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PATRONAGE DECISIONS OF COLLEGE-AGE NEGROES: THE  
INFLUENCE OF CERTAIN OPERATING CHARACTERISTICS  
OF SELECTED KINDS OF RETAIL STORES

By

JAMES CHARLES CARROLL

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## CHAPTER I

### MARKET SEGMENTATION: THE CASE OF THE NEGRO AMERICAN

Segmented markets are a manifestation of the differences that exist within groups of consumers. For example, segments can be identified on a cultural or sub-cultural basis, on the basis of buying behavior, on the basis of consumption patterns, or on the extent of the market.

The assumption underlying market segmentation is that real or perceived differences exist between and among people in their attitudes and perception processes. If these differences do not exist before enterprise marketing effort (promotion, personal selling, and advertising), an additional assumption is that enterprise effort can create differences between and among people which will be manifested in demands for different sets of goods and services of varying qualities, prices, assortments, and quantities.

These assumptions create analytical problems, especially in the field of economics, by eliminating the homogeneous demand function for a given class of goods which is designed to serve as an explanation of behavior. If one homogeneous model of consumer demand for a given class of good does not exist, then buying behavior or market performance of consumers results in a series of models which explain behavior and results obtained in the market place.

Considered in broad terms, sets of consumers may have divergent demands which are a function of differing characteristics or behavior. For example, consumers may have different demands which are reflected in differing buyer behavior (different product and service preferences influenced by differing purchase motivations, expenditure patterns, and store patronage decisions). Apparently, the consumer reflects the amalgam of his highly personalized characteristics, e.g., economic and demographic characteristics, and the influence of marketing effort in his buying behavior and consumption patterns.

At least in theory, identifiable market groups can exist without the influence of marketing effort if we

other than profit as realistic goals, including maximization of sales, working capital, market share, and brand loyalty. In fact, then, efforts to create market segments are both self-creating and self-destructive of objectives and marketing strategy. There is little question that the market segmentation created by a massive array of firms in our economy has had a significant effect upon the goal of production economies of scale and upon the technological coefficients used in given types of production runs. Technology has been used to provide the flexibility necessary in product offerings in order to serve an increasing number of market segments.

Significant questions can be raised about the concept of market segmentation. For example, the literature of marketing speaks of the "marketing concept," which is supposed to reflect enterprise effort to provide product offerings and marketing strategies which create maximization of consumer satisfactions. In terms of logic, maximization is possible on both the producer and consumer side but is rarely, if ever, obtained under the conditions of uncertainty which confront the enterprise and the consumer.

The fact is that no one set of characteristics, i.e., attitudes, perceptions, enterprise behavior, economic and demographic factors, buying behavior, consumption patterns, or industry competition explains why segmented markets exist. If the meaning of the term, buying behavior, is extended beyond the concept of habit or in-market performance characteristics to include attitudes and perceptions, then perhaps buying behavior models come closest to explaining the effects on the in-market performance of consumers.

Attitudes as a Dimension  
of Market Segmentation

In reality then the concern is with groups of people who perceive their needs and the best means of satisfying these needs in a distinctive manner. This distinctive manner can be influenced by attitudes, the perceptive process, marketing effort, economic and demographic characteristics, reference group relationships,<sup>1</sup> and

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<sup>1</sup>Beckman, T. N., and Davidson, W. R., Marketing, 8th edition, p. 100.

historical consumption patterns. The hypothesis of the differences in attitudes as the major influence in creating market segments moves away from identifying as causal factors such approaches as the actions within the market place and the use of independent (economic and demographic) characteristics as explanations of market behavior. What influences attitudes towards needs and wants can be identified closely with a host of independent and dependent variables which include the following: housing, education, occupation, income, employment, social class position, reference groups (membership, anticipatory, or dissociative), psychological orientation to other people and to the world, family structure, living standards, personal value systems, religion, traditions, customs, etiquette, folklore, and art forms.

The assignment to distinctive social, cultural, political, and economic factors of the responsibility for attitudinal differences among groups of people is even more credible when the observation is made that, aside from physiological differences among some groups of people, there are no other inherently fundamental

differences of any consequence among groups of people. Unless social, cultural, political, and economic factors are selected as the forces which shape personality structure, specifically attitudes, in individual people and ultimately determine the nature of the interaction between personality and the environment, little is available to explain differences in perceptions, attitudes, and behavior, either among groups of people or between individual people.<sup>2</sup>

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<sup>2</sup>Certain fundamental assumptions are made concerning the interrelationships between and among perceptions, attitudes, and retail store operating characteristics. A perception is defined as the human process of receiving sense impressions in such a way as to identify, distinguish, and interpret objects or ideas. (Pearson, Karl, The Grammar of Science, pp. 42-44.) An attitude is defined as an affective psychological orientation to an entity which predisposes a person to favorable or unfavorable responses toward that entity. (Johoda, M., Deutsch, M., and Cook, S. W., Research Methods in Social Relations, vol. 2, p. 278; Thurstone, L. L., The Measurement of Values, p. 297.) Retail store operating characteristics are here defined as: (1) retail price levels, (2) local newspaper advertising, (3) local radio advertising, (4) availability of nationally advertised brands, (5) availability of credit, and (6) employment of Negro personnel.

It is assumed that an attitude toward any or all of the operating characteristics is developed and crystallized through time by recurring acts of perception and that for each individual person, after some undetermined point in time, the perceptive process is in turn influenced by existing attitudes. Thus, at some point in time

### The Negro Market

The literature of anthropology, sociology, political science, economics, and marketing indicates that Negro Americans can be distinguished from Caucasian Americans on a number of bases.<sup>3</sup> Physiological differences stem from Negro skin pigmentation and cross sectional structure of body hair. Social differences derive from housing segregation and other forms of segregation, discrimination, and social inequalities. Cultural differences stem from

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attitudes and perceptions begin to interact, i.e., the nature of the attitudes depend upon the nature of the perceptions and vice versa. In other words, attitudes and perceptions bear a functional relationship to each other.

The further assumption is made that to the extent that store patronage decisions are influenced by attitudes toward retail store operating characteristics, the consumer behaves as if his attitudes toward the operating characteristics are dummy parameters, or simulated variables, as it were, representing the operating characteristics. With this assumption it is possible to say that in the rank ordering by selected judges of their own attitudes toward the operating characteristics, the attitudes and the operating characteristics are rank ordered simultaneously, thus producing what C. H. Coombs calls "stimulus comparison data." (Coombs, C. H., A Theory of Data, p. 22.) Such a statement implies that the judgment by an individual of his own attitudes toward the relative powers of retail store operating characteristics to influence his patronage decisions is essentially a process of perception, albeit the objects of the perceptive acts of his own attitudes.

<sup>3</sup> See Appendix A, pages 112 through 151 for a discussion of Negro differences.

Negro matriarchy, isolation from the Caucasian majority with respect to religious and educational institutions, and a separate Negro system of social class stratification. Political differences are reflected in the low incidence of Negro voting and office holding. Health differences are apparent in higher rates of incidence of certain diseases among Negroes. Economic differences stem from lower educational and occupational levels among Negroes, which in turn depress Negro buying power. Buying behavior differences among Negroes are attributed to distinctive purchase motivations, expenditure patterns, brand preferences, and services required.

Any of the foregoing differences can be utilized in identifying the Negro market, and generally all these differences have been treated rather thoroughly by writers in the academic disciplines to which the differences are related. The store patronage aspect of Negro buying behavior, however, has received considerably less attention.

#### Store Patronage

A review of the literature concerning the Negro

American consumer reveals the following major determinants of retail store patronage: (1) retail price levels, (2) local newspaper advertising, (3) local radio advertising, (4) availability of nationally advertised brands, (5) availability of credit, and (6) employment of Negro personnel. Of these determinants, the literature suggests that price may be the most powerful in influencing retail store patronage decisions among Negroes. Numerous studies of radio listenership and newspaper readership point out that Negroes are especially responsive to these types of advertising when these media are owned or controlled by Negroes.<sup>4</sup> Where Negro controlled media are not available, readership of local newspapers by Negroes increases markedly. Other studies point out that the availability of nationally advertised brands and the availability of credit influence retail store patronage among Negroes.<sup>5</sup> Current literature also emphasizes the importance of the employment of Negro personnel in retail

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<sup>4</sup>Johnson, J. T., op. cit., pp. 98-103.

<sup>5</sup>"Marketing to The Negro Consumer," editorial, Sales Management, 84:40, March 4, 1960; La Vine, op. cit., p. 55; Edwards, op. cit., p. 98.

institutions to the Negro consumer.<sup>6</sup>

#### Statement of the Problem

The emphasis of previous studies of the Negro market upon the purchase motivations, expenditure patterns and distinctive differences which characterize Negroes and the evidence which indicates that these differences influence perceptions which in turn influence attitudes toward certain selected retail store operating characteristics (thereby influencing store patronage decisions) suggest that: (1) the Negro sub-culture with its separate system of social stratification may or may not endure indefinitely through time as a separate and readily identifiable entity (2) variations may exist between Negro perceptions of their differences and retailers' perceptions of these differences, (3) the true nature of the relationship between Negro differences and retail marketing strategies may be undetermined, and (4) the rank and importance of the six selected retail store operating characteristics (retail price levels, local newspaper advertising, local radio advertising,

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<sup>6</sup>"Negro Market," editorial, Time, 79:81, February, 1962.

availability of nationally advertised brands, availability of credit, and employment of Negro personnel) in influencing the store patronage decisions of Negroes need to be investigated in some depth.

The Likelihood of Permanence of the  
Negro Sub-Culture as a Separate  
Entity

Distinctive Negro differences do exist. A pertinent question is whether Negro Americans will continue to constitute a separate sub-culture for an indefinite period of time. A long-range justification for concentrating research effort upon any aspect of Negro buying behavior requires an affirmative answer to this question.

The distinctive differences characterizing the Negro American population, which are reflected in unique demand functions, appear to be permanent from some viewpoints and transitory from other viewpoints. Unquestionably ethnic identity manifested in skin pigmentation is an enduring difference. Neither social segregation nor political and economic discrimination can be eliminated by Federal or state legislation. When significant social integration is required by law, the progression toward complete integration slows almost to a halt. This

quotation from William Brink and Louis Harris argues strongly for the permanence of the Negro market:

Nationwide . . . the over-all results testify to white willingness--grudging though it may be--to accomodate. But white America is not at all ready for social integration to the extent of dating and intermarriage.<sup>7</sup>

Apparently complete social integration can be achieved only if the social segregation and barrier system (proscriptions against interracial dating and marriage; residential segregation; discrimination against Negroes in education, employment, wage scales, voting, court trials, and receipt of government services and benefits) undergoes a complete breakdown. Even if the social segregation and barrier system collapsed so that racial intermarriage became commonplace, the net result probably would be merely to enlarge the percentage of the total population classified as Negro and thereby to achieve a more equitable balance of domestic political power between Negroes and Caucasians--with no attendant progress toward real social integration. If social integration cannot be achieved, then the separate social class structures among Negroes and Caucasians cannot be consolidated. If these

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<sup>7</sup> Brink, William, and Harris, Louis, The Negro Revolution in America, p. 148.

two separate social class structures cannot be integrated, then the caste system cannot be eliminated. If the caste system prevails, then social and cultural differences may persist. If social and cultural differences persist, then Negro consumer behavior may reflect these differences in the market place. Hence, the probability appears great that the Negro sub-culture will persist indefinitely through time as a separate, readily identifiable entity, although some evidence does suggest that certain aspects of the Negro sub-culture may be in the initial stages of merging with the culture of the Caucasian majority.

Variations Between Negro Perceptions  
of Their Distinctive Differences and  
Retailers' Perceptions of These  
Differences

If differences exist between Negroes' perceptions of their characteristic differences and retailers' perceptions of these differences, then questions concerning the effectiveness or efficiency of retail marketing strategies directed toward the Negro market can be raised. An analysis of the differences between the Negro's perception of his differences and their impact upon the nature of his demand for goods and services and the retail

merchant's perception of Negro differences and their impact upon Negro demand must be analyzed in terms of overt behavior on the part of Negroes and retail merchants.

The Negro is well aware of his darker skin pigmentation and his distinctive hair texture, and of his resulting expenditure of higher than average amounts of money for skin care products and hair care products. The manufacturers and retailers of skin care products and hair care products obviously are aware of these Negro physiological differences also, since many manufacturers and retailers satisfy these needs of Negroes. It is questionable, however, whether manufactureres and retailers of other types of products are aware that high Negro visibility reinforces the Negro's desire to belong and to identify with whites.

Negroes tend to perceive their physiological differences as signals for rejection by the white majority, whereas retailers apparently are inclined to perceive Negro physiological differences simply as a means of identifying a segment of the aggregate consumer market.<sup>8</sup>

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<sup>8</sup> Schwartz, Jack, "Mens Clothing and The Negro," Phylon, 24:228, 3rd qtr., 1963.

Negroes perceive their social isolation from the white majority in terms primarily of discrimination in the form of de facto housing segregation, and secondarily in terms of denial of membership in country clubs, yacht clubs, and other purely social organizations. Negroes recognize their uncommonly high expenditures for home furnishings as a compensation for their inability to sustain social relationships with whites.<sup>9</sup> The retailer, on the other hand, is prone to perceive the social isolation of Negroes as a factor which delineates a segment of the consumer market which is unable to afford a standard of living comparable with that of Caucasians.<sup>10</sup>

The better educated Negroes undoubtedly perceive the matriarchal family structure and the high rate of family disorganization among Negroes as factors which reduce Negro buying power and cause Negro consumer buyers to evince more feminine tastes and preferences than white consumer buyers.<sup>11</sup> The poorly educated Negroes probably

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<sup>9</sup>Johnson, J. T., The Potential Negro Market, p. 97.

<sup>10</sup>Ibid., p. 135.

<sup>11</sup>Lincoln, C. E., "A Look Beyond the Matriarchy," Ebony, 21:111-117, August, 1966.

are not very much aware of the influence of Negro matriarchy and family disorganization upon the nature of Negro demand for goods and services. Many retailers recognize the influence of Negro matriarchy and family disorganization as an indication that advertising intended for the Negro market must be oriented to the interests of Negro women.<sup>12</sup>

Negroes perceive their sub-standard educational attainments as a handicap in sophisticated buying situations--which leads to reliance on national brands of merchandise and patronage of stores in which previous shopping and buying experiences have proven to be satisfactory.<sup>13</sup> Retail merchants, on the other hand, have tended to regard the lower Negro educational levels as a means of delineating gullible consumers who will buy shoddy merchandise at exorbitant prices.<sup>14</sup>

As regards occupational differences, Negroes perceive their confinement to certain lower status

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<sup>12</sup>Johnson, op. cit., p. 80.

<sup>13</sup>Black, L. E., "Negro Market, Growing, Changing, Challenging," Sales Management, 9:43, October, 1963.

<sup>14</sup>"Marketing to the Negro Consumer," editorial, Sales Management, 84:40, March 4, 1960.

occupations as a form of discrimination by the Caucasian majority in general and by Caucasian employers in particular. Negroes cannot avoid perceiving such occupational discrimination as an effective limitation upon their buying power.<sup>15</sup> Retail merchants are presumed to perceive Negro occupational differences in approximately the same manner as do Negroes.

The more highly educated Negroes recognize the failure of Negroes to develop as independent entrepreneurs to any appreciable degree as a general constraint upon Negro buying power. The more sophisticated Negroes understand that this failure is due to such factors as a lack of business tradition among Negroes, the difficulty of Negroes in obtaining commercial credit, the refusal of many real estate companies to sell or lease business property to Negroes, and the scarcity of Negro-owned investment capital.<sup>16</sup> Retail merchants tend to perceive the lack of development of business enterprises by Negroes as an index of an intellectual capacity which predisposes

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<sup>15</sup>Black, op. cit., p. 43.

<sup>16</sup>"Drive to Set Negroes up in Business," U.S. News & World Report, p. 82, August, 1964.

Negroes to make unwise buying decisions.<sup>17</sup>

The entirely separate system of social stratification based upon color caste is a difference which Negroes perceive as a form of segregation designed to keep them a separate people who are denied assimilation into the mainstream of American life and society.<sup>18</sup> Negroes perceive this difference as a force which stifles their economic development and hence constrains the expansion of their buying power. Negroes generally recognize this sub-cultural difference also as the cause of a number of purchase motivations which are essentially motivations to identify with the greater American society.<sup>19</sup> Negroes are considered to be aware of their pronounced tendency to attach more importance to material things which enhance prestige than do their Caucasian counterparts.<sup>20</sup> Retail merchants are prone to attach little importance to the

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<sup>17</sup> Frazier, E. F., The Negro in the United States, p. 40.

<sup>18</sup> Myrdal, Gunnar, An American Dilemma, p. 573.

<sup>19</sup> Frazier, op. cit., p. 699.

<sup>20</sup> Pettigrew, T. F., A Profile of the American Negro, pp. 15-16.

