)he removal of discriminative stimuli for response-reinforcer sequences" is an important factor relative to the onset of depression. When an individual retires, in most cases he/she loses an attribute which has probably been used by ego and alter most of ego's life as a discriminative stimuli. One's employment status (antecedent stimulus) allows others as well as self to construct expectations with respect to one's position in society as well as his/her set of abilities (behavior) which further allows ego and alter to behave toward each other with much less ambiguity (reinforcement).

They go on to point out that job loss is "...an obvious instance of change in the reinforcement potential of the environment" (Hollon
and Beck, 1979:165). One can extrapolate from the reinforcement potential of the environment to the idea that the more significant the reinforcement potential (the larger the amount of reinforcement) which is lost, the greater the negative punishment the person will feel for having lost it. They further report that one interpretation which is applicable in these circumstances is that "reduced reinforcement-leads-to-negative-mood-model" (Hollon and Beck, 1971:165). Once again, drawing on their work, it seems only obvious that the greater the reinforcement lost the more the negative mood produced.

This would seem to point out that those with highly reinforcing employment have a better chance of experiencing some sort of negative feelings when that form of reinforcement is removed from their environment than do those with employment having low reinforcement potential. (However, should those individuals with high reinforcement potential be allowed to remain somehow connected to their previous employment, this may not obtain.) Simons and West (1980) have argued along similar lines regarding status loss as relative to occupational prestige. They point out that status loss of this type may act as a leveler in old age. Expanding on their line of thought, it is argued that since the aged white is on the average of higher occupational status, he/she presumably lose more than the aged black. Hence, one can posit the contention that in general, older whites face a greater probability of having to deal with some sort of depression (negative mood) than do old blacks, since

---

1A negative punishment has the effect of decreasing behavior of some type by removing a positive reinforcer from the actor.
in general, aged blacks do not lose as significant a reinforcer due to retirement. Botwinick (1978:31), while discussing the higher rate of suicide for aged white males than any other age-race category notes:

...that feelings of inferiority and loss of self-esteem are among the major causes of depression in the elderly.

...perhaps it may be speculated that this is the price many aged white men pay for opportunities achieved, never realized, or lost. It is interesting to speculate further that women and nonwhites of both sexes, having been deprived of opportunities, lose less in later life; in any event, they may not feel as personally unable and unworthy when without high social roles.

Once more we find little support for the double jeopardy concept. Expanding on Botwinick (1978), it appears that loss of reinforcement is related to depression which is, in turn, correlated with suicide. The old white male, due to his greater loss of reinforcers, is in a rather precarious position which does not seem to be the case for male or female blacks. Thus, at least relative to suicide, in old age the male black is actually better off than his white counterpart and the same holds true for black females relative to white females.\(^1\)

**Status generalization theory**

Berger et al. (1972a, 1972b, 1974, 1977) have formulated a theory program dealing with the manner in which status characteristics are generalized and used as a basis for constructing expectations about self and others as regards general abilities. They have also noted

\(^1\)As an aside, there is a literature which formulates the notion that previous stress brings about coping abilities and hence, the black elder, having dealt with stressful situations throughout life has built up a more well formed set of coping abilities than the old white and is thereby better prepared for the stress of old age.
that certain statuses (which they have referred to as "diffuse" in nature) carry with them a "halo-effect." This notion of a "halo-effect" refers to the circumstance that if P (person) is ranked on some status, this ranking will have effects in interaction situations even when there is little reason to assume any direct correlation between the status characteristic and the situation at hand. Hence, P's status characteristics are directly related to the expectations formed relative to ego and alter, regardless of the situation, unless there is some rather indirect evidence to contradict its use (what they have termed "burden of proof").

Further, Webster and Driskell (1978) have reported that in situations where there are more than one status characteristic used to form expectation status, those doing the expectation construction will tend to combine the statuses to form what might be considered a status average.

This is important for this task since it can be seen that if one has two status characteristics of similar ranking (in this case two negatively ranked status characteristics for the elderly black) there is no change in status rank. One simply remains in the same social position. On the other hand, if one brings into the situation two status characteristics which are not similar in their status rank, this combination process will in one way raise the status of P and in one way lower P's status, ergo, placing the actor on a somewhat ambiguous middle ground (in our case this would refer to the elderly white).

This is quite similar to the aforementioned status inconsistency literature. In regard to the positioning of the actor, it can be
seen that for the black, the age status does little to effect his/her relative status ranking. For the white though, the effect of the age status characteristic is to lower his/her status value. This lowered status value also effects the expectation status associated with the aged whites, changing them from a general ranking of relatively high ability to that of a lower ranking.

Harris (1976) has argued along coterminous lines using Goffman's concept of "spoiled identity" (1963). He attempts to establish the notion that one is unable to lose much if due to one's position, in what he defines as a caste, precludes one's ability to make gains along the lines of achieved statuses. Therefore, if the actor is already a member of a negatively evaluated caste (black race) his/her identity is already spoiled in many respects and the addition of further negatively evaluated statuses has little effect. For example, in Harris' (1976) research, he finds that as regards criminal offences being labeled a deviant is less debilitating for the black than for the white.

This is pertinent here since it points out the differential effects of a constant status such as race versus a variable status such as age. Following Harris' thought one sees that race enters into one's status ranking early in life and remains fairly stable throughout the actor's life. Age, on the other hand, has differing effects dependent upon at what stage of the life cycle one is at. Race (at least in American society) does seem to act in a similar manner to a caste and depending on which race the individual happens to be in will effect his/her social position and reactions to changes such as aging. The black cannot fall
much farther down the status ladder and is thereby, in some ways, insulated from the effects of multiple negative status evaluations. The white, however, has much to lose since his/her position has been one of relatively high standing as compared to blacks and any negative statuses accruing to his/her self-conception will take the form of an identity spoiler.

CONCLUDING REMARKS AND DISCUSSION

In summary, based on the theories used herein, we do not find support for the double jeopardy concept. However, although the theories do appear to have some degree of epistemic correlation to the concept at hand, we can make no certain predictions without actually testing the phenomenon. It may well be that, in this specific instance, these theories do not hold. It may be that the impact of age is such, that it does add to the negative position of blacks regardless of what these theories predict. Yet, the numerous theoretical frameworks presented above do function to inform the researcher of possible alternative outcomes. They serve to add insight into situations which otherwise would appear to be straightforward; and by denoting the underlying complexity of such a seemingly simple conception of multiple status characteristics, they allow us to deal with the phenomenon at a more well-informed and sophisticated level.

If society is to help those in need, we must make an attempt to pinpoint who those needy individuals are rather than constructing
and implementing programs for entire populations without certainty as to whether all individuals in the population are in need. This is especially crucial in these times of program cutbacks at all levels. Now more than ever we need to know more precisely where programs are needed and on whom time and money should be spent. It is hoped that this research program will be of help in bringing this about.

Also, it is felt that had previous researchers attempted to be more systematic in focusing in on some of the theoretical dimensions of double jeopardy, many of the scope conditions of this concept may well have been sorted out by now. This lack of theoretical grounding is seen as an overall shortcoming of much research in the area of aging and it is hoped that this can be overcome in future research programs.
REFERENCES

Bengtson, V.

Berger, J., M. Zelditch, B. Anderson, and B. Cohen

Berger, J., B. Cohen, and M. Zelditch

Berger, J., T. Conner, and M. H. Fisek

Berger, J., M. H. Fisek, R. Norman, and M. Zelditch

Blau, P.

Botwinick, J.

Chappell, N. and B. Havens

Coon, R.

Cooper, T. and M. Simonin

Cowgill, D.
Dowd, J.  

Dowd, J. and V. Bengtson  

Elam, L.  

Ewen, S.  

Fischer, D.  

Geschwender, J.  

Goffman, E.  

Harris, A.  

Harris, D. and W. Cole  

Hill, R.  

Hollon, S. and A. Beck  

Homans, G.  

Hornung, C.  
House, J. and E. Harkins
1975 "Why and when is status inconsistency stressful?" The American Journal of Sociology 81:395-412.

Hughes, E.

Jackson, J.

Jackson, J. and B. Walls

Kalish, R.

Kent, D.
1971 "Changing welfare to serve minority aged." Minority Aged in America, Institute of Gerontology, the University of Michigan-Wayne State University.

Lenski, G.

Lynd, R. and H. Lynd

Marshall

Merton, R.
Moore, J.

National Urban League

Neugarten, B. and J. Moore

Palmore, E. and K. Manton

Pampel, Fred

Ragan, P.

Seelbach, W.

Simons, R. and G. West

Strieb, G.

Ward, R.