Negroes' consciousness of class within their group and of their separate system of social stratification which is similar to but not integrated with the social stratification system of Caucasians. Retailers have made the serious mistake of regarding color caste as only a convenient way to identify a market segment which has been presumed to be of little consequence as a separate entity.<sup>21</sup>

Negroes perceive their differences with respect to politics and especially to political power as one of the worst kinds of injustice that could be imposed upon them as citizens of the United States. They are well aware of the centuries of effectual disfranchisement, of the denial of proportionate shares of government appropriations for health, education, and welfare, and of the denial of equal justice before Federal and state tribunals. The better educated Negroes clearly perceive these differences as factors contributing to depressed Negro buying power.<sup>22</sup> Retail merchants presumably have recognized also the depressing effect of these political differences upon

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<sup>21</sup> Brimmer, A. F., "The Negro in the National Economy," in The American Negro Reference Book, p. 253.

<sup>22</sup> Rudwick, E. M., W. E. B. Dubose: A study in Minority Group Leadership, p. 261.

Negro buying power.

Many urban Negroes apparently are uninformed as regards the ratio of Negroes to Caucasians in America. There is reason to believe that many retailers also have been unaware of the size of the Negro market.<sup>23</sup>

Negroes perceive the highly urban concentration of their group as a step toward economic gains in the form of better jobs, higher incomes and more stable employment. They recognize these economic improvements as a means of raising their standards of living and thereby emulating the middle class Caucasian Americans. Presumably Negroes perceive urban living and its higher income levels as enabling conditions for higher expenditures for goods and services.<sup>24</sup> Many retail merchants in urban areas regard the influx of Negroes to the central cities as an alarming turn of events because they are confronted with a new and unfamiliar kind of customer.<sup>25</sup>

As evidenced by the frequency of boycotts, sit-ins,

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<sup>23</sup> Kotler, Philip, Marketing Management, p. 14.

<sup>24</sup> Pfautz, H. W., "The New "New Negro:" Emerging American," Phylon, p. 361, winter, 1963.

<sup>25</sup> "New Marketing Profile of U.S. Negro Emerges," editorial, Sponsor, p. 38, July 26, 1965.

picketing, and demonstrations in the 1950's and 1960's, Negroes perceive their differences in income and buying power, sub-standard as the incomes may be, as an effective weapon in their struggle for equality of opportunity to work in occupations for which they are qualified.<sup>26</sup> Retailers traditionally have underrated the aggregate size of Negro buying power, but they recognize its power more clearly in those instances in which Negroes have brought the boycott, sit-in, and picket line to bear upon retail stores. These withdrawals of Negro buying power by Negroes have called to the attention of many retailers for the first time how great the neglected buying power of the Negro-market is.<sup>27</sup>

Negroes perceive their distinctive purchase motivations as forces which strongly influence their expenditure patterns and their patronage of retail stores. They are keenly aware of the desire to identify with the larger American society, of the desire to gain prestige and status, and of the desire to compensate for their inequalities with respect to the cultural, political, and

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<sup>26</sup> Brink and Harris, op. cit., p. 71.

<sup>27</sup> Kotler, Philip, op. cit., p. 14.

economic aspects of their lives in America.<sup>28</sup> The retail merchants apparently do not perceive differences in Negro purchase motivations, in the same way that Negroes perceive these differences. More often than not retailers are unaware of the intensity of race consciousness among Negroes and of their motivations to belong and to achieve status and recognition.<sup>29</sup> Because they have miscalculated the size and buying power of the Negro market, many retailers are not knowledgeable concerning the differences in Negro expenditure patterns.<sup>30</sup> Other retailers have assumed erroneously that Negro expenditure patterns for goods and services are generally the same as those of Caucasians.<sup>31</sup> Many retailers still mistakenly assume that Negro patronage is attracted solely by low retail prices.

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<sup>28</sup>Johnson, op. cit., p. 97.

<sup>29</sup>"New Marketing profile of the Negro emerges," editorial, Sponsor, p. 38, July 26, 1965; Kotler, Philip, Marketing Management, p. 15.

<sup>30</sup>Martz, Larry, "Negro Market: Business Courts Its 19 Million Customers," Newsweek, 58:67, July 31, 1961.

<sup>31</sup>"New Marketing Profile of U.S. Negro Emerges," editorial, Sponsor, p. 38, July 26, 1965.

The Relationship Between Negro  
Differences and Retail Mar-  
keting Strategies

The Negro market can be ignored by marketers only at the cost of profits which could have been realized had some efforts been made to sell this particular market segment. Marketing executives can take advantage of the marketing opportunity represented by the Negro market only if they increase their knowledge of it beyond the scope of demographic nose counting. This points out the importance of learning Negro purchase motivations, expenditure patterns, and determinants of retail store patronage decisions.

The sheer neglect of the Negro market by American enterprises is pointed out by Larry Martz as follows:

For all its size, power and potential, the Negro market has been left in an almost total vacuum: No more than 2 per cent of the nation's advertising budget is spent on ads aimed directly at Negroes, though most manufactures concede Negroes account for about 10 per cent of sales.<sup>32</sup>

Southern marketing executives are prone to neglect doing marketing research on the Negro market for fear of being associated with a side of a race issue not approved

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<sup>32</sup> Martz, op. cit., p. 67.

of by their Caucasian customers. They neglect the Negro market for fear of alienating their Caucasian customers. There is reason to believe that this fear is unjustified. D. Parke Gibson states that, "even in the South there is evidence that white people do not care what companies do to cultivate Negro business as long as it doesn't interfere with their way of life."<sup>33</sup>

Although poverty is still a factor to be considered in studying the Negro market, it is fallacious to assume that because a substantial percentage of Negroes are poor by absolute standards that all Negroes are unable to purchase any goods and services other than those essential to sustain life. This fallacy has influenced the thinking of too many marketers in the past. Neither does the lower average income level of Negroes entirely explain the differences in their buying behavior as compared to Caucasians. According to Jack Schwartz, "The lower economic position of the average Negro in the American class system does not, per se, provide sufficient information for predicting his patterns of consumption

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<sup>33</sup> "Negro Market," editorial, Time, 79:81, February 9, 1962.

relative to those of whites."<sup>34</sup>

Misconceptions among business men generally and among marketing executives in particular concerning the Negro market are very widespread. A number of surveys have revealed mistaken conceptions ranging from a belief that Negroes buy the cheapest, most durable merchandise to the opinion that Negroes are motivated to buy solely on the basis of the symbolic values of products. Not all marketing executives are aware that research has indicated that the majority of Negroes tend to buy on the basis of quality rather than on the basis of price. Others have erroneously assumed that the Negro market as far as its basic characteristics are concerned is no different from the white market.<sup>35</sup>

With respect to the development and implementation of retail marketing strategies designed especially for the Negro market, the literature indicates that retail merchants have made two types of mistakes. They have failed to recognize the significance of Negro buying

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<sup>34</sup> Schwartz, op. cit., p. 224.

<sup>35</sup> Holte, C. L., "The Negro Market: To Profit From It, Recognize It and Service Its Needs," Printers Ink, 263:29, April 4, 1958.

power and therefore have neglected this market segment entirely, or they have failed to recognize Negroes as a distinctive segment and therefore have not utilized a segmented approach.<sup>36</sup> Another serious mistake that has been made by some retailers, even those who have taken a segmented approach to the Negro market, is the failure to recognize the speed with which the nature of Negro demand changes due to the rapid changes in distinctive Negro characteristics.<sup>37</sup> These changes call for fast adjustments in the strategies directed toward the Negro market.

The Relationship Between Negro  
Differences and Retail Organization  
Strategy

The available evidence suggests that physiological, social, cultural, political, economic, and buying behavior differences among Negroes and their translation into a unique kind of Negro demand are the cause of innovations in retail organization strategy whereby

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<sup>36</sup>"Negro's Force in the Marketplace," editorial, Business Week, p. 83, May 26, 1962; Martz, op. cit., p. 67.

<sup>37</sup>Murphy, P. J., "The Promotion of Consumer Durable Goods in the Negro Market in Milwaukee," Marquette Business Review, 10:114,

Negroes are employed in conspicuous or key positions. The intensity of race consciousness has precipitated the employment of Negroes in retail establishments. This development has been abetted by the efforts of various direct action Negro organizations and by Federal legislation prohibiting discrimination against Negroes in either employment or service.

In his study of the potential Negro market in 1952 J. T. Johnson called attention to the power of the employment of Negro personnel in retail stores to attract the patronage of Negroes.<sup>38</sup> Sales Management Magazine in 1960 cited the employment of Negroes in personal selling as a prerequisite for successful information strategy directed toward the Negro market.<sup>39</sup> Reporting the findings of interviews with 3,016 Negro families, Newsweek Magazine in 1962 stated that, "a full 42 per cent of those polled indicated that they patronize stores in their areas because of 'positive' attitudes toward Negroes."<sup>40</sup>

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<sup>38</sup>Johnson, op. cit., p. 105.

<sup>39</sup>"Marketing To the Negro Consumer," editorial, Sales Management, 84:40, March 4, 1960.

<sup>40</sup>"Selling to the Negro," editorial, Newsweek, 60:92, November 5, 1962.

Pepsi-Cola vice president, H. C. Russell (a Negro), believes that Negroes should be visible in personal selling, as well as in advertising.<sup>41</sup>

Retail stores, as well as other kinds of enterprises are employing an ever increasing number of Negroes in personal selling, advertising, sales promotion and physical distribution.

#### The Relationship Between Negro Differences and Retail Product-Service Strategy

The marketing literature indicates that product-service strategies which emphasize nationally advertised brands appeal to Negroes.<sup>42</sup> As early as 1952 J. T. Johnson stated that, "in an effort to show its status generally, the Negro market tends to be exceptionally brand conscious."<sup>43</sup>

As to whether that part of retail product-service strategy which offers open account and installment credit to Negro customers causes or is caused by differences in

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<sup>41</sup>"Negro market," editorial, Time, 79:81, February 9, 1962.

<sup>42</sup>Martz, op. cit., p. 67.

<sup>43</sup>Johnson, op. cit., p. 97.

Negro purchase motivations and store patronage is not entirely clear. P. K. Edwards documented the power of retail credit to attract Negro patronage in 1932. Numerous writers since that time have reported the same phenomenon. In the past, particularly prior to World War II, it was presumed that Negroes used retail credit out of necessity due to extremely low incomes. Hence it could be argued that the offering of retail credit is the effect of Negro differences in buying power. Since World War II, however, many writers have alleged that Negroes use retail credit, especially of the open account variety, for prestige purposes, in which case it could be argued that the differences in Negro purchase motivations and store patronage are the effects of retail product-service strategies. This is an open question in connection with which the flow of causation of the temporal sequence of events is undetermined.

The Relationship Between Negro  
Differences and Retail Price  
Strategy

Pertinent information in the literature suggests that distinctive Negro demand due to unique Negro

differences may be a cause and an effect of retail price strategy which establishes basic prices at a moderate level with a view to attracting Negro patronage. The relationship appears to be one of interaction rather than a one-way sequence of events.

Price adjustments on the supply side of the market have long been cited by economists as an effective method of increasing or decreasing market demand. In 1932 Edwards singled out price flexibility as a means to attracting Negro patronage to retail stores.<sup>44</sup> A portion of Edward's research report is quoted below:

The Negro is a persistent bargain hunter, particularly in the purchase of small articles of clothing and also of shoes. Price is the most important determinant of their trade.<sup>45</sup>

Although writers in the past decade have assigned to retail price strategy an important role in attracting Negro patronage, they tend to assign the offering of quality merchandise, especially national brands, a more

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<sup>44</sup> Edwards, P. K., The Southern Urban Negro as a Consumer, p. 199.

<sup>45</sup> Edwards, op. cit., pp. 96-97.

important role.<sup>46</sup> They take the position that the Negro's drive to achieve status and to reflect the standard American middle class family life image results in the availability of nationally advertised brands in a retail store being a more powerful determinant of patronage than is price strategy. Negro tendencies to equate price and quality argue for differences in price strategy being an effect of Negro differences. It is well known that Negroes generally are less sophisticated buyers than Caucasians. It is also well known that Negroes are more highly motivated than Caucasians to buy products for prestige purposes. It seems reasonable then to conclude that Negro differences in their store patronage behavior are the results of variations in retail prices to at least as great an extent as store patronage habits are a cause of retail price differences. On the other hand, the still prevalent impression of many retailers that the buying power in the Negro market is insignificant suggests the possibility that differences in Negro demand are the cause of certain retail price strategies.

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<sup>46</sup>Martz, op. cit. p. 67.

### The Relationship Between Negro Differences and Retail Inventory Decisions

Little information is to be found in the literature that would indicate any kind of definitive cause or effect relationship between retail inventory decisions and distinctive Negro differences. Since Negroes are known to spend their incomes at a more rapid rate than do Caucasians, it could be theorized that this faster expenditure rate contributes to more rapid turnover of retail inventories, particularly in food stores.<sup>47</sup> Similarly it seems reasonable to assume that peculiarities in Negro expenditure patterns are reflected in the relative quantities of various kinds of products that are stocked in retail assortments.

### The Relationship Between Negro Differences and Retail Information Strategy

The evidence is fairly substantial in support of distinctive Negro differences as reflected in a unique kind of demand being the cause of retail information strategies in which particular effort is made to identify

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<sup>47</sup>"Negro Marketing Basics," editorial, Sponsor, 14:50, September 26, 1960.

and understand Negro differences and to shape personal selling, advertising, and sales promotion so as to cater to these differences. In a 1962 editorial Newsweek Magazine quoted William Capitan, president of Center for Research in Marketing, as saying:

Understanding Negroes' attitudes will open the way to more effective advertising, promotion, and distributive policies for those manufacturers who want to take advantage of this growing market.<sup>48</sup>

Among those marketing executives who are interested in selling to the Negro market there is little agreement as to the most effective information strategies. Some marketers believe that a direct appeal to the Negro, using Negro media and Negro salesmen is most effective.<sup>49</sup> Others think that the Negro resents being identified as a market segment. They feel that the best approach is to make no distinction between the Negro market and the general market. Still other marketers believe that the most effective approach is to combine the appeals to Negro and Caucasian markets into single pieces of

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<sup>48</sup>"Selling to the Negro," editorial, Newsweek, 60:92, November 5, 1962.

<sup>49</sup>Johnson, op. cit., p. 2.

integrated advertising.<sup>50</sup> Integrated advertising is of such a nature that both Negroes and Caucasians can identify with the same or different components of the body of the advertising. Unstructured<sup>51</sup> advertising, advertising showing products in their natural usage, and cartoon advertising are examples.<sup>52</sup>

The use of advertising in retail information strategy directed toward the Negro market has been recognized for many years as an important determinant of Negro patronage. In 1932 P. K. Edwards cited advertising copy designed to appeal to Negro women as being a very effective part of retail information strategy.<sup>53</sup>

Retail advertising must be very sensitive to changes in the Negro's social, cultural, political and economic position. Appeals must be geared to changes in

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<sup>50</sup>Bullock, H. A., *Consumer Motivations in Black and White-II*, "Harvard Business Review", p. 110, July-August, 1961

<sup>51</sup>Unstructured advertising as used here means advertising which leaves the reader or viewer free to draw his own conclusion due to the absence in the advertisement of a clearly defined message.

<sup>52</sup>Bullock, H. A., "Consumer Motivations in Black and White-II," Harvard Business Review, pp.119-123, July-August, 1961.

<sup>53</sup>Edwards, op. cit., pp. 97-110.

the Negro's self image resulting from improvements in his social, cultural, political, and economic conditions.<sup>54</sup> Retailers have badly underestimated the power of Negro media advertising generally and local newspaper advertising and local radio advertising specifically to attract Negro retail store patronage. Retail advertising is especially vulnerable to the mistaken assumption that general media reach the Negro market segment as well as the Caucasian segment.<sup>55</sup> It has been demonstrated in many instances that the use of Negro media is necessary to the effectiveness of advertising in the Negro market. A 1963 editorial in Duns Review states that, "the first company in the field to employ Negro media gains significant advantages in its effort to attract a Negro market."<sup>56</sup>

Not only are Negro media considered to be more in tune with consumer attitudes and responses in the Negro market than are the general media, but the use of Negroes

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<sup>54</sup> Murphy, op. cit., p. 114.

<sup>55</sup> "New Marketing Profile of U.S. Negro Emerges," editorial, Sponsor, p. 38, July 26, 1965.

<sup>56</sup> "The Negro Market," editorial, Duns Review, 82:62, November, 1963.

in pictorial advertising is regarded by some advertising and marketing executives as being especially well suited to Negro differences.<sup>57</sup>

Successful sales promotion in the Negro market requires believable situations with which Negroes can identify easily.<sup>58</sup> Sales promotion directed toward the Negro market must be particularly alert and responsive to social, cultural, political and economic progress among Negroes which may alter the Negro's self-image.<sup>59</sup>

The concensus among many writers is that retail marketing strategies are developed and implemented in response to clearly recognized differences among Negroes and differences in the demand resulting therefrom. The summary recommendation of these writers to retailers is to recognize the Negro market, identify its people, and invite them to buy.<sup>60</sup>

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<sup>57</sup>"Marketing to the Negro Consumer," editorial, Sales Management, 84:40, March 4, 1960.