Webster, M. and J. Driskell
SECTION II. AN ANALYSIS OF SUBJECTIVE INDICATORS

OF DOUBLE JEOPARDY
An analysis of subjective indicators of double jeopardy

Richard H. Coon

From the Department of Sociology and Anthropology
Iowa State University
Ames, Iowa  50011
INTRODUCTION

Statement of Problem

In the area of gerontology, there has been an increasing interest in articulating the experience of elderly minority members. This is partly due to the expanded interest of governmental agencies and to the seemingly recent awareness that heterogeneously characterized individuals may encounter differing life events (or at least interpret these events in different ways) based on the socially important characteristics of the individual. Gerontologists have long been interested in the different effects aging has on men and women but, only recently have they begun to investigate race in a similar manner (Bengtson, Grigsby, Corry, and Hruby, 1977; Dowd and Bengtson, 1978; Ward, 1979; Pampel, 1981). Bengtson, Grigsby, Corry, and Hruby (1977) have emphasized the need for research on aged minority populations, pointing out that research using only middle-class white Americans portrays too homologous a picture of the population aged in the United States.

One issue which has surfaced as a result of these investigations of minority aging is termed double jeopardy and addresses the issue of whether minority members endure more disadvantages in old age compared to old whites than was the case earlier in their lives. Numerous studies of double jeopardy (National Urban League, 1964; Jackson, 1970, 1974; Dowd and Bengtson, 1978; Ward, 1979; Pampel, 1981; Satariano, Albert, and Belle, 1982) have documented disparate findings, however, Perhaps these varied research findings are due in part to the multidimensionality of the concept. Another potential reason for such a disparity
of findings might be related to the lack of a theoretical base for the analysis of the double jeopardy concept.

The importance of studying this issue stems from the policy implications resting on the results of these investigations and the general knowledge gained from having more detailed information of aging. At a theoretical level, this is not merely an empirical question, it is a question of how systems of stratification singularly, and in combination, effect individual lives (Ward, 1979).

The focus of this investigation, therefore, will be to articulate the general hypotheses relating to the combined effects of age and race, so as to determine which of the hypothesized relationships holds, and to purge the age-race relationship of the potentially spurious effects of cohort and class. The analysis will be based on archival data from the General Social Surveys in 1972 and 1980. A cross-sequential independent measures design will be implemented. Variable indicators of happiness, subjective feelings of health, and subjective perception of finances are analyzed as indicative of the social psychological ramifications of the proposed age-race relationship.

Literature and Theoretical Issues

As noted earlier, there has been an argument presented in the gerontological literature pertaining to the excessiveness of negative characteristics accruing to elderly members of minority groups (National Urban League, 1964; Jackson, 1974; Dowd and Bengtson, 1978). The term used to describe this situation is "double jeopardy." As the term
implies, there is said to be a doubly deleterious effect of aging for minority members. Working from the basis of implications does not make for a strong research foundation, however, thus this study will use Ward's (1979) operational definition as its fundamental working definition. He states that, "(t)he notion of double jeopardy implies a widening of racial differences in old age, as age and race have multiplicative interaction effects" (Ward, 1979:2). Yet, as one inspects this hypothesized relation of age and race, one begins to question this double effect from a comparative standpoint.

The double jeopardy hypothesis as defined herein sets forth the supposition that minority members become more disadvantaged when compared to nonminority members, in old age, than was the case for both groups when they were younger. The two factors, age and race, are thought to interact in the situation of the aged minority individual.

Coon (1983) has argued that certain social psychological theories (social exchange, social learning, status generalization, and status consistency) do not necessarily support the double jeopardy argument at the level of individual subjective experience. Basically, these theories look at an individual's status(es) and its (their) impact on that individual's social situation or the relationship between resources, status, and social situation. Logically reasoning through these theories, one does not come to the conclusion that age and race interact in such a manner as to predict double jeopardy as a necessary outcome. Pampel (1981), using objective criteria (income), also finds little support for the double jeopardy portrayal of events. Dowd and Bengtson (1978)
report a mixture of findings, noting that, based on an analysis of objective characteristics, there does seem to be double jeopardy, but, when looking at more subjective types of variables, double jeopardy does not obtain. Satariano, Albert, and Belle (1982), using measures of cancer incidence, also document a combination of findings with regard to double jeopardy.

In addition to these divergent findings, is the contention that minority persons remain in a position of stable jeopardy across the life cycle when compared to whites at the same points. If one compares middle aged minority and nonminority members, the disadvantage which exists is unidimensional in form and is based on race alone. Later in life, old nonminority members, as well as minority individuals, can be seen to experience the accretion of negative characteristics associated with old age in our society. Thus, since the aged nonminority member has also acquired negative characteristics due to old age, as has the minority member, the single most differentiating factor is still that of a racial disadvantage. Ward (1979) has characterized this state of affairs as that of stable stratification.

Others (Kent, 1971; Pampel, 1981) have postulated that in old age even this singular jeopardy differential will wane to the extent that age acts to level out the difference between minority and nonminority members. Satariano, Albert, and Belle (1982) have reported evidence of a similar finding for males across races on physiological grounds; their findings for females across races are inconsistent. Hence, in old age, there may be fewer actual differences between races than was the case earlier in their lives. This is in diametric opposition to the double jeopardy
hypothesis, since here the difference between minority and nonminority incumbents narrows in old age rather than widens.

The general literature on this topic has been growing steadily for some time now, with little real progress in settling the issue. One of the reasons for this is due to the use of cross-sectional data at a single point in time. Single point cross-sectional analysis is not adequate for a problem of this nature, since it does not take into consideration the differences between the categories at different points in time for the respondents. In order for double jeopardy to exist, there must be a larger divergence between the category members in old age than was the case earlier in their lives. Hence, a problem of this nature is best studied using a longitudinal type of cohort analysis.

Also, researchers have tended to mix objective and subjective variables, obscuring their potential differential effects. In order to clarify where, how, and what the relationship is between age and race, it would seem appropriate to analyze objective and subjective factors separately. It may be that a double jeopardy effect is found at the objective level of analysis but not at the subjective level (the social and psychological interpretation of events). For example, if a black has low income at an objective level, but only compares him/herself with others of a similar income, he/she may not define this level of income as anything but normal. Finally, what seems to be coming out of these various research projects is the awareness that the relationship of these two systems of stratification is highly complex. Investigators are beginning to see that there are numerous, possibly divergent,
outcomes to the association of age and race. Thus, it appears that sweeping generalizations are going to be difficult, if not impossible, to make. Consequently, examining the relationship between age and race is going to demand a long and intensive investigation process.

Admittedly, divergent findings of this sort are difficult to interpret and deal with. Yet, these are the issues which must be clarified if any substantial gains are to be made in the understanding of the relation of age and race.

Hypotheses

The hypotheses listed below represent the various possible outcomes which can be logically extrapolated from the association of the two age and race stratification systems. This represents the classical approach to analyzing an event by articulating all potential results and then testing these hypotheses through data analysis to find which hypothesis actually describes the empirical evidence most accurately. The three hypotheses are 1) double jeopardy, 2) age as leveler, and 3) stable stratification.

'Double Jeopardy'

Hypothesis 1:

Age and race interact in such a way as to significantly increase the perceived disadvantages of the minority status incumbent in old age as compared to whites.
Hypothesis 2:

Age and race interact in such a way as to significantly decrease the perceived disadvantages of the minority status incumbent in old age as compared to whites.

Hypothesis 3:

Age and race do not interact in such a way as to significantly increase or decrease the perceived disadvantages of the minority status incumbent in old age as compared to whites.

Data and Methods

So as to deal with analysis of the potential confounding effects of cohort, a cohort design was created for this analysis. This type of design is founded upon the independent measures formulation noted by Botwinick (1978). To create the cross-sequential independent measures design, this research selected all individuals aged 56 to 64 in 1972 and all individuals aged 64 to 72 in 1980. By using a cohort based subsample, this study was able to deal with the effect of cohort by holding it constant within the analysis. The same cohort was studied at time two as was studied at time one. The age span used here is due to the constraints of the data gathering time frame of the data base. For specifications regarding the sample design used to generate this sample, see the NORC cumulative codebook for 1972–80. Individuals who were from 56 years of age to 64 years of age in 1972 were combined to form a pre-retirement cohort. The year 1972 was selected because this was the first year of
the continuing NORC surveys. So as to incorporate and highlight a meaningful age change, this same cohort, now 64 years of age to 72 years of age, was scrutinized in 1980 as a post-retirement cohort. (Those individuals who were 64 years old in 1980 were not necessarily post-retirement, of course, but their age change from 56 years of age to 64 years of age should tap the significance of the retirement experience nonetheless.) The time span from 1972 to 1980 was selected due to the limitations of the NORC data base. There was an N of 371 in 1972 and 301 in 1980. For the combined years, there are 574 whites and 98 blacks, of which 386 are in the lower class and 286 are in the upper class.

Dependent variables

In order to represent multiple forms of subjective experience, three types of subjectively interpreted phenomenon were considered: happiness, health, and income. (See Appendix for complete listing of items.) Happiness was measured by a single indicator as was health. The subjective interpretation of income was operationalized by two single item indicators. These three areas exemplify much of the range of variables analyzed in previous research on double jeopardy.

Independent variables

Age and race are the two variables of prime interest; their measurement is based on common sense appraisal, i.e., appearance and chronological years lived. A measure of class is presented based on a bifurcation of the NORC occupation prestige scale. (See the Hodge, Siegel, Rossi prestige scoring system specifications in Appendix G of the NORC
cumulative codebook for 1972-80 for details of the construction of the scoring system.) The mean (37.172) and median (36.052) scores on the NORC occupational prestige scale were quite close, and based on this, a score of 36 was decided upon as the cut-off point for upper and lower class in this analysis. Those who scored 36 or below were considered lower class and those who scored 37 or above were considered upper class.

Analysis technique

Multiple Classification Analysis (MCA) (Andrews et al., 1973) was used here as the primary analytic technique. Analysis of Variance and Cross Tabular Elaboration (Rosenberg, 1968) were also used to provide conceptual insight and guidance. When analyzing relationships between an interval level dependent variable and nominal level independent variables, the MCA technique is considered appropriate. Cross tabular elaborations were carried out so as to denote the direction of any non-significant interactions or patterns in the data. This allows for a more indepth explication of the relations of age and race.

Statistics of import in this study, which are drawn from the MCA, are eta, beta, and R squared. Eta represents the relation of the dependent and independent variables before adjusting for the effects of the other independent variables in the model. Eta can be squared to denote the amount of variance explained by each independent variable per se. Beta, on the other hand, depicts the relation of the dependent and independent variables after adjusting for all of the other independent variables in the model. Beta squared cannot be interpreted as the
the amount of variance explained, however. Its primary function is to depict the relative importance of one independent variable as compared to the other independent variables in the full model. $R$ squared can be used here to denote the amount of variance explained by the entire model. Also, the $R$ squared statistic can be used as a comparative device for making comparisons across analytic models. For instance, one could compare a model with two independent variables to a model which contains three independent variables so as to examine the explanatory power of the different models, i.e., does adding a third variable appreciably change the explanatory power of the model. For our purposes, we use the $R$ squared statistic to compare the main effects model of age, race, and class to a model consisting of an age-race interaction effect and a class main effect. This is done to indicate whether there is divergence between the additive model and the interaction model (Andrews, 1975:20-22).

Findings

Happiness

As noted in Table 1, age and race do not significantly interact as regards happiness. The main effect of race is the most significant factor before and after adjusting for other independent variables in the model (Table 1). Whites report being somewhat happier than blacks at all ages evaluated here. Looking at the main effect of age after aggregating races, we see that people tend to report being happier in post-retirement (Table 1). The upper class is slightly happier than
By using the elaboration technique, we see that when race is entered controlling for age, blacks do tend to report being happier in post-retirement than pre-retirement to a greater extent than do whites. Even after controlling for class, this general pattern persists. However, it must be pointed out that these differences are slight and may well be due to sampling error. On the whole then, we would say that as regards happiness, Ward's (1979) interpretation of stable stratification is upheld. Whites are happier than blacks, upper class are happier than lower class, and this remains true, or may even begin to level slightly, as one ages.

Health

There is no significant interaction between race and age, relative to self-perceived health (Table 2). The largest main effect was that of class. This was the case both before and after adjusting for the full model (Table 2). The upper class reports being healthier, both before and after retirement. The main effect of race is also important but, after controlling for the other variables in the model, the effect of race is lessened somewhat (Table 2). Age does not appear to be particularly important as regards one's perceived health. Age would, however, probably become more significant in extreme old age.

The variance explained by the full main effects model is R square .070, which is not theoretically very important. Yet, when looking at the model constructed of the age-race interaction variable and the class variable, we see that the R square of .065 is even less. Consequently,
Table 1. Happiness

Multiple Classification Analysis

Grand Mean = 1.82

<table>
<thead>
<tr>
<th>Variable and Category</th>
<th>N</th>
<th>Unadj. Dev.—Eta</th>
<th>Adj. Dev.—Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. White</td>
<td>574</td>
<td>-0.03</td>
<td>-0.03</td>
</tr>
<tr>
<td>2. Black</td>
<td>98</td>
<td>0.20</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.12</td>
<td>0.11**</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. (56-64)</td>
<td>371</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>2. (64-72)</td>
<td>301</td>
<td>-0.05</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.07</td>
<td>0.08*</td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lower</td>
<td>386</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>2. Upper</td>
<td>286</td>
<td>-0.07</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.08</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Multiple R Squared 0.024
Multiple R 0.154
2-Way Interaction (ANOVA): Race-Age 0.418

*=p < .05.
**=p < .01.

the lower class (Table 1). However, none of the above differences are significant when combined into a full model, since, taken all together, they produce an R square of only .024. By comparing the R square for the main effects model with the interaction effects model mentioned above, we get an R square of .025. Not only was the age-race interaction found to be statistically insignificant, it did not add to the explained variance in happiness.
Table 2. Health

Multiple Classification Analysis

Grand Mean = 2.39

<table>
<thead>
<tr>
<th>Variable and Category</th>
<th>N</th>
<th>Unadj. Dev.—Eta</th>
<th>Adj. Dev.—Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. White</td>
<td>574</td>
<td>-0.06</td>
<td>-0.05</td>
</tr>
<tr>
<td>2. Black</td>
<td>98</td>
<td>0.38</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.17</td>
<td>0.13***</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. (56-74)</td>
<td>371</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>2. (64-72)</td>
<td>301</td>
<td>0.01</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lower</td>
<td>386</td>
<td>0.18</td>
<td>0.16</td>
</tr>
<tr>
<td>2. Upper</td>
<td>286</td>
<td>-0.25</td>
<td>-0.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.23</td>
<td>0.21***</td>
</tr>
</tbody>
</table>

Multiple R Squared 0.070
Multiple R 0.264
2-Way Interaction (ANOVA): Race-Age 0.913

***p < .001.

it appears that the main effects model (additive model) better explains the feelings toward health of the respondents.

Looking at race, while controlling for age as a test factor, we see that the subjective interpretation of one's health condition remains stable for both racial categories across age classifications. When entering the variable class, we note that for the lower class there is little change as regards their subjective feelings of health. For the upper class, we do see a fairly large change in subjective feelings of
health. In both cases, the change tends toward weakening the relationship between race and perceived health. Blacks report being less healthy than whites and the lower class gives an account which also presents them as less healthy than the upper class, across both classifications of age.

Satisfaction with finances

Race and age did not combine to produce a significant effect, as regards satisfaction with finances (Table 3). The main effects of class and race were of nearly equal significance, but age did not produce a significant outcome. After adjusting for the other variables in the model though, the significance of race was diminished more than that of class (Table 3). The upper class was more satisfied with their financial situation than was the lower and whites were more satisfied with their finances than were blacks. This pattern remained intact even after adjusting for the other variables in the model.

There is no difference in the amount of variance explained when comparing the main effects and interactive effect models. Thus, we again conclude that an additive model fully explains the relationship.

The race by age cross tabular elaboration shows that, within each racial type, financial satisfaction is quite stable across ages. In both races, there is a slight drop in satisfaction with age. Adding class as a second control variable, the relationship still remains within each separate class level. Yet, across classes it can be seen that the upper class is more satisfied with their finances than is
the lower class. Whites report somewhat more satisfaction with finances than blacks, and the upper class indicates a greater satisfaction than does the lower. Age does not generate any significant differentiation, with respect to financial satisfaction in this sample.

Table 3. Satisfaction with finances

<table>
<thead>
<tr>
<th>Variable and Category</th>
<th>N</th>
<th>Unadj. Dev.--Eta</th>
<th>Adj. Dev.--Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. White</td>
<td>574</td>
<td>-0.04</td>
<td>-0.03</td>
</tr>
<tr>
<td>2. Black</td>
<td>98</td>
<td>0.21</td>
<td>0.16</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. (56-64)</td>
<td>371</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>2. (64-72)</td>
<td>301</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lower</td>
<td>386</td>
<td>0.09</td>
<td>0.08</td>
</tr>
<tr>
<td>2. Upper</td>
<td>286</td>
<td>-0.12</td>
<td>-0.11</td>
</tr>
</tbody>
</table>

Multiple R Squared: 0.030
Multiple R: 0.175
2-Way Interaction (ANOVA): Race-Age: 0.914

***p < .001.

Family finances relative to others

Once again, in opposition to the presumed double jeopardy type of interaction, no interaction effect was found for race and age, as regards one's perception of family finances compared to others (Table 4).
Table 4. Satisfaction with family finances

<table>
<thead>
<tr>
<th>Variable and Category</th>
<th>N</th>
<th>Unadj. Dev.--Eta</th>
<th>Adj. Dev.--Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. White</td>
<td>574</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>2. Black</td>
<td>98</td>
<td>-0.35</td>
<td>-0.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.19</td>
<td>0.13***</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. (56-64)</td>
<td>371</td>
<td>0.09</td>
<td>0.08</td>
</tr>
<tr>
<td>2. (64-72)</td>
<td>301</td>
<td>-0.11</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.12</td>
<td>0.11***</td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lower</td>
<td>386</td>
<td>-0.18</td>
<td>-0.16</td>
</tr>
<tr>
<td>2. Upper</td>
<td>286</td>
<td>0.25</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.27</td>
<td>0.24***</td>
</tr>
</tbody>
</table>

Multiple R Squared 0.103
Multiple R 0.322
2-Way Interaction (ANOVA): Race-Age 0.617

***=p < .001.

With respect to the relative finances variable, all of the independent variables in the additive model were found to be significant, race and class more so than age (Table 4). However, after controlling for the effects of the additional variables in the additive model, we see that race loses a meaningful amount of its impact. Class also loses some impact, but not as much as race. The influence of age is not much effected by adjusting for other variables.
Although respondents of both races indicated that they felt their family finances were below average, blacks scored even lower than did whites. The main effect of class showed a considerable differentiation, with the lower class reporting well-below average relative to finances and the upper class indicating slightly above average finances.