<sup>58</sup>Murphy, op. cit., p. 115.

<sup>59</sup>Ibid., p. 115.

<sup>60</sup>"Market Basics," editorial, Sponsor, 15:26, October 9, 1961.

The Importance of the Six Selected  
Retail Store Operating Character-  
istics in Influencing the Store  
Patronage Aspects of Negro  
Buying Behavior

According to the marketing literature the retail store operating characteristics which are most influential in determining Negro patronage decisions are: (1) retail price levels, (2) local newspaper advertising, (3) local radio advertising, (4) availability of nationally advertised brands, (5) availability of credit, and (6) employment of Negro personnel. Whether these characteristics are in fact the most important determinants has not been demonstrated by empirical research. The assertions in the literature apparently stem from the opinions of the various writers. There is a need to gain more knowledge concerning the influence of these characteristics upon Negro patronage decisions. By comparison with the amount of research effort that has been directed toward the purchase motivation and expenditure pattern aspects of Negro buying behavior, the store patronage aspect has been neglected. Exploratory research efforts need to be launched to evaluate the rank and importance of the retail store operating characteristics cited above.

Whether the operating characteristics in question are in reality as important as they are alleged to be in the literature can be determined to some extent by a statistical test of significance. Generally, if their significance is too great to be attributed to chance alone, then the conclusion can be drawn that they are indeed among the real determinants of Negro patronage decisions, even though they may not constitute an exhaustive set of patronage determinants.

#### Purposes of the Study

This study concentrates on a fundamental problem-- evaluation of the importance of the six selected retail store operating characteristics as influences on store patronage decisions of Negroes, with special reference to four selected kinds of retail stores (food, drug, clothing, and furniture and appliances). The hypotheses to be tested and which can provide partial solutions to the problem include the following:

1. College-age Negroes are capable of ranking their own attitudes toward the six retail store operating characteristics with respect to the importance of these characteristics as influences upon their patronage

decisions vis-a-vis retail food stores, drug stores, clothing stores, and furniture and appliance stores in Tuscaloosa, Alabama.

2. The aggregate influence of the six selected retail store operating characteristics upon the store patronage decisions of college-age Negroes with respect to retail food stores, drug stores, clothing stores, and furniture and appliance stores in Tuscaloosa, Alabama is too great to be attributed to chance alone.

3. The individual influence of the six selected retail store operating characteristics upon the store patronage decisions of college-age Negroes with respect to retail food stores, drug stores, clothing stores, and furniture and appliance stores in Tuscaloosa, Alabama is too great to be attributed to chance alone.

4. The differences between Negro senior and freshmen college students, with respect to the influence of the six retail store operating characteristics upon their retail clothing store patronage decisions in Tuscaloosa, Alabama are too great to be attributed to chance alone.

5. With respect to the store patronage aspect of their buying behavior, college-age Negroes behave as

rational economic men, as described in the economics literature.

## CHAPTER II

### METHODOLOGY

Determinants of retail store patronage decisions of Negroes which are described in marketing and economics literature are primarily qualitative in character. That is, the rank importance, the relative power, and the relationships and interrelationships of these variables (determinants) which permit explanation and prediction are untested.<sup>1</sup> To establish rank order importance and the power of these determinants, perceptions and attitudes of individuals must be investigated and tested. Thus, the sampling procedure employed in this study depends upon the assumption that people as a group are similar in their abilities to perceive, their abilities to store sense impressions in their memories, and to reason about the contents of the sense impressions. Karl Pearson states the

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<sup>1</sup> McNemar, Quinn, "Opinion-Attitude Methodology," Psychological Bulletin, 43:351, 1946; Pearson, Karl, Grammar of Science, 3rd edition, p. 130.

assumption this way: "The universal validity of science depends upon the similarity of the perceptive and reasoning faculties in normal civilized men."<sup>2</sup> Read Bain describes the assumption in this manner:

Scientifically we cannot go behind the data present to our senses except to make probable inferences and logical deductions on the basis of past tested and tried sense experience generalized into scientific facts.<sup>3</sup>

This assumption concerning similarities in human mental processes is vital to the faith that men place in the scientific method. Without this assumption the methods and findings of science would amount to little more than meaningless chaos. The disturbing element in this point of view is that the good reputation of scientific method is more dependent upon what exists in the minds of men than upon what exists external to the minds of men.

The necessity of the assumption of similarities in human mental processes is described by Pearson as follows:

. . . Science is in reality a classification and analysis of the contents of the mind; and the scientific method consists in drawing just comparisons and in-

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<sup>2</sup>Pearson, op. cit., p. 47.

<sup>3</sup>Bain, Read, "An Attitude on Attitude Research," The American Journal of Sociology, 33:952, May, 1928.

ferences from the stored impresses of past sense impressions, and from the conceptions based upon them. . . .<sup>4</sup>

About these conceptions we reason, endeavoring to ascertain their relationships and to express their sequences in those brief statements or formulae which we have termed scientific laws. In this process we often analyze the material of sense impressions into elements which are not in themselves capable of forming distinct sense impressions; we reach conceptions which are not capable of direct verification by the senses; that is to say, we can never, or at least we cannot at present, assert that these elements have objective reality.<sup>5</sup>

A serious limitation of scientific investigation relates to the concept of causation. If the ability of man to determine the relationships between variables and to determine the temporal sequence of events is limited to sense impressions concerning whether variable relationships are orderly or not orderly, and whether certain events follow certain other events in time sequence, then the designation of one variable as the cause of another, or the designation of one event as the cause of another, is a very questionable activity. Read Bain's comment

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<sup>4</sup> Pearson, op. cit., p. 52.

<sup>5</sup> Ibid., p. 95.

on this matter is much to the point:

The generalization of the observed and measured uniformity is the scientific fact; the real causes are all the antecedent factors from the beginning of time.<sup>6</sup>

Scientific investigation is seriously limited also in its ability to predict. The limitation to probability statements is described by Pearson this way:

Science in no case can demonstrate any inherent necessity in a sequence, nor prove with absolute certainty that it must be repeated. Science for the past is a description, for the future a belief; it is not and never has been an explanation, if by this word is meant that science shows the necessity of any sequence of perceptions.<sup>7</sup>

In addition to the required assumptions for group investigation and analysis and the limitation concerning causation noted above, results of investigations of perceptions and attitudes depend to a great extent upon the hierarchy of values of the researcher and the effect these values have upon the decision making process (selection of variables and methods of analysis).<sup>8</sup>

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<sup>6</sup>Bain, op. cit., p. 952.

<sup>7</sup>Pearson, op. cit., p. 113.

<sup>8</sup>Churchman, C. W., Prediction and Optimal Decision, p. 394.

Karl Pearson summates these problems by saying:

"All knowledge is concise description. All cause is routine."<sup>9</sup>

### Attitudinal Data

To obtain measures of importance and rank, data which reflect attitudes must be collected and analyzed from the subjects. In this study, an attitude is defined as an affective psychological orientation to an entity which predisposes a person to favorable or unfavorable responses toward that entity.<sup>10</sup> Hence, attitudes are a function of economic and demographic characteristics, total fabric of experience of an individual or group, and responses to behavior of the individual or groups. Expressed in other terms, attitudes affect perceptions and perceptions affect attitudes. There is, however, a certain permanence in attitudes; at least there is a consistency which allows the individual to reason about the contents of his attitudes derived from sense impressions. In this study, data

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<sup>9</sup>Pearson, op. cit., p. 133.

<sup>10</sup>Festinger, Leon and Katz, Daniel, Research Methods in the Behavioral Sciences, p. 278; Johada, M., Deutsch, M., and Cook, S. W., Research Methods in Social Relations, vol. 1, p. 112; Thurstone, L. L., The Measurement of Values, p. 297.

needed for analysis must reflect the attitudes of Negroes toward certain selected operating characteristics of retail stores. In fact, determinants noted in the previous chapter apparently reflect attitudes of Negroes. The desire is to measure the rank and importance and power of these attitudes.

This study concentrates on attitudes which, according to the literature of marketing, are the same as the retail store characteristics desired ideally by Negroes. If Negroes perceive a retail store in the light of their attitudes, favorable or unfavorable responses to that store's offerings will be created by similarities of attitudes toward that retail store. In a sense such Negro attitudes can be regarded as simulated variables representing the store characteristics. Attitudes of this kind are the type which C. H. Coombs classifies as bases for establishing "stimulus comparisons."<sup>11</sup> The essential idea is that stimuli can be compared on a greater-than or less-than basis. Coombs explains the concept in this hypothetical form:

Each stimulus may be represented by an appropriate point on a line which is a continuum to be interpreted as the attribute in question. Furthermore,

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<sup>11</sup> Coombs, C. H., A Theory of Data, p. 22.

when an individual judges one stimulus to have more of this attribute than another, this corresponds to the statement that the point for that stimulus is to the right of the other on this continuum.<sup>12</sup>

The data obtained from this study consist of the recorded affective responses of Negroes to six stimuli presented in a two-dimensional circular array. These stimuli correspond to six selected operating characteristics of retail stores. Thus the attitudinal data can be regarded as order positions of both the stimuli and the Negroes who make the responses.

Attitudinal data are qualitative in nature. The recording, measurement, and analysis of such data present certain problems which are not encountered in the recording, measurement, and analysis of quantitative data.

Attitudes have been selected as a focal point of this investigation because:

1. Physiological, social, cultural, political, and economic factors are believed to structure attitudes through the interaction with perceptions which are in turn influenced by these environmental factors.

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<sup>12</sup>Ibid., p. 22.

2. Negroes are distinctly different with respect to these factors.

3. Attitudes predispose people to certain actions.

4. It is believed, therefore, that attitudes provide some index of the pertinent variables; i.e., Negro attitudes toward certain retail store operating characteristics are an index of Negro patronage decisions.

5. If attitudes do reveal predispositions to overt behavior, then it is possible to use them to predict behavior (at least to the extent of making probability statements).

With respect to the idea that attitudes cause behavior, Anselem Strauss says, "practically every psychologist who has defined the attitude has conceived of the attitude as entering into the causation of behavior."<sup>13</sup>

With regard to the concept of attitudes as predictors of behavior, D. D. Droba states that, "an attitude is a certain subjective state of preparation to action."

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<sup>13</sup> Strauss, Anselem, "The Concept of Attitude in Social Psychology," Journal of Psychology, 19:344, 1945.

It is the foreshadowing of what the individual will likely be doing with respect to the object in question."<sup>14</sup>

Attitudes do change through time in response to changes in the factors which shape them. The assumption is made, however, that attitudes remain stable for long enough periods of time for them to be useful as indices of human behavior.

#### Sampling Procedure

The convenience sample studied includes 40 Negro freshmen college students and 40 Negro senior college students in Tuscaloosa, Alabama. The sampling procedure and the application of the data-collection vehicle were completed in October and November, 1967. The data-collection vehicle is designed to determine the rank and importance of the six operating characteristics of retail stores to these Negro population groupings. The hypothesis that these six operating characteristics, as determined from the literature of marketing, influence patronage decisions of these Negroes with respect to retail food stores, drug stores, clothing stores, and furniture

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<sup>14</sup>Droba, D. D., "The Nature of Attitude," Journal of Social Psychology, 4:449, 1933.

and appliance stores in Tuscaloosa, Alabama was tested. Six operating characteristics of retail stores included: (1) retail price levels, (2) local newspaper advertising, (3) local radio advertising, (4) availability of nationally advertised brands, (5) availability of credit, and (6) employment of Negro personnel. The sample included both male and female Negro college students.

The six operating characteristics of retail stores are supposed to reflect the attitudes of the Negro population, according to the literature of marketing, and, as such, are representative variables which supposedly influence decisions on the part of the Negroes concerning retail store patronage. In effect these are summation attitudes and reflect the total fabric of experience on the part of the Negro. In essence these attitudes serve as summation variables. The major concern of this study is with Negro attitudes toward the retail operating characteristics and not with the degree to which local retailers exemplify these characteristics in the implementation of their retail strategies.

The basic sampling unit is the Negro college student. The convenience sample was stratified by class rank (Negro freshmen and senior college students) so as to maximize the

probability of reflecting familiarity of the sample group with the retail structure in Tuscaloosa. In essence, data were collected from convenience samples because of the desire to reflect advanced levels of education among Negroes, to test a methodological approach to analyzing rank and importance of the variables under study, and to begin the exploration of the dimensions of the research challenge presented by the Negro ultimate consumer. The inferences drawn from the convenience samples of Negro college students were limited to the 80 students who recorded responses upon the data-collection instruments.<sup>15</sup>

#### Scaling Method

The attribute to be measured in this investigation is the relative importance of retail store operating characteristics as influences upon store patronage decisions of Negro college students. W.S. Torgerson defines

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<sup>15</sup> Even though random type samples were not drawn, this approach can be justified as follows:

[Random samples are not feasible.] . . . (1) the unfeasibility of obtaining a sample large enough to permit numerous subclassifications of the total sample, and to permit checks on the meaning of identical questions and responses in different subsamples; and (2) that the broader the population selected for study, the more complex it becomes for a scientific study of attitudes and opinions. (Remmers, H.H., Introduction to Opinion and Attitude Measurement, pp. 24-25.)

an attribute as that which, "will refer to a measurable property; that is, to a property capable of graduations."<sup>16</sup>

Many psychological scaling techniques used by social scientists are dependent upon L. L. Thurstone's law of comparative judgment, which, in turn, was derived from psycho-physical scaling methods developed by Gustav Fechner. The following quotation from W. S. Torgerson describes briefly the work of Thurstone in the field of psychological scaling methods:

Louis Leon Thurston (1887-1955) pointed out that many of these 'psychophysical' scaling methods could be used for accurate measurement of psychological attributes of stimuli which had no relevant measurable physical correlate. Thurstone developed the law of comparative judgement for data collected by Fechner's method of paired comparisons and showed that it was possible to obtain internally consistent measurements for various psychological attributes such as, e.g., the intensity of feeling toward various 'nationalities,' the judgement of the relative merits of compositions, or preferences for various goods or gifts.<sup>17</sup>

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<sup>16</sup>Torgerson, W. S., Theory and Method of Scaling, p. 26.

<sup>17</sup>Ibid., p. v.

The Law of Comparative Judgment is a set of equations derived from the following postulates:

1. Each stimulus when presented to an observer gives rise to a discriminial process which has some value on the psychological continuum of interest.
2. Because of momentary fluctuations in the organism, a given stimulus does not always excite the same discriminial process, but may excite one with a higher or lower value on the continuum. If any stimulus is presented to an observer a large number of times, a frequency distribution of discriminial processes associated with that stimulus will be generated. It is postulated that the values of the discriminial processes are such that the frequency distribution is normal on the psychological continuum. Each stimulus thus has associated with it a normal distribution of discriminial processes.
3. The mean and standard deviation of the distribution associated with a stimulus are taken as its scale value and discriminial dispersion respectively.<sup>18</sup>

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<sup>18</sup>Ibid., pp. 159-160.

A scaling technique involves objects possessing attributes, a linear continuum representing the attribute, and judges. The objective is to position the objects or the judges, or the objects and the judges along the continuum. Thurstone and Chave state that, "The very idea of measurement implies a linear continuum of some sort, such as length, price, volume, weight, age."<sup>19</sup>

The measurement of attitudes by means of scaling techniques involves the assignment of numbers to the data, which in turn facilitates the analysis of the data. J. P. Guilford states the idea this way: "Measurement means the description of data in terms of numbers and this, in turn, means taking advantage of the many benefits that operations with numbers and mathematical thinking provide."<sup>20</sup>

The concepts of magnitude and quantity are relevant in the scaling of attitudinal data. Torgerson defines magnitude as, "essentially anything capable of being greater-than or less-than something else. A magnitude is

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<sup>19</sup>Thurstone, L. L., and Chave, E. J., The Measurement of Attitudes, p. 10.

<sup>20</sup>Guilford, J. P., Psychometric Methods, p. 1.

a particular amount of an attribute."<sup>21</sup> He states further that, "the attribute then is analogous to a continuum of points, and the magnitude to a point in the continuum." Torgerson defines quantity as, "a particular instance of a particular magnitude."<sup>22</sup>

Thurstone's argument on behalf of the effectiveness of scaling techniques in measuring attitudes is presented below:

There are so many complex factors involved in a persons' attitude on any social issue that it cannot be adequately described by a score on some sort of test or scale. This is quite true, but it is also equally true of all measurement.

The measurement of any object or entity describes only one attribute of the object measured. This is a universal characteristic of all measurement. When the height of a table is measured, the whole table has not been described but only that attribute, which was measured. Similarly, in the measurement of attitudes, only one characteristic of the attitude is described by a measurement of it.