When comparing the multiple R square of .103 to the R square of .105 for the model containing the race-age interaction variable, along with the class variable, it becomes apparent that only two-tenths of 1 percent of the variance is not accounted for by the main effects model.

While controlling for age as a test factor, we find that in the pre-retirement age group, blacks tend to feel that their family finances are less than those of others more often than do whites. Retired blacks still feel that their family finances are poorer, compared to others, more often than whites, but to a lesser extent. Hence, the pattern of the relationship tends to weaken over these age categories, not increase as the double jeopardy hypothesis would predict. When adding class as a control, we find that age has little effect on the relationship of relative finances and race. The effect of class is impressive though. Once again, by using the elaboration process, we note that in the lower class blacks more readily report feelings of poor family income compared to others, than do whites at both age levels. In the upper class, this relationship does not obtain to the same degree, and even attenuates in post-retirement.

Combining all age and class groupings, whites feel their family incomes are higher than do blacks, when compared to others. Once again,
aggregating over all categories, the pre-retirement group sees their family finances as better than do the retired individuals. And finally, as expected, the upper class sees their family finances as relatively better than do those in the lower class.

Discussion

From this analysis we conclude that the hypothesis of stable stratification is most representative of the respondents analyzed here. At no time did we find any type of significant interaction between race and age.

An important issue to be brought forward at this point relates to the operationalization of the concept of double jeopardy. There are potentially two different ways of defining the concept and this is very significant as to the interpretation of the findings. A consensus needs to be reached as to whether double jeopardy refers to a simple additive function or a more complex multiplicative one. In this study, the multiplicative model based on the work of Ward (1979) and Pampel (1981) was implemented. As was reported, the multiplicative interaction of age and race was not found to be a significant factor regarding one's subjective well-being. Yet, taken separately, in two of the four dependent variables both age and race did act to qualify the outcome. The issue is quite complex though, in as much as for the happiness variable. Although blacks in general report a lower score on happiness than whites, the post-retirement group reports being more happy than the pre-retirement group, producing an offsetting mixture. Whereas, with respect to
relative family finances, both the black and post-retirement categories report more negative feelings regarding their finances which would tend to support an additive conceptualization of double jeopardy.

Hence, based on the two different ways of defining double jeopardy, in one instance no double jeopardy is reported (multiplicative form) and in the other (additive form) double jeopardy does obtain in at least some facet of subjective well-being. This is an important theoretical concern and must be dealt with by researchers in this area.

As regards why blacks would not indicate being in a state of double jeopardy, perhaps they feel little subjective double jeopardy due to their choice of comparison group. By comparing themselves to other blacks in similar positions, they tend to see themselves as being no different from the rest. Or, if they do begin to make cross-racial comparisons in old age, they find that old whites are also in a position of lower status and are thereby not in a greatly different status than they are. In fact, due to the crossover effect of life expectancy in old age for blacks, old blacks may feel that their position is somewhat enhanced in old age. This might be founded on some type of feeling of having "made it."

This type of feeling may be closely related to Birren and Renner's (1977) notion of adaptation. Jackson (1980) points out that one major factor to be dealt with in the adaptation process is that of adapting to loss. She argues that in old age blacks may be more able to deal with loss because of their previous social experience. "...(m)any aged blacks living in poverty had lifelong histories of poverty."
Consequently, for poor aged whites, poverty may have been more of a shock" (Jackson, 1980:144). Thus, elderly black's subjective interpretations of socially significant events may be somewhat more positive, because even instances which some might interpret as rather negative in nature are embedded within a more normal frame of reference similar to Nelson's (1948) adaptation level notion and Thibaut and Kelley's (1959) comparison level.

Future Research

The next step in investigating this phenomenon is to explore the objective indicators of double jeopardy. The question of whether there are actual differences in empirical situations needs to be addressed. After findings have been amassed in both the subjective and objective spheres, an analysis which is more theoretically informed may be carried out that begins to lay the foundation of a theory of minority aging. For, as Jackson has noted," (a) fair statement is that no body of theory about minority aging exists..." (1980:8).
REFERENCES

Andrews, Frank


Bengtson, Vern, Eugene Grigsby, Elain Corry, and Mary Hruby

Birren, James and V. Jayne Renner

Botwinick, Jack

Coon, Richard

Dowd, James and Vern Bengtson

Helson, H.,

Hoyt, Danny

Jackson, Jacquelyne
Jackson, Jacquelyne
1974 "NCBA, Black aged, and politics." In F. Esiele (ed.)
Political Consequences of Aging. Academy of Political and
Social Science 415:138-59.

Jackson, Jacquelyne

Kent, Donald
in America. Institute of Gerontology. University of
Michigan-Wayne State University.

National Urban League
1964 Double Jeopardy, the Older Negro in America Today. New York: 
Author.

Pampel, Fred

Rosenberg, Morris

Satariano, William A., Samuel Albert, and Steven H. Belle
1982 "Race, Age and Cancer Incidence: A Test of Double Jeopardy."

Thibaut, J. and H. Kelley

Ward, Russell
1979 The Stability of Racial Differences Across Age Strata: An
Assessment of Double Jeopardy. Paper presented at the
Gerontological Society meetings, Dallas, Texas.
APPENDIX: DEPENDENT VARIABLES

Happiness

Taken all together, how would you say things are these days -- would you say that you are very happy, pretty happy, or not too happy?

Health

Would you say your own health, in general, is excellent, good, fair, or poor?

Satisfaction with Finances

We are interested in how people are getting along financially these days. So far as you and your family are concerned, would you say that you are pretty well satisfied with your present financial situation, more or less satisfied, or not satisfied at all?

Finances Relative to Others

Compared with American families in general, would you say your family income is far below average, below average, average, above average, or far above average?
SECTION III. AN ANALYSIS OF OBJECTIVE INDICATORS OF DOUBLE JEOPARDY
An Analysis of Objective Indicators of Double Jeopardy

Richard H. Coon

From the Department of Sociology and Anthropology
Iowa State University
Ames, Iowa 50011
INTRODUCTION

The focus of this research is to analyze the impact of race and age on three objectively measured variables associated with a person's quality of life. The three dependent variables of interest are: (1) total family income, (2) marital status, and (3) incidence of burglary within the last year. The independent variables used herein are: (1) race, (2) age, and (3) class.

Because the emphasis of this research is on the accuracy of the "double jeopardy" hypothesis, the effect of the independent variables race and age are of major concern. As a means of decomposing some of the more confounding issues associated with minority aging in contemporary American society, class is used as an alternative explanatory variable as well as a control variable in the test factor elaboration portion of the analyses. A logit model will be used to analyze the data so as to differentiate the main effects of the three independent variables from an interaction effect model which depicts the postulated impact of double jeopardy.

Statement of Problem and Review of Literature

Minority status in contemporary American society is unquestionably a position of low status as compared to majority whites (Feagin, 1982). That this devalued position persists into old age for the minority member is not very surprising, especially since old age itself is regarded as a negatively evaluated status in most modern societies (Cowgill and Holmes, 1972; Gorden, Gaitz, and Scott, 1976; Brotman, 1970; Bultena
and Powers, 1978). Thus, much gerontological research in the past two decades ('60s and '70s) has reported that minority (usually more specifically black) elderly occupy a highly unenviable position in American society due to the fact that they hold two negatively evaluated statuses simultaneously. This predicament has become commonly known as "double jeopardy" (the National Urban League, 1964; Jackson, 1970, 1974; Palmore and Manton, 1973; Dowd and Bengtson, 1978; Ward, 1979; Satariano et al., 1982). Double jeopardy research investigates the consequences of the combined effects of two negatively evaluated statuses (Chappell and Havens, 1980). And, as regards minorities, Ward (1979) points out that the combination of age and race is understood to produce an interactive type of effect. Hence, "...the problems that typically face elderly persons are compounded by the specific problems that face blacks" (Satariano et al., 1982:642).