Further, only those characteristics of an object can be measured which can be described in terms of 'more' or 'less.'

Only those characteristics can be described by measurement which can be thought of as linear magnitudes. In this context, linear magnitudes are

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<sup>21</sup>Torgerson, op. cit., p. 26.

<sup>22</sup>Ibid., p. 26.

weight, length, volume, temperature, amount of education, intelligence, and strength of feeling favorable to an object.<sup>23</sup>

A number of methods of scale measurement could have been used to measure the attitudinal data with which this study is concerned; for example, an interval scale, an ordered metric scale, or a partially ordered scale.<sup>24</sup> The scale that was used is the ordinal scale because the numbers assigned possess the property of rank order.<sup>25</sup>

#### Rank Order Scaling

Numerous scaling techniques, such as the Guttman scalogram, the paired comparison technique, the rating technique, the Likert technique, the method of equal appearing intervals, the method of successive categories, the unfolding technique, the latent structure method, or even a learning curve technique, could have been used to scale the attitudes upon which this study focuses.<sup>26</sup> The

<sup>23</sup>Thurstone, L. L., op. cit., pp. 295-296.

<sup>24</sup>For descriptions of these scales see (Thorgeron, W. S., Theory and Methods of Scaling, pp. 15-21.)

<sup>25</sup>Guilford, op. cit., p. 12.

<sup>26</sup>For a description of these scaling techniques see (Guilford, J. P., Psychometric Methods, pp. 154-301; Festinger, Leon, and Katz, Daniel, Research Methods in the Behavioral Sciences, pp. 496-513.)

scaling technique that was used is the rank order method because:

1. Rank order scaling corresponds more closely than other techniques with C. W. Churchman's decision making theory which asserts that the decision maker's personal hierarchy of values determines the nature of the decision making process and hence the validity of the decision making process for that person.<sup>27</sup> A scaling technique essentially is a theory of behavior.<sup>28</sup> It is this investigator's belief that the decision making part of human behavior is most credibly described in theories presented by Churchman.<sup>29</sup>

2. The response task required of Negro college students in rank ordering six stimuli is easier than the response task that would be required if the Guttman scalogram technique or the paired comparison technique were used.

3. The rank order scaling technique in essence compares each stimulus with every other stimulus without

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<sup>27</sup> Churchman, op. cit., p. 258.

<sup>28</sup> Festinger and Katz, op. cit., p. 524.

<sup>29</sup> Churchman, op. cit., p. 258.

the multitude of judgments necessary in the paired comparison technique.<sup>30</sup>

4. With the rank order method, all the stimuli are present for simultaneous observation by the subject.

5. The common practice of representing rank order data in a frequency distribution matrix lends itself well to the application of the statistical technique of variance analysis, after transformation of the ordinal data to meet the normality requirements of variance analysis.<sup>31</sup>

6. Rank order scaling is a special case of the Law of Comparative Judgment.<sup>32</sup> Consequently, the acceptance by social scientists of the application of Case V of the Law of Comparative Judgment applied to data collected by the method of paired comparisons attaches to the method of rank order.<sup>33</sup>

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<sup>30</sup>Festinger and Katz, op. cit., p. 506.

<sup>31</sup>Torgerson, W. S., op. cit., p. 46.

<sup>32</sup>Festinger and Katz, op. cit., p. 520.

<sup>33</sup>Ibid., p. 520.

7. Rank order scaling is well suited for use with a limited number of variables.<sup>34</sup> This study involves only six stimuli to be ranked at one time.

8. Rank order scaling imposes unidimensionality on the data in that transitivity is forced.<sup>35</sup>

9. The rank order scaling technique rank orders both the stimuli and the judges.<sup>36</sup> This provides an analogy with a two-way analysis of variance.<sup>37</sup>

10. Rank order scaling assures reliability because internal consistency and transitivity are forced upon the data.<sup>38</sup>

11. Rank order scaling meets the requirement that an adequate scale possess validity on the grounds of logical validation. That is, the six retail store

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<sup>34</sup>See (Stouffer, A., "Some Observations on Study Design," The American Journal of Sociology, 55:355-361, January, 1950) for an argument in favor of limiting the number of variables and making them unidimensional.

<sup>35</sup>Festinger and Katz, op. cit., p. 502.

<sup>36</sup>Torgerson, op. cit., p. 48.

<sup>37</sup>Ibid., p. 46.

<sup>38</sup>The investigator subscribes to the definition of reliability given in (Marie Jahoda, Morton Deutsch, and Stuart W. Cook, Research Methods in Social Relations, vol. 1, p. 93): "Reliability means that repeated measurement by the same procedure should give similar results."

operating characteristics which act as stimuli, being what they are, the nature of the attribute to be measured (the power to influence Negro patronage of retail stores) cannot be other than it is stated to be.<sup>39</sup> (Validity of scaling technique is defined as the ability of the technique to measure what it claims to measure.)<sup>40</sup>

12. Rank order scaling is free from the suspicion that higher order scales applied to attitudinal data do not yield units of measurement which are truly equal.<sup>41</sup>

Rank order scaling defines the relative positions of objects or subjects with respect to an attribute, with no suggestion as to how great the distances between positions may be.<sup>42</sup> The essential characteristic of such a scale is rank order. The investigator is limited in the use of a rank order scale to statements of greater, equal,

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<sup>39</sup>Goode, W. J., and Hatt, P. K., Methods in Social Research, p. 238.

<sup>40</sup>Ibid., p. 237.

<sup>41</sup>McNemar, Quinn, "An Opinion-Attitude Methodology," Psychological Bulletin, 43:312, 1946.

<sup>42</sup>Jahoda, Deutsch, and Cook, op. cit., p. 121.

or less.<sup>43</sup> In this study, the possibility of a statement of equality is eliminated in that the subjects are required to rank order the stimuli so as to force a condition of transitivity.

Jahoda, Deutsch, and Cook describe rank order scaling as follows:

An ordinal scale is like an elastic yardstick which is being stretched unevenly; the scale positions as indicated by the numbers on the stick are in a clearly defined order, but the numbers do not provide any definite indication of the distance between any two points on the stick. The distance between 8 and 9 may be equal to, less-than, or greater-than the distance between 1 and 2.<sup>44</sup>

In this study the Negro college students were asked to rank the six operating characteristics of retail stores according to their importance as influences upon the students' store patronage decisions.

#### Transformation of Rank Order Data

Without any kind of transformation of ordinal data the analytical statistical techniques that may be applied to ordinal data are: frequencies, modes, coefficients

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<sup>43</sup>Selltiz, Claire, Jahoda, Marie, Deutsch, Morton, and Cook, S. W., Research Methods in Social Relations, p. 192.

<sup>44</sup>Jahoda, Deutsch, and Cook, op. cit., p. 121.

of contingency, medians, centiles, and rank order coefficients of correlation.<sup>45</sup> A. N. Oppenheim states that Kendall's Tau may be used also. He also asserts that with some loss of information, percentages and chi-square tests may be used.<sup>46</sup> More powerful analytical techniques may sometimes be used in conjunction with various kinds of data transformations.

With a monotonic transformation of ordinal data so as to meet the assumption of normality, the data may be analyzed by means of variance analysis.<sup>47</sup>

The fundamental requirement for a transformation of rank order data is that rank order be preserved. J. P. Guilford's assessment of the effect of transformations upon rank order data is as follows:

With ordinal-scale measurements, any transformation that will still preserve rank order will leave the scale inviolate. We may multiply all numbers by a constant or add a constant to every one and the obtained numbers retain the same rank order as before.

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<sup>45</sup> Guilford, op. cit., p. 13.

<sup>46</sup> Oppenheim, A. N. Questionnaire Design and Attitude Measurement, p. 256.

<sup>47</sup> Banks, Seymour, Experimentation in Marketing, p. 73.

We could even square every number, take its (positive) square root, or find its logarithm. The resulting numbers would still be in correct order.<sup>48</sup>

A transformation of rank order data with a view to using variance analysis is often applied in order to stabilize the variance in the data.<sup>49</sup> Homogeneity of variance is another assumption underlying the use of the analysis of variance.<sup>50</sup> A third assumption underlying the use of variance analysis that must be considered in a transformation of rank order data for purposes of suiting the data for analysis of variance is the additivity of parameters. In this research the analysis of arithmetic means of the ranks was contemplated. According to Guilford the addition of ranks (i. e., numbers assigned to stimuli to represent their position on a continuum representing the attribute to be measured) is legitimate.<sup>51</sup> Guilford states that, "unless the properties of order and additivity are present in the phenomena of nature, the

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<sup>48</sup> Guilford, op. cit., p. 17.

<sup>49</sup> Kendall, M. G., The Advanced Theory of Statistics, vol. 2, p. 207.

<sup>50</sup> Banks, op. cit., p. 72.

<sup>51</sup> Guilford, op. cit., p. 180.

assignment of numbers in a particular domain of observation will do us little good."<sup>52</sup>

Guilford's concept of additivity is cited below:

By 'additivity' is meant the fact that the operation of addition gives results that are internally consistent.

. . . Additivity implies that subtraction, multiplication, and division can be conceived as special cases of addition.<sup>53</sup>

The transformation used in this study involves the conversion of ranks to per cent positions and the use of a normal frequency distribution table to obtain the equivalent normalized score.<sup>54</sup> The formula used to convert ranks to per cent positions is:

<sup>52</sup>Ibid., p. 9.

<sup>53</sup>Ibid., p. 8.

<sup>54</sup>The table of the normal frequency distribution used to find the equivalent normalized scores for per cent positions is found in (Ghiselli, E. E., Theory of Psychological Measurement, pp. 379-391.)

This study involves the use of ranks one through six. When normalized these six ranks have these values:

<u>Rank Order</u>	<u>Equivalent Normalized Score</u>
1	1.38
2	.67
3	.21
4	-0.21
5	-0.67
6	-1.38

per cent position =  $\frac{100 (n - \text{rank}) + 0.5}{n}$ , where n is the number of stimuli ranked.<sup>55</sup>

### Analysis of Variance

Thurstone suggests that a scale of attitudes enables a researcher to describe the "degree of homogeneity of heterogeneity in the attitudes of a designated group on the issue as shown by the spread of dispersion of its frequency distribution."<sup>56</sup>

The statistical technique of analysis of variance is well suited to reveal the extent of homogeneity of heterogeneity in the attitudes to be studied and to reveal the "group mind" of the Negro college students whose attitudes will constitute the raw data which is to be processed, i.e., in the language of classical statistics, analysis of variance is a technique for comparing the variance within categories with the variance between categories in order to determine whether true differences exist between the means of categories or whether the differences are due to chance alone. In analysis, customarily, if the variance within categories is greater than the variance between categories, the differences are

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<sup>55</sup> Ibid., p. 82.

<sup>56</sup> Thurstone, L. L., "Attitudes Can Be Measured," American Journal of Sociology, 33:540, 1928.

attributed to chance alone.<sup>57</sup>

This technique involves a least squares solution of a matrix consisting of numbers representing various observed values of the phenomena under investigation.<sup>58</sup> The column heading of the matrices developed in this study are the six operating characteristics of retail stores and the row headings are rank order positions one through six.

The analysis of variance was developed by R. A. Fisher for use in analyzing small samples obtained at agricultural experiment stations.<sup>59</sup> The technique was selected for this research because it is the most powerful statistical technique available for purposes of hypothesis testing.

The practical value of variance analysis is in testing for significant differences among category or group means. Tests are actually made with the F-test which is designed to test the significance of the difference between two variances. The F-tests are so constructed that variances will be different only if the means are

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<sup>57</sup>Richmond, S. B., Statistical Analysis, 2nd edition, 1964, p. 309.

<sup>58</sup>Edwards, A. L., Techniques of Attitude Scale Construction, p. 28, 1957: Eisenhart, op. cit., p. 4.

<sup>59</sup>Eisenhart, Churchill, "The Assumptions Underlying the Analysis of Variance," Biometrics, 3:4, March, 1947.

heterogeneous.  $F$  is computed by dividing the variance between category means by the variance within categories or groups. An  $F$  distribution exists for each combination of number of degrees of freedom ( $n_1-1, n_2-1$ ).<sup>60</sup>  $F$  tables for use in testing are available in most standard statistical textbooks. The values of  $F$  in an  $F$  distribution are essentially the maximum variance ratios that would be expected to exist on the basis of chance alone, at some selected level of significance. Generally, if the computed  $F$  value is greater than the corresponding critical value in the  $F$  distribution, the differences between or among category or groups means are considered to be too great to be attributable to chance alone. That is, the differences are regarded as statistically significant at the selected level of significance—customarily the .05 level.

Whenever analysis of variance is used to make inferences from the characteristics of a sample to the population from which the sample is drawn, the inferences are valid only if certain assumptions about the population and the sampling procedure by means of which the data are

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<sup>60</sup>Richmond, op. cit., pp. 307-309.

obtained are fulfilled.<sup>61</sup> These assumptions are: (1) the data are observed values of random variables; (2) the parameters are additive; (3) variances within categories are homogeneous and correlations are zero; (4) the observed values of the random variables are from a multivariate normal (Gaussian) distribution;<sup>62</sup> (5) a weaker and somewhat controversial assumption is that of independent events.<sup>63</sup> An assumption related to most sampling procedures is that the sample be a random probability sample; that is, each value in the population must have had an equal probability of being selected as an observed sample value. The consequence of non-additivity of parameters is a loss of information. The consequence of non-homogeneous error variance within categories is said to be a loss of treatment effects. Concerning the consequences of non-normality, W. G. Cochran states that:

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<sup>61</sup>Eisenhart, op. cit., p. 8.

<sup>62</sup>Ibid., p. 14.

<sup>63</sup>McNemar, Quinn, Psychological Statistics, 3rd edition, p. 93.

In addition to its effects on the validity of tests of significance, non-normality is likely to be accompanied by a loss of efficiency in the estimations of treatment effects and a corresponding loss of power in the F and t tests.<sup>64</sup>

The consequence of non-independent events is a spurious reduction in standard errors.<sup>65</sup>

Just how rigid are the constraints imposed by the assumptions for the analysis of variance is an unsettled issue. Some writers feel they are not a serious limitation to the use of variance analysis.

Seymour Banks comments on the matter as follows:

In practice one can never be certain that all the assumptions of the analysis of variance apply in any given case, and sometimes there is good reason to suspect that some, in fact, do not. However, although generalization is hazardous, the experience which has been built up in the field of biology and agricultural experimentation indicates that the analysis of variance and its related tests of significance are fairly robust: The probability levels of the F test are not too much disturbed by failures of the assumptions to be completely satisfied. Where necessary, it is often possible to overcome the problems by transforming the data.<sup>66</sup>

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<sup>64</sup> Cochran, W. G., "Some Consequences When the Assumptions for the Analysis of Variance Are Not Satisfied," Biometrics, 3:25-36, 1947.

<sup>65</sup> McNemar, Quinn, op. cit., p. 93.

<sup>66</sup> Banks, op. cit., p. 77.

In any event the assumptions do not constitute any real constraint upon the application of variance analysis in this research project because random probability sampling is not involved and no inferences will be drawn concerning the Negro population in Tuscaloosa, Alabama or concerning any Negroes other than those from whom the attitudinal data are obtained.

#### Hypothesis Testing

The hypotheses that were tested are those five which were postulated in Chapter I, page 39. The first hypothesis (that college-age Negroes are capable of rank ordering their own attitudes toward the six selected retail stores operating characteristics with respect to the importance of these characteristics as influences upon their patronage decisions vis-a-vis retail food stores, drug stores, clothing stores, and furniture and appliance stores in Tuscaloosa, Alabama) was tested empirically by recording the responses of the subjects on survey questionnaires.<sup>67</sup> Visual observation of the responses was sufficient to

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<sup>67</sup>See Appendix B for an exhibit of the survey questionnaire.

establish whether the Negro students were capable of rank ordering their own attitudes—and simultaneously the operating characteristics. Composite rank orderings were computed by summing the ranks assigned by the students and then rank ordering the sums.<sup>68</sup>

The second hypothesis (that the importance of the six selected retail store operating characteristics considered as a group, as influences upon the store patronage decisions of college-age Negroes with respect to retail food stores, drug stores, clothing stores, and furniture and appliance stores in Tuscaloosa, Alabama is too great to be attributed to chance alone) was tested by variance analysis.

The third hypothesis (that the importance of the six selected retail store operating characteristics, considered individually as influences upon the store patronage decisions of college-age Negroes with respect to retail food stores, drug stores, clothing stores, and furniture and appliance stores in Tuscaloosa, Alabama is too great to be attributed to chance alone) was tested by a multiple

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<sup>68</sup> Guilford, op. cit., p. 180.

range test, utilizing: (1) the means for each stimulus (in this case a store operating characteristic), (2) the standard error of each stimulus mean, and (3) the degrees of freedom on which this standard error is based.<sup>69</sup>

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<sup>69</sup> See (Duncan, D. B., "Multiple Range and Multiple F Tests," Biometrics, 11:5, 1955) in which the multiple range test is described as follows:

First, a table—of special significant studentized ranges for a 5 per cent level test is entered at the row for  $n_2 = 30$  degrees of freedom, and significant studentized ranges are extracted for samples of sizes  $p = 2, 3, 4, 5, 6,$  and  $7.$

. . . The significant studentized ranges are then each multiplied by the standard error . . . to form what may be called shortest significant ranges. The shortest significant ranges,  $R_2, R_3, . . . R_7$  are recorded at the top of a worksheet as shown in Table IV.