Perhaps because this concept touches on a sensitive issue in American society, numerous investigations have been conducted on this subject. There does not, however seem to be a clear cut pattern in the findings associated with respect on double jeopardy. For example, Jackson (1974) argues that income differences between whites and blacks support a double jeopardy outcome. Dowd and Bengtson (1978) also note that minorities in their sample had greater declines in income in old age compared to whites, which supports the double jeopardy hypothesis. Conversely, however, Palmore and Manton (1973) found that the equality index score for income they employed was the highest in their sample when looking at race versus age or sex. Further, Whittington (1975)
found that the financial status of blacks compared to whites improved with age. Pampel (1981) also did not find support for the double jeopardy hypothesis when analyzing income.

Variant findings associated with health status as opposed to financial status exist as well. Dowd and Bengtson (1978) report a self-accessed decline in health for their minority respondents which would indicate double jeopardy, whereas, Siegel (1980) and Atchley (1980) report that as blacks reach advanced ages, their life expectancy begins to parallel that of whites and that after age 75 there is an actual cross-over effect such that life expectancy for blacks becomes greater than that for whites. Moreover, Shanas (1980) notes that differences in the functional capacity of blacks and whites begin to converge with age.

These paradoxical findings point to the illusive nature of the double jeopardy hypothesis. Some authors report that it does exist (National Urban League, 1964; Jackson, 1970, 1974) whereas others assert that minority aged are not in a situation of double jeopardy (Pampel, 1981; Ward, 1979). In addition, researchers such as Satariano et al. (1982) and Dowd and Bengtson (1978) report a mixture of findings. Satariano et al. (1982), looking at physiological characteristics, argue that double jeopardy exists in one subsample while not in another. Dowd and Bengtson (1978) found double jeopardy associated with objective indicators such as income but not with subjective indicators such as life satisfaction.
Hence, based on the diversity of findings surrounding double jeopardy, it is argued here that there is a need for more research concerning this topic. Possibly what will finally emerge, based on further investigation of this topic, is that double jeopardy will be understood as a situated phenomenon. That is, it may well be that in certain sectors of their life, minority elders are in a position of double jeopardy and in other areas they are not.

This need for further and more focused research on the double jeopardy hypothesis parallels the notion, as Berger et al. (1974) have averred, that finding the scope conditions of a concept or theory is an important endeavor. Especially in this case, more research is needed to specify the ramifications of the combined effects of race and age.

Of major import regarding double jeopardy, is the uncertainty as to its appropriate definition. Does double jeopardy refer to a simple additive function of age and race or does it refer to a more complex multiplicative interaction of age and race? This work will use the latter definition founded on the prior operationization by Ward (1979) and Pampel (1981). Later in the paper, this issue will be dealt with further.

Chappell and Havens (1980) and Coon (1983) have begun to broach the issue of scope conditions by asserting that double jeopardy is possibly better understood as being multidimensional in nature. Satariano et al. (1982) also point to the variant character of double jeopardy in positing that the manner in which one's race and age impact on one's health may vary across different diseases. Thus, health, for
example, may be too global a variable to meaningfully specify the impact of age and race on an individual's life conditions. The work of these authors indicates that research should continue to be carried out on double jeopardy and that more factors pertinent to this issue should be examined. This need for further research is the impetus for the work at hand. The present study will focus on certain objectively defined variables so as to clarify how race and age effect these facets of a person's life.

Ward (1979), Pampel (1981) and Coon (1983) have suggested the relationship of age and race can take three different forms. These variant outcomes can be articulated as: (1) an age by race interaction, producing double jeopardy, (2) an age by race interaction, resulting in a leveling of the difference between the races, and (3) no age by race interaction outcome. The task of this work, therefore, is to analyze pertinent data to determine which of these hypothesized outcomes is obtained. Listed below are the operational hypotheses which represent the aforementioned possible outcomes of the association of age and race.

'Double Jeopardy'

Hypothesis 1:
Age and race interact in such a way as to significantly increase the objective disadvantages of the minority status incumbent in old age as compared to whites.
'Age as Leveler'

Hypothesis 2:

Age and race interact in such a way as to significantly decrease the objective disadvantages of the minority status incumbent in old age as compared to whites.

'Stable Stratification'

Hypothesis 3:

Age and race do not interact in such a way as to significantly increase or decrease the objective disadvantages of the minority status incumbent in old age as compared to whites.

Data and Methods

Research sample and design

Data for this investigation are drawn from the General Social Surveys conducted by the National Opinion Research Center (NORC) from 1972 through 1982. The total N of the sample used in this analysis is 3,550. Age is categorized into pre-retirement (age 52 through 62) and post-retirement (age 65 through 75). The N for the pre-retirement category is 2,117 and for the post-retirement category is 1,433. For race, the N of whites is 3,161 and for blacks it is 395. (See Appendices A, B, and C for a further elaboration of sample size by category.)

As a qualifying note, it should be noted that other data sets were looked to as alternative data bases, but either they contained such a small number of old blacks as to preclude their use in testing the hypotheses of interest, or the age distribution was insufficient to perform the analysis.
The dichotomous categorization of the variables is based on practical as well as methodological reasons. When one creates numerous categories for variables the data is, by definition, spread across more categories and, hence, lowers the number of respondents for each cell. Sample size, in general, is a problem when dealing with old blacks and generating numerous variable categories would have aggregated an already problematic situation here. Adding categories would cause cells to have zero respondents which would severely compromise the findings and interpretations.

The age parameters are set as they are because: 1) fairly wide age ranges had to be used so as to capture a large enough sample base; 2) the range of each category is not any broader because it was felt that keeping the cohorts as homogeneous as possible would detract from any unmeasured cohort impact; and 3) the age categories cluster around the retirement age so as to tap a significant age change passage. Family income uses $10,000 as its cut point because that is approximately the government poverty level for families. The categorization of marital status and burglary are self-explanatory.

Dependent variables

Three variables are used in this analysis to examine different facets of life relevant to minority aging. These variables are: (1) total family income, (2) marital status, and (3) burglary. (See Appendices D and E for the complete specification of these items.) Each of these variables is measured by a single item indicator.
The rationale for selecting total family income and marital status as indicators of double jeopardy is based on their inclusion in prior work on the double jeopardy issue. Numerous researchers (Jackson, 1974; Dowd and Bengtson, 1978; National Urban League, 1964) have argued that the low income of old minority individuals is evidence of double jeopardy. Also, Jackson (1974) and the National Urban League (1964) have suggested that being married in one's old age is a beneficial status, as regards offsetting some of the negative factors associated with aging in America. And, as they suggest, old black men are more likely not to be married in old age, thus, once again providing a situation of double jeopardy.

With respect to the burglary variable, it was included because, as conceived here, double jeopardy refers to the deleterious effect that the compounding of old age and minority standing have on one's quality of life. As two noted researchers in the area of double jeopardy state, research on this issue usually examines "...the combined effects of two negatively perceived statuses on some general quality of life indicator..." (Chappell and Havens, 1980:157). Thus, because a large proportion of elderly in industrialized societies live in the largest cities (Cantor, 1979) and reside in neighborhoods characterized by high crime and high risk, (Cantor, 1979; Ward, 1979) this variable should tap one facet of whether one's quality of life (being comparatively freer of victimization) is qualified by one's race and age, possibly bringing about double jeopardy.
Independent variables

Because this research focuses on the evaluation of the double jeopardy hypothesis, age and race are the two variables of prime interest as independent variables. Their measurement is based on common sense appraisal, i.e., appearance and chronological years lived. As a surrogate measure of class, the NORC occupation prestige scale was bifurcated into high and low. An occupation scoring a three or lower is coded as lower class and a four or about is coded upper class. The sample distribution is bimodal and by splitting the sample at this cut point the two modes were separated. Of course, this is only a crude approximation of class, but it will serve as a means of stratifying the sample and thereby allow one to at least minimally examine the effect of a respondent's position in the social system.

General format of class analysis

This research uses the variable class in what might be termed a two-tiered fashion. That is to say, class is used in two separate ways in this study. First, it is included in the logit model as simply an independent variable which represents a competing rational as to why individuals are differentially treated and have variant life chances in modern industrial society. Neo-Marxian critical theorists argue that it is the class structure of society which most importantly impacts on human beings. Therefore, this research examines the effects of class on the dependent variables so as to compare it to the effect of age, race, and the interaction of age and race on the same dependent variable.
This is done simply to determine the different magnitudes of each of these variables. In one sense then, class is being controlled for, in as much as the study does examine its impact rather than simply neglect it as unimportant.

The second use of class is as a traditional control variable when used in the test factor elaboration analysis portion of the research. When used in this fashion, different levels of class are held constant, and within different levels of class, the action of other variables is investigated. By doing this, the research purges the analysis of the potentially obfuscating characteristics of class as a confounding variable.

Analysis technique

Since the data investigated in this study have been categorically coded, a logit analysis is carried out as a means by which the magnitude of each separate effect can be interpreted. The basic design of the research implemented here is a comparison of the double jeopardy theory driven model which includes the age by race interaction effect to a model representing the null hypothesis of no age by race interaction.

As stated by Knoke and Burke (1980), there are two general ways of analyzing contingency table data within the log-linear perspective. Using the general log-linear approach the researcher does not specify which of the variables is to be considered the dependent variable. In the logit approach, however, the dependent variable is specified. "The criterion to be analyzed is the expected odds \((\Omega_{ij})\) (omega) as a function
of the other, independent variables (Knoke and Burke, 1980:11-12).

Theil (1970) explains the logit approach as a means of determining the conditional probability of a response (the probability of being in a certain response category given the determining factors of other variables in the model). The criterion which is analyzed within the log-linear perspective is the expected cell frequencies associated with the dependent variable (Knoke and Burke, 1980). The logarithmic functions are entered into the equation as a means of reformulating the equation into an additive format (Reynolds, 1977). By changing the equation used to specify the expected cell frequencies into an additive equation the log-linear technique becomes somewhat analogous to ordinary regression (Knoke and Burke, 1980). Thus, Knoke and Burke (1980:24) state that in the logit model, "...one variable is taken conceptually as dependent upon variation induced by the others." And they (Knoke and Burke, 1980) suggest, further, that the parameters associated with each of the independent variables in the logit model can be interpreted in a fashion similar to the additive coefficients in ordinary regression.

This is important for this analysis because the significance of the parameter coefficients in the two logit models are the criteria by which this work evaluates the importance of the independent variables. The significance, both substantive and statistical, of the coefficients is used herein to determine the usefulness of the parameters in determining the outcome of the dependent variable. Hence, if the interaction coefficient for the age by race interaction is nonsignificant, the double jeopardy hypothesis, as well as, the age as leveler hypothesis
will be rejected. In a similar vein, the stable stratification hypothesis will be rejected if the coefficient for race is found not to be significant. The adequacy of the overall model will also be discussed.

Findings

**Total family income**

Table 1 reports the parameters, coefficients, and significance of the coefficients for the main effects and interaction effects models with income as the dependent variable. As can be seen in this table, all of the parameter coefficients in the main effects model are highly significant. For the double jeopardy interaction model, the main effect parameter coefficients are also highly significant. The interaction effect, however, is not significant. Thus, the hypothesized double jeopardy outcome based on the compounding impact of race and age is rejected.

Fienberg (1981) sets the level of significant for rejecting any model using a goodness-of-fit test based on a chi-square at .05 or lower. Thus, when interpreting the magnitude of the residual chi-square for any model using a goodness-of-fit test, a probability of less than .05 is too small to consider the model as fitting the data well. For the chi-square statistics, the .05 or larger level of significance is analogous to the conventional regression criteria of .10 or less. Thus, due to the large sample size for this study, a level of .10 will be used to increase the stringency of the test. The residual chi-square for the main effects model is $\chi^2 = 10.20$ with four degrees of freedom.
Table 1. Income

**Main Effects Model**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Code</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>young, old</td>
<td>-.822</td>
<td>.0001</td>
</tr>
<tr>
<td>Race</td>
<td>white, black</td>
<td>-.503</td>
<td>.0001</td>
</tr>
<tr>
<td>Class</td>
<td>low, high</td>
<td>.597</td>
<td>.0001</td>
</tr>
</tbody>
</table>

**Main Effects and Interaction Effects Model**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.885</td>
<td>.0001</td>
</tr>
<tr>
<td>Race</td>
<td>-.542</td>
<td>.0001</td>
</tr>
<tr>
<td>Class</td>
<td>.597</td>
<td>.0001</td>
</tr>
<tr>
<td>Age by Race</td>
<td>.070</td>
<td>.4668</td>
</tr>
</tbody>
</table>

and a P value of .0383. For the interaction model, the residual is \( \chi^2 = 9.67 \) with three degrees of freedom and a P value of .0216. The general model in both instances therefore does not function to significantly aid in determining the reported level of income. Thus, in neither case does the model fit the data well.

In both logit models, all of the variables are shown to be significant but the parameters of age and class are of greatest importance. The gamma coefficients, drawn from contingency table test factor elaboration, for income by race, age, and class also serve to illuminate the analysis and support the logit findings. The gammas are, respectively: race = -.538, age = -.633, and class = .518. Thus, in both
the logit and contingency table analyses one finds an inverse relation­ship between race and income and age and income, while finding a posi­tive relationship between class and income. It is suggested here that the stable stratification hypothesis is the most accurate hypothesis based on these models. Race does show a strong impact on income in a negative direction as does age (race = -.503, age = .822, logit coef­ficients). Hence, one can interpret this as pointing out that race effects one's income in a negative fashion and continues to do so into old age. As was pointed out earlier in the paper, double jeopardy can be defined as either referring to an additive or multiplicative effect. These data, although not supporting a multiplicative conceptualization of double jeopardy do appear to lend credence to the existence of double jeopardy as an additive outcome. Both age and race do have a negative impact on one's income. It is for exactly this reason that consensus must be reached as to the meaning of double jeopardy.

As regards the effect of class on income by age and race, the level of class did not greatly change the age and race effect. That is, within categories of class, age and race had a similar effect. At no time did the phi coefficient exceed .198. Yet, one does find class affecting the income by race relationship. Though, in neither case is the relation­ship strong. The phi coefficient for income by race in the lower class is .146 whereas in the upper class the coefficient is .050.

Marital status

The parameter coefficients for the main effects model are all, once again, found to be highly significant when marital status is used
as the dependent variable. As shown in Table 2, age and race are both positively related to one's marital status. Inspecting cross-tabulation tables indicates that a higher percentage of whites than blacks are married and a higher percentage of pre-retirement than post-retirement people are married. Conversely, class shows an inverse relationship. Here, one finds that more people in the upper class are married than in the lower class.

Table 2. Marital Status

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Code 1</th>
<th>Code 2</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>young</td>
<td>old</td>
<td>.367</td>
<td>.0001</td>
</tr>
<tr>
<td>Race</td>
<td>white</td>
<td>black</td>
<td>.298</td>
<td>.0001</td>
</tr>
<tr>
<td>Class</td>
<td>low</td>
<td>high</td>
<td>-.186</td>
<td>.0001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Code 1</th>
<th>Code 2</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>.302</td>
<td>.0001</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td>.285</td>
<td>.0001</td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td>-.185</td>
<td>.1001</td>
</tr>
<tr>
<td>Age by race</td>
<td></td>
<td></td>
<td>.091</td>
<td>.1069</td>
</tr>
</tbody>
</table>

In a vein similar to the logit interaction model for income, the main effects in the interaction model for marital status are statistically significant, but the interaction effect is not (see Table 2). Therefore, the double jeopardy hypothesis is again rejected. One's age,
race, and class do effect one's marital status, but age and race do not
appear to act together to significantly alter their impact on marital
status.

The residual $\chi^2$ of the main effects model is too large to consider
the fit of the model acceptable ($\chi^2 = 8.25$, dF = 4, $P = .0827$). Con-
versely, the residual $\chi^2$ of the interaction effect model is small enough
to reach significance ($\chi^2 = 5.65$, dF = 3, $P = .1298$). The substantive
meaning of the interaction model's significance is suspect, however,
in that the interaction coefficient itself is not significant as a
separate parameter ($\chi^2 = 2.60$, dF = 1, $P = .1069$). The reason the
interaction model residual chi-square is small enough to reach signifi-
cance is most likely that the model has additional information to use
in determining the variation in the dependent variable, not that the
information itself is very significant. This is somewhat analogous to
adding substantively meaningless variables to a regression analysis and
thereby getting a higher level of significance. As Blalock (1972:163)
has suggested, "(s)tatistical significance should not be confused with
practical significance."

The gammas drawn from the contingency table elaboration analysis
of marital status by race, age, and class are respectively: race = .319,
age = .378, and class = -.227. These provide further support for the
findings of the logit model. Controlling for class, once again, as
with income, the effects of age and race on marital status are not
greatly affected. At neither level of class did the phi coefficient
exceed 0.159. Also, as was the case for income, the relationship of
race and marital status is affected by controlling for class. In the lower class, the marital status by race phi coefficient is 0.124, but in the upper class the coefficient is 0.002. However, in neither case is the phi coefficient large enough to show a highly significant relationship.

As with income, the stable stratification model is once again corroborated as the best fit model in that race does effect one's marital status at all ages. To this point at least, this research suggests that the models including the interaction term, have not functioned to better explain the variation in the dependent variable. As a caveat, it should be noted, however, that in both the investigation of income and of marital status, the results appear to indicate that although the variables used in the models are producing significant main effects, other variables need to be added to the models in order for them to better fit the data parsimoniously.