As a final preparatory step it is convenient to display the means in ranked order from left to right, spaced so that the distances between them are very roughly proportional to their numerical differences. This may be done on the worksheet immediately under the shortest significant ranges as in Table IV. The lines underscoring the means indicate the results and are added as the test proceeds.

TABLE IV WORKSHEET

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a) Shortest Significant Ranges

p:	(2)	(3)	(4)	(5)	(6)	(7)
Rp:	10.53	11.07	11.37	11.66	11.84	11.99

b) Results

Varieties:	A	F	G	D	C	B	E
Means:	<u>49.6</u>	<u>58.1</u>	<u>61.0</u>	61.5	67.6	71.2	<u>71.3</u>

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The fourth hypothesis (that the differences between Negro senior and freshmen college students, with respect to the influence of the six selected retail store operating characteristics upon their retail clothing store patronage decisions in Tuscaloosa, Alabama are too great to be attributed to chance alone) was tested by variance analysis.

The fifth hypothesis (that with respect to the store patronage aspect of their buying behavior, college-age Negroes behave as rational economic men as described in the economics literature) was tested empirically by observing the incidence of recorded attitudinal responses related to the store operating characteristics of price levels, local radio advertising, and local newspaper advertising.

Note: Any two means not underscored by the same line are significantly different.

Any two means underscored by the same line are not significantly different.

We now set out to test the differences in the following order; the largest minus the smallest, the largest minus the second smallest, up to the largest minus the second largest; then the second largest minus the smallest, the second largest minus the second smallest, and so on, finishing with the second smallest minus the smallest. Thus, in the case of this example the order for testing is: E - A, E - F, E - G, E - D, E - C, E - B; B - A, B - F, B - G, B - D, B - C; C - A, C - F, C - G, C - D; D - A, D - F, D - G; G - A, G - F; and finally F - A.

Scope and Limitations of the Study

The attitudinal data used in the study was collected at various times during the months of October and November, 1967 from Negro college students at Stillman College, Tuscaloosa, Alabama. The data consisted of responses from a convenience sample of 40 Negro senior college students and 40 Negro freshmen college students. The responses were in the form of ordinal numbers representing the attitudes of students toward the relative importance of the operating characteristics as influences upon their patronage decisions.<sup>70</sup> Each student rank ordered his attitudes toward the six operating characteristics four times (one time for each of the four kinds of stores), thereby producing 24 separate responses, or data bits. Under these data collection methods, of course, no inferences were drawn concerning any Negroes other than the 80 students who constituted the convenience sample.

The study methods and results have significant limitations. It is clearly recognized that factors other

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<sup>70</sup>See Appendix B for an exhibit of the survey questionnaire.

than retail price levels, local radio advertising, local newspaper advertising, availability of nationally advertised brands, availability of credit, and employment of Negro personnel are influential in determining store patronage decisions. The location of a retail store, for instance, is known to be a factor of some consequence in influencing the patronage of some consumers.

Store patronage is only one aspect of buying behavior. Buying behavior, like other forms of behavior, is subject to a multiplicity of determinants.

A. N. Oppenheim states that, "behavior is a function of the interaction between P (all the person's inner determinants, such as temperment, attitudes, or character traits) and E (all the environmental factors, as perceived by an individual."<sup>71</sup> He expresses the relationship in the form of an equation, " $B = F(P,E)$ ," where B represents behavior.<sup>72</sup>

The six operating characteristics of retail stores were selected for special investigation because they are

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<sup>71</sup>Oppenheim, A. N., op. cit., p. 153.

<sup>72</sup>Ibid., p. 143.

the ones that are cited in the marketing literature as being the most powerful determinants of store patronage decisions among Negroes. A basic assumption of this investigation is that the environmental factors in the lives of American Negroes interact with the inner determinants of Negro behavior to shape the purchase motivations and hence to influence the ultimate form of Negro expenditure patterns and Negro patronage of retail stores.

The restriction of the study to retail food stores, drug stores, clothing stores, and furniture and appliance stores imposes certain limitations of scope upon the study. These particular kinds of stores are only a few of the great variety of kinds of retail stores. Negro expenditures for products sold in food stores, drug stores, clothing stores, and furniture and appliance stores would represent only a portion of total Negro expenditures for goods and services.

Retail food stores, drug stores, clothing stores, and furniture and appliance stores were selected for special attention because the marketing literature asserts that the bulk of new or additional Negro income is being spent for the spectrum of goods and services offered by

these kinds of retail establishments. It is recognized, however, that Negro responses to marketing strategies implemented by these kinds of stores would not necessarily be the same as responses to strategies implemented by other kinds of retail establishments, although the suspicion is great that the responses would be the same.

The restriction of the study to the Negro market in Tuscaloosa, Alabama imposes certain spatial limitations. Each geographical region of the United States is different with respect to environmental factors and to the orientation of Negroes to the larger Caucasian society which surrounds them. Therefore, it is to be expected that Negro attitudes toward retail marketing strategies in the Tuscaloosa, Alabama market might vary somewhat from Negro attitudes in other markets.

The rapid rate of change in the social, cultural, political, and economic environmental factors which interact with and structure Negro attitudes is recognized as a factor which constrains the applications and implications of conclusions drawn to restricted time intervals. This study is based on observations made at a point in time and does not capture the dynamic aspects of the forces at

work in shaping Negro attitudes. The justification for the approach used rests upon the assumption that attitudes are sufficiently stable through time to allow accurate descriptions.

The avowed nature of this research is exploratory. Data were obtained from a convenience sample of Negro college students. Inferences were not drawn concerning the attitudes and buying behavior of any Negroes other than those Negro college students from whom attitudinal responses were obtained.

An important purpose of the research can be achieved if sufficient information is gained from an analysis of the Negro attitudes to enable the investigator to make recommendations for a more comprehensive study of a larger portion of the Negro market segment—a study based upon random probability sampling. Such a study, of course, could be used to draw inferences concerning the entire population from which the sample is taken.

#### Contributions of the Study

The contributions that have resulted from the investigation are:

1. The literature assertions concerning the importance of six specific retail store operating characteristics as influences upon Negro patronage decisions have been verified.

2. Attitudes of Negroes have been demonstrated to be a useful index of one component (patronage decisions) of Negro buying behavior.

3. The use of rank order scaling in conjunction with the statistical technique of variance analysis has been shown to be a valid methodology for measuring a qualitative variable (attitudes).

## CHAPTER III

### FINDINGS AND ANALYSIS

The rank order data obtained from 40 Negro senior college students and 40 Negro freshmen college students were recorded in three frequency distribution matrices--one for each of the three groupings of college students. In these matrices, which are shown in Appendix E, pages 165 through 175, the rank order data are aggregated by kind of store (food, drug, clothing, and furniture and appliances). The six retail store operating characteristics (retail price levels, local newspaper advertising, local radio advertising, availability of nationally advertised brands, availability of credit, and employment of Negro personnel) constitute the column headings and the four kinds of retail stores constitute the row headings.

These matrices provide an analytical framework in which rank order of the retail store operating characteristics can be summated.<sup>1</sup> The ranks of the operating

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<sup>1</sup>For a description of the process of summing the ranks see (Guilford, J. P., Psychometric Methods, p. 180).

characteristics reveal the importance of these items to Negro seniors and Negro freshmen through their retail store patronage decisions in four kinds of retail stores--food stores, drug stores, clothing stores, and furniture and appliance stores.<sup>2</sup>

Rank Order Findings for Negro Seniors and Negro Freshmen as a Group

The summary rank orders assigned to the operating characteristics by Negro seniors and Negro freshmen as a group are shown in Table 1.

The findings of the rank orderings by Negro seniors and Negro freshmen as a group are:

1. Retail price levels are ranked number 1 for food stores, drug stores, clothing stores, and furniture and appliance stores.

2. Availability of nationally advertised brands is ranked number 2 for drug stores and clothing stores, and number 3 for food stores and furniture and appliance stores.

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<sup>2</sup>In the frequency distribution matrices shown in Appendix E, pages 165 through 175 the figures to the upper right of the totals for each kind of store indicate rank orders of the operating characteristics.

TABLE 1. SUMMARY RANK ORDERINGS OF SIX SELECTED RETAIL STORE OPERATING CHARACTERISTICS OF NEGRO SENIORS AND NEGRO FRESHMEN AS A GROUP, BY KIND OF STORE\*

Kind of Store	Rank Order of Retail Price Levels	Rank Order of Local Newspaper Advertising	Rank Order of Local Radio Advertising	Rank Order of Avail-ability of Nationally Advertised Brands	Rank Order of Avail-ability of Credit	Rank Order of Employ-ment of Negro Personnel
Food	1	5	6	3	4	2
Drug	1	5	6	2	4	3
Clothing	1	5	6	2	3	4
Furniture and Appliance	1	6	5	3	2	4

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

3. Employment of Negro personnel is ranked number 2 for food stores, number 3 for drug stores, and number 4 for clothing stores and furniture and appliance stores.

4. Availability of credit is ranked number 2 for furniture and appliance stores, number 3 for clothing stores, and number 4 for food stores and drug stores.

5. Local newspaper advertising is ranked number 5 for food stores, drug stores, clothing stores, and number 6 for furniture and appliance stores.

6. Local radio advertising is ranked number 6 for food stores, drug stores, clothing stores, and number 5 for furniture and appliance stores.

#### Rank Order Findings for Negro Seniors

The summary rank orders assigned to the operating characteristics by Negro seniors are shown in Table 2.

The findings of the rank orderings by Negro seniors are:

1. Retail price levels are ranked number 1 for all types of stores.

2. Availability of nationally advertised brands is ranked number 2 for food stores, drug stores, furniture

TABLE 2. SUMMARY RANK ORDERINGS OF SIX SELECTED RETAIL STORE OPERATING CHARACTERISTICS OF NEGRO SENIORS, BY KIND OF STORE\*

Kind of Store	Rank Order of Retail Price Levels	Rank Order of Local Newspaper Advertising	Rank Order of Local Radio Advertising	Rank Order of Avail-ability of Nationally Advertis- ed Brands	Rank Order of Avail-ability of Credit	Rank Order of Employ-ment of Negro Personnel
Food	1	4	5	2	6	3
Drug	1	4	5	2	6	3
Clothing	1	4	5	1	2	3
Furniture and Appliance	1	5	6	2	3	4

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967

and appliance stores, and number 1 (along with retail price levels) for clothing stores.

3. Availability of credit is ranked number 2 for clothing stores and number 3 for furniture and appliance stores, while it is ranked number 6 for food stores and drug stores.

4. Employment of Negro personnel is ranked number 3 for food stores, drug stores, clothing stores, and number 4 for furniture and appliance stores.

5. Local radio advertising is ranked number 5 for food stores, drug stores, clothing stores, and number 6 for furniture and appliance stores.

#### Rank Order Findings for Negro Freshmen

The summary rank orders assigned to the operating characteristics by Negro freshmen are shown in Table 3.

The findings of the rank orderings by Negro freshmen are:

1. Retail price levels are ranked number 1 for food stores and drug stores and number 2 for clothing stores and furniture and appliance stores.

2. Availability of credit is ranked number 1 for

TABLE 3. SUMMARY RANK ORDERINGS OF SIX SELECTED RETAIL STORE OPERATING CHARACTERISTICS OF NEGRO FRESHMEN, BY KIND OF STORE\*

Kind of Store	Rank Order of Retail Price Levels	Rank Order of Local Newspaper Advertising	Rank Order of Local Radio Advertising	Rank Order of Availability of Nationally Advertised Brands	Rank Order of Ability of Credit	Rank Order of Employment of Negro Personnel
Food	1	5	6	3	4	2
Drug	1	5	6	2	4	3
Clothing	2	5	6	3	1	4
Furniture and Appliance	2	5	6	3	1	4

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

clothing stores and furniture and appliance stores.

3. Availability of nationally advertised brands is ranked number 3 for food stores, clothing stores, furniture and appliance stores, and number 2 for drug stores.

4. Local radio advertising is ranked number 6 for food stores, drug stores, clothing stores, and furniture and appliance stores.

5. Local newspaper advertising is ranked number 5 for food stores, drug stores, clothing stores, and furniture and appliance stores.

Rank Order Findings for Negro  
Seniors and Negro Freshmen  
Combined, Negro Seniors,  
and Negro Freshmen

The summary rank orders assigned to the operating characteristics by Negro seniors and Negro freshmen combined, Negro seniors, and Negro freshmen are shown in Table 4.

Significance of the Six Selected Retail  
Store Operating Characteristics

In order to meet the normality assumption required by variance analysis, the rank order data was transformed

TABLE 4. SUMMARY RANK ORDERINGS OF THE SIX SELECTED RETAIL STORE OPERATING CHARACTERISTICS OF NEGRO SENIORS AND NEGRO FRESHMEN AS A GROUP, NEGRO SENIORS, AND NEGRO FRESHMEN, BY KIND OF STORE\*

Student Group	Rank Order of Retail Price Levels	Rank Order of Local Newspaper Advertising	Rank Order of Local Radio Advertising	Rank Order of Availability of Nationally Advertised Brands	Rank Order of Availability of Credit	Rank Order of Employment of Negro Personnel
FOOD STORES						
Negro Seniors and Negro Freshmen	1	5	6	3	4	2
Negro Seniors	1	4	5	2	6	3
Negro Freshmen	1	5	6	3	4	2
DRUG STORES						
Negro Seniors and Negro Freshmen	1	5	6	2	4	3
Negro Seniors	1	4	5	2	6	3
Negro Freshmen	1	5	6	2	4	3

CLOTHING STORES

Negro Seniors and Negro Freshmen	1	5	6	2	3	4
Negro Seniors	1	4	5	1	2	3
Negro Fresh- men	2	5	6	3	1	4

FURNITURE AND APPLIANCE STORES

Negro Seniors and Negro Freshmen	1	6	5	3	2	4
Negro Seniors	1	5	6	2	3	4
Negro Fresh- men	2	5	6	3	1	4

\*Source of Data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

into normalized standard scores.<sup>3</sup> Initially all the data for Negro seniors and Negro freshmen combined was aggregated by kinds of stores and analyzed in a single matrix, permitting a test for significant differences among the operating characteristics as well as among the kinds of stores. In the sense that both senior and freshmen students were regarded as constituting a single sample group this was an intragroup analysis. The finding of no significant differences among the four kinds of stores suggested that an additional analysis to test for significant differences between Negro freshmen and Negro seniors could be performed using data for only one kind of store. (See Table IV, page 166, which depicts the similarity in rankings for each kind of store.) Accordingly, a second analysis was made utilizing data for clothing stores only. In the sense that the seniors were regarded as one group and the freshmen were regarded as another group this was an intergroup analysis.<sup>4</sup> Clothing store data were

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<sup>3</sup>For details of the transformation of the ordinal numbers 1 through 6 see Appendix C, page 159.

<sup>4</sup>Four additional analyses of variance were made besides the two described in this chapter and shown in detail in the Appendices. These were:(1) an analysis of

selected because it is believed that the Negro college students from whom the attitudinal data were obtained would have had more actual experience in making clothing store patronage decisions than they would have had in making patronage decisions among food stores, drug stores, and furniture and appliance stores.

A test for individual significance of each of the six operating characteristics was made, utilizing the

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data for Negro seniors only, aggregated by kinds of stores; (2) an analysis of data for Negro seniors and Negro freshmen combined, aggregated by Tuscaloosa residents and non-Tuscaloosa residents, with respect to clothing stores only; (3) an analysis of data for Negro seniors and Negro freshmen, aggregated by males and females, with respect to clothing stores only; (4) an analysis of data for Negro seniors and Negro freshmen, aggregated by married students and single students, with respect to clothing stores only.

All additional analyses indicated significant differences among the retail store operating characteristics. No significant differences were revealed, however, between: (1) kinds of stores, (2) Tuscaloosa residents and non-Tuscaloosa residents, (3) males and females, (4) married students and single students. It should be noted, however, that with the exception of the first additional analysis the number of responses in each category pair used for aggregation were not balanced and the total number of responses had to be arbitrarily reduced in each of the other additional analyses in order to achieve the balance required in the conventional two way layout for analysis of variance. It is not known what the results would have been for these latter three analyses had a larger number of responses been available for analysis.

multiple range test. (See Chapter III, pages 81 through 94 for a description of this test.) The multiple range test was applied to the combined data for Negro seniors and Negro freshmen and was essentially an intragroup test.