Burglary

As noted in Table 3, the only parameter in either the main effects or interaction effects models for burglary which is significant is the race variable. All other variables in both models add virtually nothing to the fit of the model. Thus, one must conclude that there is no support for the double jeopardy hypothesis in these models. And, it is evident here that the stable stratification hypothesis is more relevant. Age does not even serve as a meaningfully differentiating criteria. Minorities (blacks) are simply more prone to being
Table 3. Burglary

### Main Effects Model

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Code 1</th>
<th>Code 2</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>young</td>
<td>old</td>
<td>.068</td>
<td>.4634</td>
</tr>
<tr>
<td>Race</td>
<td>white</td>
<td>black</td>
<td>-.467</td>
<td>.0001</td>
</tr>
<tr>
<td>Class</td>
<td>low</td>
<td>high</td>
<td>-.022</td>
<td>.8122</td>
</tr>
</tbody>
</table>

### Main Effects and Interaction Effects Model

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.009</td>
<td>.9417</td>
</tr>
<tr>
<td>Race</td>
<td>-.487</td>
<td>.0001</td>
</tr>
<tr>
<td>Class</td>
<td>-.013</td>
<td>.8916</td>
</tr>
<tr>
<td>Age by race</td>
<td>.099</td>
<td>.4088</td>
</tr>
</tbody>
</table>

Burglarized at all points in time studied here. The gamma coefficients for burglary by race, age, and prestige are: race = -.352, age = .073, and prestige = .056. One can see from the logit and gamma coefficients that race is the dominant factor here. In fact, the other variables could just as well be dropped from the model.

The residual $\chi^2$ for both models is acceptable, yet, the main effects model (more realistically, the main "effect" model) is substantially more significant than the interaction effect model ($\chi^2 = 5.33$, dF = 4, P = .2552; $\chi^2 = 4.65$, dF = 3, P = .1996, respectively).

As regards the effect of controlling for class on burglary by age and race, there does appear to be a small but substantively significant effect. Class does effect the burglary by age and race relationship,
but the impact is mainly nested within the upper class. The phi coefficients for burglary by age and race, within the upper class are: phi = .025 and .198. Hence, one sees that as an upper class person ages, race tends to become more associated with higher rates of burglary. As was reported above, it is the blacks who bear the brunt of burglaries. Within the lower class, the phi coefficients are very low and are not affected much by changes in age. Thus, this is not simply a situation of age and race interaction.

To qualify the above, one must keep in mind that although the level of significance criteria has been used here as a means of evaluating the importance of parameter coefficients, even fairly small effects can reach statistical significance since this study has an N of over 3,000. Therefore, it is important to be aware that although the parameters examined in this research have been significantly related to the dependent variables they are by no means adequately determining the reported variation in the dependent variables. Other variables need to be studied in order to formulate a model which better fits the data. For example, the level of one's mental and physical functioning, one's health, or education are variables which may affect one's family income.

DISCUSSION AND CONCLUSIONS

Based on the research reported here, the proposed hypothesis of double jeopardy for minority elderly is not supported. The evidence collected here does show that minority status is an important variable with respect to one's income, marital status, and whether one has been
burglarized in the last year. Age is also found to act as an important determining component of one's level of income and marital status. Age, by itself, however, does not seem to be a critical factor regarding whether one has been burglarized in the past year. The effect of class tends to mirror that of age in this study. It does affect one's income and marital status directly but, does not in general, appear to significantly qualify one's penchant for being burglarized.

Overall, then, this research is considered as supporting the proposed stable stratification hypothesis set forth by Ward (1979). The minority incumbent in American society is placed in a situation of duress as regards general life changes, but age and race do not statistically interact in such a way as to significantly affect that situation. Yet, these data can also be interpreted as showing that old blacks are potentially worse off than old whites because of the joint impact of two negative statuses or attributes. The issue is rather complex. The stable stratification hypothesis captures the fact that the positions of old whites and old blacks remains stable relative to each other. It does not, however, deal with the fact that in absolute terms the elderly black may be much worse off than the elderly white. For example, whereas neither the black nor the white individual may have been below the poverty level in middle age, the black may have been precariously close to this level compared to the white. Thus, as one enters old age, and loses resources due to this status passage, the black individual may in fact drop below the poverty line while
the white does not. This sort of interpretation would thereby support the double jeopardy concept.

When examining total family income, one may wonder how it is that age, as well as race, affect one's level of income but that the interaction effect does not substantiate the compounding outcomes of these two independent variables. One factor to be considered is that age influences the level of family income for both minority and nonminority individuals. Thus, comparatively speaking, the difference between blacks and whites remains stable while their actual incomes do change. This is in accord with the notion of stable stratification, which suggests that there is a difference between blacks and whites in American society and that this difference is not unduly affected by changes in one's age.

The second element which may come to bear on the findings pertaining to income is that factors associated with minority family structures may function to offset some of the hardships of aging for these individuals. It has been reported that the family institution serves as a strong support structure for elderly minority members (Sussman, 1976; Troll et al., 1979). Hence, it is conjectured here that the general family context of the minority elder may aid in offsetting some of the financial problems associated with old age.

As regards the marital status of elderly individuals, it has been asserted that blacks (especially black males) are more likely not to be married in old age (National Urban League, 1964). This, then, is said to be indicative of double jeopardy. This research did not
find support for the double jeopardy emphasis of this assertion. Further, Cantor (1979) reports that it is the old white female, partly due to her longer life, who is found to be living alone.

While this study did find that minority individuals did report being married proportionately less than did whites, examining this relationship across age did not show an increase in blacks not being married as compared to whites. Although not statistically significant, the difference between the minority and nonminority categories actually lessened in old age.

Finally, this research did find a statistically significant difference between minority persons and whites with respect to burglary. Age did not interact with race to exaggerate this difference for the minority member in general, though. Yet, by examining cross-classification tables it was found that class did come into play as an important factor here. Those minority elderly who are in the post-retirement phase of their lives and who are also in the upper class reported a much greater incidence of burglary than any other group. The difference in the lower class was not nearly so striking but the minority group did report more burglaries.

In summary, this study concludes that, at least for the variables studied here, a statistical interaction definition of double jeopardy does not hold. In fact, although not statistically nor practically significant, in many cases cross-classification tables revealed a slight leveling of differences between minority and nonminority groups across age. Because these leveling effects were so small though the more
conservative interpretation of stable stratification is here considered most warranted.

It must be made abundantly clear, however, that this study is not asserting that minority status in American society is not a pernicious circumstance. It is. In all three dependent variables, minority group membership showed negative consequences. Further efforts to create equal opportunities and environmental contexts for minorities are definitely warranted, based on the findings amassed here.

In conclusion, this research has served to deal with at least two important issues. First, an analysis of the double jeopardy hypothesis, defined as a multiplicative function of age and race, was carried out. The study showed that age and race do not statistically interact and thus, do not act conjointly to qualify the data beyond the impact of the main effect of age and race. The hypothesized interaction of age and race is therefore rejected. Secondly, this study raised the question of the appropriate definition of double jeopardy. Is the multiplicative definition an appropriate one? After all, it does seem that the idea behind double jeopardy connotes a widening of the gap between whites and blacks. Or is it more reasonable to argue that in some qualitative sense the simple additive association of age and race creates a deleterious enough situation for old blacks that while comparatively there is little change, absolutely the change is devastating, i.e., note the above argument regarding old blacks dropping below the poverty level. At this point, it is the contention of this study that the latter definition may be the most relevant.
Future research in the area of minority aging must take this question up for further investigation. Contemporary sociological researchers (including the present author) must not allow the use of readily available statistical techniques to be their guide to the conceptualization of research problems. Sociologists must remain critical of their own work and continually strive to refine their understanding of the qualitative, as well as quantitative, aspects of the social world. As indicated here, relying too heavily on more sophisticated statistical techniques may well cause sociologists to begin to ask the wrong questions. Manipulating and transforming data statistically does not necessarily lead to a better understanding of the human condition.
REFERENCES

Atchley, R.

Berger, J., T. Conner, and H. Fisek

Blalock, H.

Brotman, H.

Bultena, G. and E. Powers

Cantor, M.

Chappell, N. and B. Havens

Coon, R.

Cowgill, D. and L. Holmes

Dowd, J. and V. Bengtson

Feagin, J.

Fienberg, S.
Gordon, C., C. M. Gaitz, and J. Scott

Jackson, J.

Knoke, D. and P. Burke

National Urban League

Palmore, E. and K. Manton

Pampel, F.

Reynolds, H.

Satariano, W., S. Albert, and S. Belle

Shanas, E.

Siegel, J.
Sussman, M.  

Theil, H.  

Troll, L., S. Miller, and R. Athely  

Ward, R.  

Whittington, F.  
APPENDIX A: CATEGORICAL N's FOR INCOME
<table>
<thead>
<tr>
<th>Income</th>
<th>Low (1,362)</th>
<th>Post-retirement (789)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Preretirement (573)</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>White (474)</td>
<td>Minority (99)</td>
</tr>
<tr>
<td>Class</td>
<td>Low (320)</td>
<td>High (154)</td>
</tr>
<tr>
<td></td>
<td>Low (95)</td>
<td>High (4)</td>
</tr>
<tr>
<td></td>
<td>Low (442)</td>
<td>High (249)</td>
</tr>
<tr>
<td></td>
<td>Low (82)</td>
<td>High (16)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income</th>
<th>High (1,463)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Preretirement (1,120)</td>
</tr>
<tr>
<td>Race</td>
<td>White (1,056)</td>
</tr>
<tr>
<td>Class</td>
<td>Low (454)</td>
</tr>
<tr>
<td></td>
<td>Low (43)</td>
</tr>
<tr>
<td></td>
<td>Low (101)</td>
</tr>
<tr>
<td></td>
<td>Low (7)</td>
</tr>
</tbody>
</table>
APPENDIX B: CATEGORICAL N's FOR MARITAL STATUS
<table>
<thead>
<tr>
<th>Marital status</th>
<th>Married (2,415)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>Preretirement (1,582)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>Whites (1,442) Minority (140)</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>Low High Low High</td>
</tr>
<tr>
<td></td>
<td>(697) (745) (103) (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Not married (1,141)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>Preretirement (541)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>Whites (445) Minority (96)</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>Low High Low High</td>
</tr>
<tr>
<td></td>
<td>(256) (189) (89) (7)</td>
</tr>
</tbody>
</table>
APPENDIX C: CATEGORICAL N's FOR BURGLARY
<table>
<thead>
<tr>
<th>Burglary</th>
<th></th>
<th>Yes (132)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Preretirement (83)</td>
<td></td>
<td>Post-retirement (49)</td>
</tr>
<tr>
<td>Race</td>
<td>White (67) Minority (16)</td>
<td></td>
<td>White (38) Minority (11)</td>
</tr>
<tr>
<td>Class</td>
<td>Low (35) High (32) Low High (14) (2)</td>
<td>Low (21) High (17) Low High (6) (5)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Burglary</th>
<th></th>
<th>No (2,252)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Preretirement (1,327)</td>
<td></td>
<td>Post-retirement (925)</td>
</tr>
<tr>
<td>Race</td>
<td>White (1,194) Minority (133)</td>
<td></td>
<td>White (838) Minority (87)</td>
</tr>
<tr>
<td>Class</td>
<td>Low (598) High (596) Low High (110) (23)</td>
<td>Low (454) High (384) Low High (72) (15)</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D: DEPENDENT VARIABLES

Total Family Income:

In which of these groups did your total family income, from all sources, fall last year before taxes, that is?

Marital Status:

Are you currently -- married, widowed, divorced, separated, or have you never been married?

Burglary:

During the last year -- that is, between March and now -- did anyone break into or somehow illegally get into your (apartment/home)?
APPENDIX E: CODING SCHEME FOR DEPENDENT VARIABLES

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Logit code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Married</td>
<td>1</td>
</tr>
<tr>
<td>2. Widowed</td>
<td></td>
</tr>
<tr>
<td>3. Divorced</td>
<td>+</td>
</tr>
<tr>
<td>4. Separated</td>
<td></td>
</tr>
<tr>
<td>5. Never married</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Burglary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes</td>
<td>1</td>
</tr>
<tr>
<td>2. No</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income</th>
<th>Presently government poverty level for families is approximately $10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Under $1,000</td>
<td></td>
</tr>
<tr>
<td>2. 1,000 - 2,999</td>
<td></td>
</tr>
<tr>
<td>3. 3,000 - 3,999</td>
<td></td>
</tr>
<tr>
<td>4. 4,000 - 4,999</td>
<td>+ 1</td>
</tr>
<tr>
<td>5. 5,000 - 5,999</td>
<td></td>
</tr>
<tr>
<td>6. 6,000 - 6,999</td>
<td></td>
</tr>
<tr>
<td>7. 7,000 - 7,999</td>
<td></td>
</tr>
<tr>
<td>8. 8,000 - 9,999</td>
<td></td>
</tr>
<tr>
<td>9. 10,000 - 14,999</td>
<td></td>
</tr>
<tr>
<td>10. 15,000 - 19,999</td>
<td>+ 2</td>
</tr>
<tr>
<td>11. 20,000 - 24,999</td>
<td></td>
</tr>
<tr>
<td>12. 25,000 or over</td>
<td></td>
</tr>
</tbody>
</table>
GENERAL SUMMARY AND CONCLUSIONS

The primary task of this dissertation was to set forth a thorough investigation of the adequacy of the double jeopardy hypothesis as it pertains to the association of age and race. The work was carried out through three separate but complementary steps. In the first stage of the research, the existing literature on double jeopardy was reviewed. A number of theory frameworks were used to determine the theoretical validity of the double jeopardy claim, with respect to minority aged. This paper concluded that: (1) there was a definite need for further research on the situation of minority elderly, based on the diversity of findings regarding their life circumstances, (2) that the concept of double jeopardy has merit as a general concept, and (3) that although the concept of double jeopardy is probably appropriate in certain situations, it may well not be with respect to minority aging.

In the second stage of the analysis, subjective factors associated with one's general life satisfaction were analyzed as representative of variables used in prior research. In line with the theoretical analysis from the first paper, at no time did this research obtain a double jeopardy outcome. The interaction of race and age was never found to be significant and thus, the hypothesized double jeopardy relationship was rejected. The impact of race was consistently greater than age. The effect of class was significant in all cases except when looking at general happiness. Age, however, was significantly
related to only two out of the four variables: (1) happiness and
(2) satisfaction with family finances.

The third and final phase of the research program dealt with
analyzing objectively measured variables which can be considered
associated with double jeopardy. Once again, this study did not find
support for the double jeopardy hypothesis.

Three dependent variables (total family income, marital status,
burglary) were used in this analysis and in no case was there conclu­
sive evidence for the presence of double jeopardy. The main effects -
stable stratification model always functioned to fit the data very
nearly as well as the double jeopardy model. The interaction effect
of age and race was never found to be significant.

Hence, it is the conclusion of this work that the hypothesized
double jeopardy interaction of age and race is not indicative of the
general life circumstances of minority elderly in contemporary American
society. This work, however, cannot make a definite statement in
this regard because the existence of double jeopardy for minority aged
is probably closely related to the social climate at any particular
time. Attitudes toward age and race as status characteristics may
vary and, thus, the potential for age and race to significantly inter­
act and thereby effect one's life more so than their simple main effect
does exist.

The stable stratification model suggested by Ward (1979) is best
supported by the research in this project. Although minority elderly
are not found to be in a state of double jeopardy, the stable
stratification model does point out that minority individuals do experience discrimination all of their lives. Hence, it would seem appropriate to continue to implement programs which are created to aid under-priviledged individuals such as minority elderly. These programs, however, need to target those individuals who are truly in need rather than blanket the entire minority population for, as shown in the data, the population of minority individuals in American society is highly heterogeneous and are not all in a similar life context. For example, old upper class blacks, in many instances, are not necessarily in a worse position in American society than are old lower class whites.

Thus, the recommendation of this project is that work needs to continue to be carried out on the exigencies of the aging experience for minorities. For, as Golden (1979) points out, empirical data specifically relating to minority aging is sparse. Yet, further research in this area needs to implement variables which can be used to stratify the overall population of minority elderly, such that this fairly heterogeneous population can be better classified into more homogeneous subpopulations. This will allow researchers, as well as policymakers, to better understand the varied needs of minority elders in American society and, hence, better determine subpopulations in need and to implement programs to alleviate some of these problems.
REFERENCES

Golden, H.  

Ward, R.  
ACKNOWLEDGEMENTS

I would like to express my gratitude to the faculty, staff, and my graduate student colleagues in the department of sociology and anthropology here at Iowa State University. They have made my work here a truly rewarding experience. Dr. Ron Simons deserves special acknowledgment. He functioned as a true mentor and friend at times when I needed to feel these qualities most. Also, I would like to thank Dr. Dan Hoyt for his methodological expertise in the analysis portion of this work and Dr. Ed Powers for introducing me to gerontology here at Iowa State, as well as helping me procure a fellowship with the Midwest Council for Social Research on Aging. My entire doctoral committee receives my true and heartfelt thanks for putting up with the deadlines my situation demanded.

Most of all though, I want to express my appreciation and love to my wife, Nancy, and my daughters, Sara and Dana, for their undying support and affection in a time of great stress. They gave me the motivation to finish a task, which at times seemed like it had no end.

Finally, let me greatly thank my typist, Mary Shearer, for dealing with this dissertation with great dispatch, and Gale West for helping tie up all the loose ends.