Analysis of Variance of Data  
for Negro Seniors and Negro  
Freshmen as a Group

The data were analyzed in a frequency distribution matrix in which the six selected retail store operating characteristics are the column headings and the four kinds of retail stores are the row headings.

At the .05 level of significance the differences between operating characteristics were found to be real, i.e., their influence as a group upon Negro patronage decisions is too great to be attributed to chance alone.

At the .05 level of significance the differences between retail stores were found not to be real, i.e., their influence as a group upon Negro patronage decisions can be attributed to chance alone.

For the details of the variance analysis and the F tests for significances, see Appendix F, pages 176 through 194.

Analysis of Variance of Data  
for Negro Seniors and Negro  
Freshmen, with Respect to  
Clothing Stores Only

The data were analyzed using a frequency distribution matrix similar to that used in the first analysis. In this case the row headings were Negro seniors and Negro freshmen. The purpose of this analysis was to investigate possible significant differences between Negro seniors and Negro freshmen with respect to the importance of the retail store operating characteristics in influencing patronage decisions vis-a-vis clothing stores only.

At the .05 level of significance the F test indicated significant differences among the operating characteristics. The F test indicated that no significant differences exist between Negro seniors and Negro freshmen.

For the details of the variance analysis and the F tests for significance see Appendix G, pages 195 through 207.

Multiple Range Test Applied  
to Data for Negro Seniors  
and Negro Freshmen  
as a Group

The multiple range test revealed that all possible combinations of differences between two operating characteristic means were significant except the following:

1. The difference between the means for retail price levels and for availability of nationally advertised brands.
2. The difference between the means for availability of nationally advertised brands and for employment of Negro personnel.
3. The difference between the means for employment of Negro personnel and for availability of credit.
4. The difference between the means for local newspaper advertising and for local radio advertising.

Altogether there are  $\frac{n(n-1)}{2}$ , or 15, possible combinations of operating characteristic means. Eleven of the 15, or 73.06 per cent were found to be significant.<sup>5</sup>

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<sup>5</sup>The multiple range test was developed by David B. Duncan to test for differences among individual means when the means as a group have been found to be significant according to the F test. (Duncan, D. B., "Multiple Range and Multiple F Tests," Biometrics, 11:1-42, 1955.)

The test relates to and utilizes some information from the summary of computations for analysis of variance of normalized rank order data for Negro seniors and Negro freshmen, aggregated by store type, shown in Appendix F.

## CHAPTER IV

### CONCLUSIONS AND RECOMMENDATIONS

Study of the influence of retail store operating characteristics on patronage decisions of three population groupings of college-age Negroes generally confirms the assertions of marketing and economics literature concerning the influence of these characteristics upon Negro patronage decisions.

Conclusions and generalizations stemming from the hypotheses include the following:

1. All three student groups are capable of discriminating among and ranking the patronage determinants. The first hypothesis is a valid generalization.

2. Although all the determinants are considered important by the Negro population groupings investigated, there is significant evidence that indicates that the better educated Negroes (in this case Negro college students) are most influenced by retail price levels.

3. The Negro college student more often than not behaves as an economic man--is rational, cost conscious,

and attempts to maximize. The second hypothesis cannot be tested definitively. Some evidence indicates store patronage behavior conforming to the concept of an economic man. Other evidence does not indicate such behavior.

4. The multiple range test results are interpreted to mean that each of the determinants exerts a significant influence (when compared to a majority of each of the other determinants) upon Negro patronage decisions. The four pairs of operating characteristic means between which the test indicated no significant differences are interpreted to mean that the difference between the pair of operating characteristics in each instance is so slight as to be negligible when the responses are aggregated. More specifically these four differences are interpreted in this way:

a. Retail price levels and the availability of nationally advertised brands exert influences upon Negro patronage decisions that are almost, but not completely, equal.

b. Availability of nationally advertised brands and employment of Negro personnel exert influences upon Negro patronage decisions that are almost, but not completely, equal.

c. Employment of Negro personnel and the availability of credit exert influences upon Negro patronage decisions that are almost, but not completely, equal.

d. Local newspaper advertising and local radio advertising exert influences upon Negro patronage decisions that are almost, but not completely, equal.

The third hypothesis is a valid generalization.

4. Apparently the differences in ages, educational levels, and periods of time exposed to a college atmosphere between Negro seniors and Negro freshmen are not important enough to be reflected in differences in their modes of perception of store operating characteristics and their attitudinal responses to these characteristics; i.e., for practical purposes their patronage decision making processes are the same with respect to the four kinds of stores studied. The fourth hypothesis is not a valid generalization.

Other specific conclusions include the following:

1. Negro college students make patronage decisions with respect to different kinds of stores on a systematic and consistent basis, as evidenced by the absence of significant differences among their attitudes vis-a-vis

the four kinds of stores studied.

2. For all kinds of stores studied, except clothing stores, the importance of three operating characteristics (retail price levels, availability of nationally advertised brands, and employment of Negro personnel) in influencing patronage decisions among the Negroes studied is clearly much greater than the importance of the other three operating characteristics--as evidenced by a high percentage of the Negro students' ranking these three operating characteristics in rank order positions 1 or 2 or 3.

3. The availability of credit at clothing stores is still effective in attracting patronage among both Negro seniors and Negro freshmen, but is a less important attraction at the other three kinds of stores studied. Apparently the Negro tradition of credit buying still exists with respect to clothing stores, although its influence apparently has weakened with respect to food stores and furniture and appliance stores. For example, the small independently owned grocery store in the Negro community may not be as important as a supplier of food to Negroes as it once was. In other words, Negro demand

for credit generally may be lower than the literature indicates.

4. Negroes use credit out of necessity when buying high priced furniture and appliances--just as many Caucasians do.

5. Among food stores, drug stores, and furniture and appliance stores retail price levels and the availability of nationally advertised brands are clearly stronger patronage attractions to the Negro students studied than are the other four operating characteristics. This suggests a trend among Negroes toward buying behavior similar to that of Caucasians.

6. The employment of Negro personnel is a greater patronage attraction to the Negroes studied than local newspaper advertising or local radio advertising, for all four kinds of stores studied. Employment of Negro personnel is even more important than credit availability for all kinds of stores studied except clothing stores. This suggests the willingness of Negroes to use their buying power to achieve employment gains. It suggests further that Negroes may be far less responsive to newspaper and radio advertising than many retailers, advertising specialists, and journalists believe.

Recommendations for Retail Policy-Making  
and Research

The findings and conclusions of this study are regarded as justifying certain recommendations for retail policy-making and research. These are:

1. Retail price levels being the most powerful determinant of Negro patronage decisions, price strategy formulation should take precedence over other strategies whenever competition on the basis of price is feasible.

2. The development and implementation of product service strategies which embody substantial assortments of nationally advertised brands is strongly recommended to retailers who are interested in selling to the Negro market.

3. Retail organization strategy should provide for the employment of Negroes in responsible and conspicuous positions--especially in retail food stores.

4. The retail service strategy of retail food stores and drug stores should continue to minimize the role of credit as an attraction of Negro patronage.

5. Local newspaper advertising and local radio advertising should be deemphasized as components of the

information strategy of food stores, drug stores, clothing stores, and furniture and appliance stores.

6. Retail information strategy should emphasize sales promotion and personal selling as vehicles for communicating with the Negro market.

7. The likelihood of permanence of the Negro sub-culture as a separate entity should be investigated in depth.

8. The variations between Negro perceptions of their distinctive differences and retailers' perceptions of Negro differences should be further explored.

9. The question as to whether Negro differences bear a cause or an effect relationship to the development and implementation of retail strategies designed to attract Negro patronage should be further investigated.

10. The findings of this study suggest the possible fruitfulness of the extension of the investigation of the determinants of Negro patronage decisions to broader segments of the Negro sub-culture. It seems reasonable to assume that similar findings would be obtained from data from a random probability sample of Negro households taken from a well-defined Negro population frame. Inferences could be made, of course, under such circumstances from the sample to the population.

## BIBLIOGRAPHY

## BIBLIOGRAPHY

### Books

- Banks, Seymour, Experimentation in Marketing, McGraw-Hill, New York, 1965, 275 pp.
- Beckman, Theodore N., and Davidson, William R., Marketing, The Ronald Press Co., New York, 1967, 8th ed., 872 pp.
- Bergel, Egon E., Social Stratification, McGraw-Hill, Inc., New York, 1962, 458 pp.
- Brink, William, and Harris, Louis, The Negro Revolution in America, Simon and Schuster, New York, 1964, 249 pp.
- Broom, Leonard, and Glenn, Norval D., Transformation of the Negro American, Harper & Row, New York, 1965, 209 pp.
- Churchman, C. W., Prediction and Optimal Decision, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1961, 394 pp.
- Coombs, Clyde, A Theory of Data, John Wiley & Sons, Inc., New York, 1964, 585 pp.
- Croxton, Frederick E., and Cowden, Dudley J., Applied General Statistics, Prentice Hall, Inc., 1955, 2nd ed., 843 pp.
- Edwards, Allen L., Techniques of Attitude Scale Construction, Appleton Century-Crofts, Inc., New York, 1957.
- Edwards, Paul K., The Southern Urban Negro as a Consumer, Prentice Hall, Inc., New York, 1932, 323 pp.

- Festinger, Leon, and Katz, Daniel, Research Methods in the Behavioral Sciences, Holt, Rinehart & Winston, New York, 1953.
- Franklin, John H., From Slavery to Freedom, Alfred A. Knopf, New York, 1956, 2nd ed., 639 pp.
- Frazier, Edward F., The Negro in the United States, Macmillan Co., New York, 1949, 767 pp.
- Ghiselli, Edwin E., Theory of Psychological Measurement, McGraw-Hill, New York, 1964, 404 pp.
- Ginzberg, Eli, editor, The Negro Challenge to the Business Community, McGraw-Hill Book Co., New York, 1964.
- Goode, N. J., and Hatt, Paul K., Methods in Social Research, McGraw Hill, New York, 1952.
- Guilford, J. P. Psychometric Methods, McGraw Hill, New York, 1954, 597 pp.
- Jahoda, Marie; Deutsch, Martin; and Cook, Stuart W., Research Methods in Social Relations, vol. 1, Dryden Press, New York, 1951, 421 pp.
- Johnson, Joseph T., The Potential Negro Market, Pageant Press, New York, 1952.
- Johnson Publishing Co., Inc., How Do You Sell to Urban Negro Consumers? Johnson Publishing Co., Inc., Chicago, 1967, 17 pp.
- Kendall, M. G., The Advanced Theory of Statistics, vol. 2, Hafner Publishing Co., New York, 1951.
- Kotler, Philip, Marketing Management, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1967.
- McNemar, Quinn, Psychological Statistics, John Wiley & Sons, Inc., New York, 1962, 3d ed., 451 pp.

- Miller, Abie, The Negro and the Great Society, Vantage Press, New York, 1965, 209 pp.
- Myrdal, Gunnar, An American Dilemma, Harper and Bros., New York, 1944, 148 pp.
- Oppenheim, A. N., Questionnaire Design and Attitude Measurement, Basic Books, Inc., New York, 1966, 298 pp.
- Pearson, Karl, The Grammar of Science, Meridian Books, Inc., New York, 1960, 3d ed., 394 pp.
- Pettigrew, Thomas F., A Profile of the Negro American, D. Van Nostrand Co., Inc., Princeton, New Jersey, 1964, 250 pp.
- Remmers, H. H., Introduction to Opinion and Attitude Measurement, Harper and Bros., New York, 1954.
- Richmond, Samuel B., Statistical Analysis, The Ronald Press Co., New York, 1964, 624 pp.
- Rudwick, Elliott M., W. E. B. DuBois: A Study in Minority Group Leadership, University of Pennsylvania Press, Philadelphia, 1960, 382 pp.
- Seltiz, Claire, and others, Research Methods in Social Relations, Henry Holt and Co., Inc., New York, 1959, rev. ed., 622 pp.
- Thurstone, Louis L., The Measurement of Values, University of Chicago Press, Chicago, 1959, 322 pp.
- Thurstone, Louis L., and Chave, E. J., The Measurement of Attitudes, University of Chicago Press, Chicago, 1929.
- Torgerson, Warren S., Theory and Methods of Scaling, John Wiley and Sons, Inc., New York, 1958, 428 pp.
- Warner, W. L., Social Class in America, Science Research Associates, Inc., 1949.

## Articles

- Alexis, Marcus, "Some Negro-White Differences in Consumption," American Journal of Economics and Sociology, 21:11-28, January, 1962.
- Bain, Read, "An Attitude on Attitude Research," The American Journal of Sociology, 33:940-957, May, 1928.
- Black, L. E., "Negro Market; Growing, Changing, Challenging," Sales Management, 91:42-47, October 4, 1963.
- Brimmer, Andrew F., "The Negro in the National Economy," in The American Negro Reference Book, pp. 251-336, edited by John P. Davis, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1966.
- Bullock, Henry A., "Consumer Motivations in Black and White-I," Harvard Business Review, pp. 89-104, May-June, 1961.
- Bullock, Henry A., "Consumer Motivations in Black and White-II," Harvard Business Review, pp. 110-124, July-August, 1961.
- "Burgeoning Middle Class Boosting Negro Buying Power," Sales Management, 93:77-78, November 20, 1964.
- Cochran, W. G., "Some Consequences When the Assumptions for the Analysis of Variance Are Not Satisfied," Biometrics, 3:22-38, 1947.
- Davis, Allison, "Caste, Economy, and Violence," in Logan Wilson and William L. Kolb, Sociological Analysis, pp. 479-488, edited by Robert K. Merton, Harcourt Brace & Co., New York, 1949.
- "Drive To Set Negroes up in Business," editorial, U. S. News and World Report, p. 82, August, 1964.

- Droba, D. D., "The Nature of Attitude," Journal of Social Psychology, 4:444-461, 1933.
- Duncan, David B., "Multiple Range and Multiple F Tests," Biometrics, 11:1-42, 1955.
- Eisenhart, Churchill, "The Assumptions Underlying the Analysis of Variance," Biometrics, 3:3-20, March, 1947.
- Franklin, John H., "A Brief History of the Negro in the United States," in The American Negro Reference Book, pp. 1-95, edited by John P. Davis, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1966.
- "Gains for U. S. Negroes Spell New Radio Values," editorial, Sponsor, pp. 37-43, July 26, 1965.
- Haer, John L., "Predictive Utility of Five Indices of Social Stratification," American Sociological Review, 22:541-546, 1957.
- Herzog, Elizabeth, "Is There a Breakdown of the Negro Family," Social Work, 2:3-10, January, 1966.
- Holte, Clarence L., "The Negro Market: To Profit From It, Recognize It and Service Its Needs," Printers Ink, 264:29-32, April 4, 1958.
- Kessler, Matthew A., "Economic Status of Non-White Workers 1955-1962," Monthly Labor Review, 86:780-788, July, 1963.
- La Vine, Robert S., "The Negro Market: A \$16 Billion Sales Challenge," Duns Review, 70:54-55, 169-173, October, 1957.
- Lincoln, C. E., "A Look Beyond the Matriarchy," Ebony, 21:111-117, August, 1966.
- "Market Basics," editorial, Sponsor, 15:16-21, October 9, 1961.

- "Marketing to the Negro Consumer," editorial, Sales Management, 84:36-44, March 4, 1960, pp. 36-44.
- Martz, Larry, "Negro Market: Business Courts Its 19 Million Customers," Newsweek 58:67-69, July 31, 1961.
- McNemar, Quinn, "An Opinion-Attitude Methodology," Psychological Bulletin, 43:289-374, 1946.
- Murphy, Patrick J., "The Promotion of Consumer Durable Goods in the Negro Market in Milwaukee," Marquette Business Review, 10:99-118, Fall, 1966.
- "The Negro Market," editorial, Duns Review, 82:61-62, November, 1963.
- "The Negro Market," editorial, Printers Ink, pp. 337-341, August 23, 1957.
- "Negro Market," editorial, Time, 79:80-81, February 9, 1962.
- "Negro Marketing Basics," editorial, Sponsor, 14:17-52, September 26, 1960.
- "Negro's Force in the Marketplace," editorial, Business Week, pp. 76-84, May 26, 1962.
- "New Frontiers in Insurance," editorial, Ebony, 22:123-130, February, 1967.
- "New Marketing Profile of U. S. Negro Emerges," editorial, Sponsor, 19:38-43, July 26, 1965.
- Parsons, Talcott, "Social Classes and Class Conflict in the Light of Recent Sociological Theory," American Economic Review, Supplement, 39:16-26, 1949.
- Pfautz, Harold W., "The New, "New Negro:" Emerging American," Phylon, pp. 360-368, Winter, 1963.
- "Philadelphia's Black List," The Economist, 208:437, August 3, 1963.

- Schwartz, Jack, "Men's Clothing and the Negro," Phylon, 24:224-231, Fall, 1963.
- "Selling to the Negro," editorial, Newsweek, 60:43, November 5, 1962.
- Shaffer, Helen B., "Negro Revolution: Next Steps," Editorial. Research Reports, 11:25-542, July 21, 1965.
- Shaffer, Helen B., "Negroes in the North," Editorial Research Reports, Vol. II, No. 16, October, 1965.
- Stauffer, Samuel A., "Some Observations on Study Design," The American Journal of Sociology, 55:355-361, January, 1950.
- Strauss, Anselem, "The Concept of Attitude in Social Psychology," Journal of Psychology, 19:329-339, 1945.
- Thurstone, Louis L., "Attitudes Can Be Measured," American Journal of Sociology, 33:529-554, 1928

#### Other Sources

- Encyclopedia of the Social Sciences, vol 4, The McMillan Co., New York, 1935, pp. 621-645.
- U. S. Congress, Congressional Quarterly Fact Sheet on Urban Negro Population, The Congress, Washington, D. C., August 22, 1966.

## APPENDIX

Appendix A

The Negro Market

## THE NEGRO MARKET

Negro Americans are identified as a distinctive group. The distinguishing differences of this group include the following: (1) physiological, (2) social, (3) cultural, (4) political, (5) health, (6) economic and demographic, (7) buying power, and (8) buying behavior (including purchase motivation, expenditure patterns, brand preferences, services required, and store patronage).

### Physiological Differences

The most distinguishing physiological characteristics of Negroes are skin pigmentation and body hair structure. Their skin pigmentation renders them easy to identify and their cross sectional hair structure, which is elliptical, causes the hair to be extremely curly.

### Social Differences

The social isolation of the Negro American as an individual in a minority group in the United States has been maintained through de facto housing segregation;

political disfranchisement; discrimination in education, employment, use of public facilities, and the receipt of government services. According to Gunnar Myrdal:

Equality in 'social relations' is commonly denied American Negroes. An elaborate system of measures is applied to separate the two groups and to prevent the building up of intimate relations on the plane of equality. Personal identification of members of the two groups is thereby hindered. Some of these segregation measures have a spatial or institutional character, others are embodied in an etiquette of racial behavior.<sup>1</sup>

Another view of social isolation of Negroes is expressed by the following quotation from John Hope Franklin:

In a nation dedicated to the idea of the essential equality of mankind and in which there is a general commitment to the fusion of races and cultures, the existence of a separate Negro community constitutes one of the truly remarkable social anomalies of the twentieth century.<sup>2</sup>

Most of the laws, taboos, and other means of social segregation are based upon the societal dictate that Negro men should not have sexual relations with Caucasian women in the United States. The hierarchy of restrictions or

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<sup>1</sup>Myrdal, Gunnar, An American Dilemma, p. 573.

<sup>2</sup>Franklin, J. H. "A Brief History of the Negro in the United States," in The American Negro Reference Book, p. 72.

inhibitions placed in the Negro's path include, according to Myrdal:

..., (1) the ban on intermarriage and other sex relations involving white women and colored men takes precedence before everything else. It is the end for which other restrictions are arranged as the means. Thereafter follows: (2) all sorts of taboos and etequettes in personal contact; (3) segregation in schools and churches; segregation in hotels, restaurants, and theaters, and other places where people meet socially; (4) segregation in public conveyances; discrimination in public services; and finally, inequality in (5) politics, (6) justice, and (7) breadwinning and relief.<sup>3</sup>

Of course, the point can be argued that sexual relationships are only incidental to the desire of the Caucasian majority to maintain status quo in economic institutions and structures which tend to exploit the Negro, maintain the Negro's status quo, and permit economic rent derived from the Negro human being for the benefit of the Caucasian majority. Not all Caucasians benefit from the economic rent derived from the Negro; probably only a select few do so. Among lower middle-class and poor Caucasians fear of competition for jobs, security, social status, and income creates a strained relationship between the Caucasians and Negroes in the society.

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<sup>3</sup>Myrdal, op. cit., p. 588.

### Cultural Differences

As a result of the planned and unplanned social isolation of the Negro American by the Caucasian American, the Negro American sub-culture has been created over the last four centuries. Cultural assimilation of the Negro American by the Caucasian majority has been minimal, even though the Negro was freed in the 1860's. Barriers to assimilation have been more conspicuous in the case of the Negro American than in the cases of other minority groups in the Caucasian population of the United States.

The cultural differences between the Caucasian majority and the Negro minority in the United States are reflected by the root relationships of their cultures.<sup>4</sup> For example, matriarchal control of Negro family life is still common in that sub-culture. In 1964, 23 per cent of Negro families were headed by a woman, compared to only 9 per cent of Caucasian families.<sup>5</sup> Unquestionably, the

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<sup>4</sup>Culture is defined anthropologically by Bronislaw Malinowski as, "the body of commodities and instruments as well as of customs and bodily or mental habits which work directly or indirectly for the satisfaction of human needs." (Encyclopaedia of the Social Sciences, vol. 4, p. 625.)

<sup>5</sup>Herzog, Elizabeth, "Is There a Breakdown of the Negro Family," Social Work, 2:4, 1966.

reproductive capacity of the Negro woman during slave-holding days and the character of present day social welfare legislation have contributed to the breakdown of the family and the disorganization of family relationships. The rate of illegitimacy among Negroes is much higher than among Caucasians; a high percentage of Negro mothers are gainfully employed outside the home; and crime rates among Negro adult males are much higher than among Caucasian adult males. Matriarchal family control seems to contribute to the breakdown of family structure and the further disorganization of family relationships. Despite these problems, the Negro has made his home a focal point of social life for the family, friends, and relatives.<sup>6</sup>

There is compelling evidence that the socio-economic status of Negro Americans contributes significantly more to the breakdown of family structure and function than do the motivations, beliefs, customs, or mores of Negroes themselves.

Other institutions which reflect a distinctive Negro sub-culture are found in the churches and the educational institutions which serve the Negro community.

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<sup>6</sup>Johnson, J. T., The Potential Negro Market, p. 97.

The Negro church, especially in the South, has served as a rationalizing and facilitating device for the adjustment of the Negro to a subordinate status in the South subsequent to emancipation.<sup>7</sup> The Negro church was the first institution the Negroes could control and really call their own. In modern times the church has been a symbol of freedom from Caucasian domination and the appeal of the church has been exceptionally strong as a coalescing device for resistance to Caucasian domination. However, the importance of the Negro church (still primarily protestant in philosophy) as an influence upon family life as well as a reenforcer of the Negro folk culture (intensely influenced by fundamental Protestantism) has probably declined in total, due to the migrations of Negroes away from rural areas to urban centers.

The educational institutions which have served the Negro community have consistently been judged inferior to counterpart institutions serving the Caucasian majority. Since education is a means and also an institutional barrier to economic opportunity and higher incomes, education, especially the segregated type, has helped to maintain the

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<sup>7</sup>Frazier, E. F., The Negro in the United States, p. 366.

social subordination of the Negro American.<sup>8</sup> The effects of desegregation of educational facilities are largely unknown, but there are significant generation gaps in the level of education among Negroes as compared to the Caucasian population. For example, in 1963 Negro males 25 years and older had a median of 8 years of schooling as compared to 11 years of schooling among Caucasian males in the same age group. Negro females had a median of 8 1/2 years schooling as compared to 11 years schooling among Caucasian females.<sup>9</sup>

An integral component of the culture of any group of people is the work that the men and women do to gain a livelihood. The occupational levels of Negroes are drastically different from those of the white population. L. E. Black states that:

About 58 per cent of Negroes work in occupations requiring little or no formal training as opposed to only 22 per cent of whites. Only 15.4 per cent of Negroes are found in professional and white collar employment, contrasted to 46.4 per cent of white workers.<sup>10</sup>

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<sup>8</sup>Ibid., p. 363.

<sup>9</sup>Black, L. E., "Negro Market: Growing, Changing, Challenging," Sales Management, 91:43, October 4, 1963

<sup>10</sup>Ibid., p. 43.

According to Gunnar Myrdal, "the leading Negro profession is school teaching, while preaching ranks second."<sup>11</sup> E. F. Frazier states that "the majority of the Negro males in the small urban areas are employed as common laborers while most of the employed women are engaged in domestic service."<sup>12</sup> Negro Americans are distinctive not only with respect to the relatively low levels of their occupations but also with respect to the number of gainfully employed per family unit. The Negroes tend to have a higher number employed in each family unit than do whites.<sup>13</sup>

Negro occupations are characterized by frequent unemployment, especially within agricultural and other types of seasonal occupations. The spectre of unemployment hovers more heavily and more frequently over Negro wage earners than it does over white employees.

A rather striking difference among Negroes with respect to occupational levels is the low percentage of

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<sup>11</sup>Myrdal, op. cit., p. 319.

<sup>12</sup>Frazier, op. cit., p. 234.

<sup>13</sup>Kessler, M. A., "Economic Status of Non-White Workers, 1955-1962," Monthly Labor Review, 86:780-788, July, 1963.

American business enterprises that are owned by Negroes. Although Negroes comprised 11 per cent of the United States population in 1964, they owned only 1.2 per cent of the business enterprises.<sup>14</sup> The lack of retail business development among Negroes is often attributed to the spatial patterns of housing segregation in many cities which produce clusters of small Negro communities. Few of these communities can support a prosperous Negro store.<sup>15</sup> Other reasons why Negroes as a group have been unsuccessful in developing business enterprises are: inadequate financing, the refusal of white real estate agents to sell business property to Negroes, and the lack of loyalty among Negroes to Negro business enterprises.<sup>16</sup> The Negro business enterprises that do exist can be classified for the most part into four types of establishment categories: recreational and amusement, real estate, retail trade, and personal service.<sup>17</sup>

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<sup>14</sup>"Drive to Set Negroes up in Business," editorial, U.S. News & World Report, p. 82, August, 1964.

<sup>15</sup>Myrdal, op. cit., p. 308.

<sup>16</sup>Frazier, op. cit., p. 40.

<sup>17</sup>Ibid., p. 396.

Negro owned and operated insurance companies represent the most outstanding business accomplishment of Negroes.<sup>18</sup> All Negro owned insurance companies, however, have less insurance in force on Negroes than does any one of several of the major insurance companies in the United States.

Negroes are frequently criticized for not attaining a degree of success in the field of business enterprise comparable to their achievements in the arts, sports, entertainment, and professions. The threshold of business development by Negro Americans simply has never been achieved by a significant portion of the Negro population. Threshold in this situation refers not only to capital needs but also to entrepreneurial motivations and skills. Barriers to the threshold point are considerably greater for the Negro American than for other minority groups in the United States.

The Negro sub-culture in the United States is characterized by a system of social stratification that is entirely separate from the social stratification system of the Caucasian majority. Nevertheless, its differences

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<sup>18</sup>Ibid., p. 387.

can be analyzed in terms of conventional sociological systems for stratifying societies. Relationships of superiority and inferiority were inherent in the caste system of slavery days. Superiority attached to the Caucasians who owned the land and the slaves. What little work the landowners did was of a managerial nature. Inferiority attached to the Negro slaves who performed the agricultural labor and the domestic labor in the homes of the Caucasian owners. Thus, the real basis for the relationships of superiority and inferiority was a combination of slavery, color caste, and a division of labor.

Social stratification is ultimately based on a division of labor. A man's social class is determined primarily by his occupation. This phenomenon is not unique within the Southern part of the United States. According to Talcott Parsons, "the most prominent social stratification structure in Western society is the 'work' that people do."<sup>19</sup> Sociologists have developed numerous methods of classifying people according to

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<sup>19</sup>Parsons, Talcott, "Social Classes and Class Conflict in the Light of Recent Sociological Theory," American Economic Review, Supplement, 39:19, 1949.

social class. W. L. Warner's ISC (Index of Status Characteristics) is the most commonly used. Four other indices (education, occupation, Centers' question, and Open-End question) have been used extensively, but Warner's ISC is still preferred, especially for predictive purposes.<sup>20</sup>

Warner found that in the South Caucasians were classified according to family background, time on the land, wealth, occupation, education, income, and participation in civic affairs.<sup>21</sup>

It is essential to recognize that the color caste system has survived slavery in the South. Negroes, however, also are stratified according to social class within the Negro community as are Caucasians within Caucasian communities.<sup>22</sup> This initial dual stratification, which

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<sup>20</sup>With W. L. Warner's ISC classification criteria are: type of occupation, dwelling area, house type, and source of income. Richard Centers classified people on the basis of their responses to the question, "If you were asked to use one of these names for your social class standing, which would you say you belong to: the middle class, lower class, working class, or upper class?" Open-End question involves first asking respondents whether they believe social classes exist in the United States and then, if the response is affirmative, asking the question, "Which social class are you in?" (Haer, J. L., "Predictive Utility of Five Indices of Social Stratification," American Sociological Review, 22:542, 1957.)

<sup>21</sup>Warner, W. L., Social Class in America, p. 23.

<sup>22</sup>Black, op. cit., p. 44.

permits multiple stratifications, explains numerous distinctive Negro purchase motivations, expenditure patterns, and store patronage decisions. Negroes have no opportunity for social classification on the basis of family background. Their classification system starts with occupation. Other criteria applicable to them are education, income, type of house, location of residence, material possessions, standard of living, public behavior, and participation in organizations external to the family.<sup>23</sup> C. L. Holte's description of Negro social classes is quoted below:

The lower class is the large class of unskilled and semi-skilled workers, most of whom are the recent migrants from rural areas and small towns in the South. Their level of education is low. The middle class includes mostly the families of individuals holding minor administrative and clerical positions, and lower salaried civil service workers. This class is more developed in the North. In the South there is greater fusion between the upper groupings. Their level of education is the lower grades of high school. The upper class consists of the families of professional people, and those who conduct successful and substantial business enterprises, particularly banking, insurance, and real estate.<sup>24</sup>

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<sup>23</sup>La Vine, R. S., "The Negro Market: A \$16 Billion Sales Challenge," Duns Review, 70:55, October, 1957.

<sup>24</sup>Davis, Allison, "Caste, Economy and Violence," in Sociological Analysis, p. 486.

The social stratifications in effect among Negroes are reflected in the groups' maintaining characteristic consumption patterns or life styles.<sup>25</sup>

#### Political Differences

Distinctive political differences exist among Negroes with respect to voting, court trials, and the receipt of government services.

In order to void the potential effects of misuse of political power by a coalition of emancipated slaves and poor whites, the Southern Bourbons virtually disfranchised Southern Negroes in 1876. The Negro American's heritage of active participation in politics (office holding and voting) is practically non-existent.<sup>26</sup> Despite the Civil Rights Act of 1965, the number of registered and participating Negro voters in the South is still disproportionately small.

Southern Negroes probably have not been able to receive equal justice in courts of law. The numbers of

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<sup>25</sup> Bergel, E. E., Social Stratification, p. 486.

<sup>26</sup> Franklin, J. H., From Slavery to Freedom, pp. 324-334.

Negroes arrested and convicted of various felonies and misdemeanors have always been inordinately high.

Public monies appropriated by the United States Congress and by State Legislatures for purposes of education and health care have traditionally been distributed so that disproportionately small shares have been made available to Negroes. Being a minority group and effectually disfranchised, Negroes have been powerless to remedy the situation.

#### Health Differences

The levels of health and of health care among Negroes are bases of distinction for this group that have long been recognized. Generally the health of Negroes is inferior to that of whites. Myrdal, writing in 1944, stated that, "the majority of the Negro population suffers from severe malnutrition."<sup>27</sup> He attributed the low level of Negro health to less nutritious diets. Myrdal ascribed the poor diets to Negro poverty, but expressed the opinion that, "there seems to be certain interesting differences even when income is kept

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<sup>27</sup> Myrdal, op. cit., p. 375.

constant."<sup>28</sup> Poor health has handicapped Negroes in acquiring jobs of sufficiently high level to ensure them of incomes large enough to support a decent standard of living. Negroes do spend disproportionately less for health care services of a medical and dental nature than does the Caucasian majority group.

#### Economic and Demographic Differences

Even though Negroes may enjoy legal equality and high social status among other Negroes, they may still be subjected to social segregation and discrimination in occupation, income, and employment by the Caucasian majority. The remarks of Allison Davis concerning Negro economic differences are pertinent to the discussion:

A study of income, savings, property ownership, and occupation has revealed the marked statistical tendency of economic and occupational status to follow caste lines; together with an actually wide intra-caste spread of economic status. With regard to the first system of behavior, that is, the economic class stratification within each color caste, the chief determinants are considered to be laws and customs of a 'freely competitive' economy, the differential control and fertility of land, the differential availability of credit, and powerful dogmas and antagonisms.<sup>29</sup>

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<sup>28</sup> Ibid., p. 372.

<sup>29</sup> Davis, Allison, "Caste, Economy, and Violence" in Sociological Analysis, p. 486.

The Negro population of the United States in early 1965 was slightly over 21 million people.<sup>30</sup> Negroes constitute the largest ethnic segment of the consumer market—11 per cent of the total United States population.<sup>31</sup>

The Negro American population is growing more rapidly than is the Caucasian American population.<sup>32</sup> During the period 1950-1959 the Negro population increased slightly more than 23 per cent, while the total United States population increased slightly more than 14 per cent.<sup>33</sup> Projected increases in population among Negro Americans indicate a 23 per cent increase in the 1960's and a 27 per cent increase in the 1970's. By 1980 the Negro American population will approximate 30 million and will constitute almost 12 per cent of

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<sup>30</sup>"Gains For U. S. Negroes Spell New Radio Values," editorial, Sponsor, p. 38, July 26, 1965.

<sup>31</sup>United States Congress, Congressional Quarterly Fact Sheet on Negro Population, p. 1, August 22, 1966.

<sup>32</sup>Black, L. E., "Negro Market: Growing, Changing, Challenging," Sales Management, 91:44, October 4, 1963.

<sup>33</sup>"Marketing To the Negro Consumer," editorial, Sales Management, 84:36, March 4, 1960.

the American population.<sup>34</sup> These estimates are based upon current mortality and fertility rates.

The Negro population in 1968 is characterized by a high degree of urban concentration. They are, as an ethnic group, approaching a numerical majority in many of America's largest cities.<sup>35</sup> Approximately 75 per cent of all Negroes reside in urban locations and 33 per cent of the Negroes are located in the 25 leading metropolitan markets. Only 14 per cent of Caucasians live in the same 25 metropolitan markets. Of great importance to retailers is the fact that 2/3 of all retail sales are made in these same 25 markets.<sup>36</sup> The 78 largest cities in the United States contain 28 per cent of all Negroes.<sup>37</sup>

Already the populations in many major American cities are at least 50 per cent Negro and the percentages

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<sup>34</sup>"Burgeoning Middle Class Boosting Negro Buying Power," editorial, Sales Management, 84:36, March 4, 1960.

<sup>35</sup>Congressional Quarterly Fact Sheet on Urban Negro Population, p. 1, August 22, 1966.

<sup>36</sup>"New Marketing Profile of U. S. Negro Emerges," editorial, Sponsor, p. 38, July 26, 1965.

<sup>37</sup>Johnson Publish Co., How Do You Sell to Urban Negro Consumers, p. 3.

are increasing.<sup>38</sup> It has been estimated that by 1970 Negroes will make up 40 per cent or more of the population in 14 of the major cities in the United States.<sup>39</sup>

The concentration of the Negro population is largely the result of two major types of migrations that have occurred since World War II: from rural to urban areas and from the Southern to the Northern part of the United States. Between 1940 and 1950 a million Negroes made the same trek.<sup>40</sup> Despite the mass migrations from the South to the North, it has been predicted that by 1980, 42 per cent of all Negroes will still be living in the South because of higher birth rates among those who do not migrate.<sup>41</sup>

Distinctive differences in the average annual incomes of Negroes as compared to Caucasians are due to pay scale differentials for the same work in the same

<sup>38</sup>"New Marketing Profile of U. S. Negro Emerges," editorial, Sponsor, p. 38, July 26, 1965.

<sup>39</sup>Congressional Quarterly Fact Sheet on Urban Negro Population, p. 1, August 22, 1966.

<sup>40</sup>Pfautz, H. W., "The New New Negro: Emerging American," Phylon, p. 61, winter 1963.

<sup>41</sup>Miller, Abie, The Negro and The Great Society, p. 152.

occupations and to employment practices among enterprises and institutions which relegate Negroes to lower status occupations in conformance with the color caste system. Among employed Negroes median annual income is approximately 50 per cent that of Caucasians. Since Negro workers are more frequently unemployed and remain unemployed for longer periods of time than do Caucasians in the same or similar occupations, aggregate Negro buying power is reduced to sub-normal levels. Despite the wide differentials between Negro and Caucasian incomes, the total Negro income in 1965 was reported to have been \$25 billion.<sup>42</sup>

Another distinguishing difference that is related to Negro income is the willingness of Negroes as a group to use their buying power as a weapon in their struggle for equality of opportunities in occupations and in employment.<sup>43</sup> Writing in 1964 William Brink and Louis Harris

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<sup>42</sup>"New Marketing Profile of U. S. Negro Emerges," editorial, Sponsor, p. 38, July 26, 1965.

<sup>43</sup>"The Negro Market," editorial, Duns Review, 82:61, November, 1963.

stated that:

While not too many Negroes have boycotted as yet, a hefty 62 per cent of them—and that's more than 11 million—said they stand ready to boycott if they are asked by their leaders to do so in the cause of Civil rights.<sup>44</sup>

Sit-ins and picketing have also been used very effectively by Negro direct action organizations to persuade both retail and manufacturing enterprises to employ Negroes. The Negro slogan, "don't buy where you can't work," is particularly meaningful for retailers, although Negroes have effectively boycotted certain brands of products also. The "Selective Patronage Movement" which was launched through the influence of Negro ministers in 1963 in Philadelphia has been especially effective against retailers, as well as against other types of enterprises.<sup>45</sup>

The right of Negroes to boycott and picket a store which discriminates against them is sanctioned by a 1938 Supreme Court decision.<sup>46</sup> According to Brink and Harris

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<sup>44</sup>Brink, William, and Harris, Louis, The Negro Revolution in America, p. 71.

<sup>45</sup>"Philadelphia's Black List," editorial, The Economist, 208:437, August 3, 1963.

<sup>46</sup>Myrdal, op. cit., p. 313.

"the victims of the boycotts generally have been certain popular breads, dairy products, beer and soft drinks, as well as the better-known dime store chains.<sup>47</sup>

Negro living standards on the average have been inferior to those of Caucasians ever since emancipation. This condition has persisted because of Negro poverty and residential segregation. Sub-standard housing is the most critical aspect of the lower living standards of Negroes.

The influence of lower living standards upon the nature of Negroes' demands for goods and services is being reflected through expenditures of new or additional income for a spectrum of goods, brands, and services that will improve living standards. For example a large portion of new Negro income is being spent for furniture, appliances, clothing, food, drugs, medicines, and physicians' services. As Negro incomes rise as a result of the social, political, cultural, and economic advances made by Negroes in the aftermath of public school desegregation, the various Civil Rights Acts, and the Economic Opportunity Act, the influence of Negro living

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<sup>47</sup> Brink and Harris, op. cit., pp. 70-71.

standards upon the nature of their effective market demand will continue to be exerted strongly.

Economic Gains for Negro Americans Since World War II

Major economic gains for Negro Americans date from the World War II era. Manpower shortages resulted in unprecedented high employment levels for Negroes. For the first time a substantial number of Negroes were able to realize the advantages of a higher standard of living. With the increased incomes came educational opportunities for the younger Negroes. The results of those opportunities are to be seen in higher occupational levels and higher incomes for Negroes in the 1960's.

Negro advances in occupational levels since World War II are dramatized by the fact that in 1940 more than 40 per cent of Negroes in the United States were agricultural laborers, whereas in 1960 only 15 per cent were employed in agriculture.<sup>48</sup> According to M. A. Kessler:

The largest relative gains posted by non-whites during 1955-62 were in professional services (such as hospital, medical, and other health services, welfare and other religious

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<sup>48</sup> Pfautz, op. cit., pp. 361-363.

institutions) and business and repair services--all of which grew nearly 70 per cent in the 7 year span.<sup>49</sup>

Negroes also have made substantial advances in Federal Government employment, both in the Civil Service and in the various branches of the armed forces.

The general trend of Negro occupational levels is unquestionably upward. According to Ebony Magazine, 28 per cent of gainfully employed Negroes will be employed as white collar workers by 1975.<sup>50</sup> The most widespread opportunities for Negroes to upgrade their occupational levels are in the fields of technology and the skilled trades. Theoretically the Economic Opportunity Act of 1965 will facilitate the training of Negroes for employment in these fields. Negro entry into the skilled trades is handicapped, however, by labor union policies and traditions and the nature of union membership.<sup>51</sup>

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<sup>49</sup>Kessler, M. A., "Economic Status of Non-White Workers, 1955-1962," Monthly Labor Review, 86:78, July 1963.

<sup>50</sup>"New Frontiers in Insurance," editorial, Ebony, 22:123, February, 1967.

<sup>51</sup>Broom, Leonard and Glenn, Norval, Transformation of the Negro American, p. 132.

Startling advances in average annual family income have been made by Negro wage earners in the past twenty years.<sup>52</sup> Advances have been particularly dramatic within the past ten years. It is predicted that Negro incomes will continue to rise and at an increasing rate.

Negro Americans have realized some striking absolute gains in income and living standards, even though these gains are not very great relative to those of Caucasians. Pertinent Negro income statistics reported by H. B. Shaffer are quoted below:

Income for Negroes rose 54 per cent between 1950 and 1960; for families it went up 73 per cent. In 1961, 20 per cent of all Negro families made more than \$6,000 a year as compared to 4 per cent in 1945. The percentage doubled from 1950 to 1960.<sup>53</sup>

According to L. E. Black, the median Negro family income in 1960 was \$3,233, which is double the 1949 median.<sup>54</sup>

In 1964 Sales Management Magazine reported that about 38

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<sup>52</sup>Black, op. cit., p. 44.

<sup>53</sup>Shaffer, H. B., "Negroes in the North," Editorial Research Report, 2:789, October 27, 1965.

<sup>54</sup>Black, op. cit., p. 46.

per cent of Negro families earn between \$4,000 and \$9,000 annually, whereas only 10 per cent were in this range at the beginning of the post war period.<sup>55</sup>

The following figures cited by A. F. Brimmer also point to absolute gains being more significant than relative gains:

Between 1947 and 1963, median family income, for both total and non white families, just about doubled. For all families the median rose from \$3,031 in 1947 to \$6,249 in 1963. The advance for non whites was from \$1,614 in 1947 to \$3,456 in 1963.<sup>56</sup>

Clearly Negro gains in income relative to Caucasians were negligible. Writing in 1964, Eli Ginzberg stated that, "The median family income among Negroes is still approximately 50 percent of median family income among whites." At the same time Ginzberg wrote that, "In the South, median Negro family income is 40 per cent of that of the white population."<sup>57</sup>

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<sup>55</sup> "Burgeoning Middle Class Boosting Negro Buying Power," editorial, Sales Management, 93:77, November 20, 1964.

<sup>56</sup> Brimmer, A. F., "The Negro in the National Economy," in The American Negro Reference Book, p. 258.

<sup>57</sup> Ginzberg, Eli, The Negro Challenge to the Business Community, pp. 41-45.

Occupational levels and incomes have improved. The trend in employment levels, however, is discouraging. Negroes have traditionally been subject to more frequent and more prolonged periods of unemployment than have Caucasians. Today the percent of unemployed Negro workers is much higher than the percentage of Negroes in the total population. Kessler states:

Throughout the postwar period unemployment has consistently fallen most heavily on the nonwhite worker. Comprising only a tenth of the civilian labor force in 1962, nonwhites accounted for two-tenths of the jobless total. This disparity was evident among both men and women.<sup>58</sup>

#### Buying Power Differences

The importance to the American economy of the buying power of Negroes is demonstrated by the fact that by 1965 Negro Americans were spending approximately \$25 billion annually for goods and services. Sponsor Magazine projects aggregate Negro income to \$40 billion in 1970.<sup>59</sup> L. E. Black estimates the aggregate figure will be \$45 billion.<sup>60</sup>

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<sup>58</sup> Kessler, op. cit., p. 783.

<sup>59</sup> "New Marketing Profile of U. S. Negro Emerges," Sponsor, 19:38-42, July 26, 1965.

<sup>60</sup> Black, op. cit., p. 43.

Of some economic significance too is the more rapid rate of expenditure of Negro buying power for goods and services than the rate among Caucasians for comparable time periods. A 1960 study reported by Sponsor Magazine indicates that, "the average Negro family with a \$5,000 income maintains a standard of living comparable to that of a white family with an \$8,000 income."<sup>61</sup> L. E. Black states that in 1960, 44 per cent of Negro families earned from \$3,000 to \$8,000. This segment comprises the various levels of the Negro middle class. He predicts further that by 1970 Negro personal income should be roughly 9 per cent of national personal income.<sup>62</sup>

Robert S. La Vine states that, "A third of every purchasing dollar in Birmingham, Alabama comes from Negroes."<sup>63</sup>

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<sup>61</sup>"Negro Marketing Basics," editorial, Sponsor, 14:50, September 26, 1960.

<sup>62</sup>Black, op. cit., pp. 43-46.

<sup>63</sup>La Vine, R. S. "The Negro Market: A \$16 Billion Sales Challenge," Duns Review, 70:55, October, 1957.

Despite the dramatic economic gains actually made by the Negro to date, the fact remains that he is still relatively poor in comparison to his Caucasian counterpart. In 1964 U. S. News & World Report published this statement: "In the 100 years since the Civil War, Negroes have increased to 11 per cent of the United States population. But they have only 5.4 per cent of the national income...."<sup>64</sup> Printers Ink in 1957 reported that according to the 1950 census the median income of Negro males in Birmingham, Alabama was \$1,676 as compared to a median of \$2,883 for white males. Median income for Negro females in the same year in the same city was \$467 as compared to median of \$1,147 for white females.<sup>65</sup>

In 1963 L. E. Black commented as follows:

Seventy-one per cent of Negroes are in the lower economic class, having annual incomes of less than \$5,000. However, in terms of their own social structure, only 46 per cent with incomes under \$3,000 would be classified as in the lower income class. The median income for employed

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<sup>64</sup>"Drive To Set Negroes up in Business," editorial, U. S. News & World Report, p. 82, August, 1964.

<sup>65</sup>"The Negro Market," editorial, Printers Ink, p. 340, August 23, 1957.

Negroes is approximately 55 per cent that of white workers. The income disparity stems from the Negro's subordinate occupational status and shorter duration of employment.<sup>66</sup>

The Buying Behavior of The  
Negro American

Visible knowledge concerning Negroes as a particular market segment is limited. Most of the material available in economic and marketing literature focuses on particular subjects; is designed for specific purposes, e.g., selling advertising space in media; is designed to emphasize viewpoints or conditions; and is generally disconnected in nature. Most of the knowledge concerning the market is contained in current, or relatively recent, journal articles based on research that has been performed in scattered locations without sufficient attention being given to methodology, especially as regards sampling procedures.

Information in periodicals dwells upon Negro demographic characteristics and Negro buying behavior with respect to purchase motivations, buying habits, and

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<sup>66</sup> Black, op. cit., p. 43.

expenditure patterns vis-a-vis products, brands, and services. Some attention occasionally is given to retail store patronage motives among Negroes. Whether these studies consider the effects of culture on perceptions is questionable.

Differences in Negro purchase motivations have been cited in the literature as the major reasons why marketers should be concerned with the Negro market. Of equal importance, however, are differences in Negro expenditure patterns with respect to products, brands, and services, and differences in responses to the retail store operating characteristics which influence retail store patronage decisions.

The recognized needs of Negroes and their perceptions as to how these needs can best be satisfied constitute their purchase motivations. The translation of the motivations into actual purchases whereby various percentages of the annual family income are spent for assortments of goods of different brands and for various services constitutes their expenditure patterns. Negroes' selections of suppliers constitute their patronage decisions.

### Purchase Motivations

Distinctive differences in purchase motivations of Negroes when compared to Caucasians have been identified for many years. These differences in purchase motivations vary in degree and not in kind when Caucasian purchase motivations are examined. According to H. A. Bullock, the Negro American is a more rational buyer than the Caucasian with respect to food, drugs, and health care services; but more emotional than the Caucasian with respect to clothing, furniture, appliances, entertainment, liquor, and personal beauty care.

Apparently, Negroes want group identification whereas Caucasians want group distinction.<sup>67</sup> Consequently, Negroes display a marked tendency toward compulsive buying of products which will impart to them a sense of belonging to a membership or an anticipatory reference group.

Also, according to Bullock, Negro emotional motivations toward purchasing products, brands, and services which will enhance their prestige and status within their

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<sup>67</sup> Bullock, H. A., "Consumer Motivations in Black and White - I," Harvard Business Review, p. 93, May-June, 1961.

own sub-culture and in the eyes of the Caucasian community are of great importance. Moreover, motivations to emulate Caucasians can be found in the high volume of Negro purchases of cosmetic products for the hair and skin.

Negroes have clothing color preferences that differ from those of Caucasians due to certain hues of color harmonizing better with their complexions.<sup>68</sup> Nationally advertised clothing brands are preferred for their symbolic status value. Negroes have a well established tendency to purchase clothing on an installment credit basis.<sup>69</sup> Negroes are thought to regard clothing items as anthropometric disguises.<sup>70</sup>

When Negroes patronize high quality retail stores, the reasons can be traced to prestige motivations.<sup>71</sup> In addition, Negroes have concentrated on buying national brands of food because of fear of not getting their

<sup>68</sup> Schwartz, Jack, "Men's Clothing and The Negro," Phylon, 24:228, 1963.

<sup>69</sup> Edwards, P. K., The Southern Urban Negro as a Consumer, p. 12.

<sup>70</sup> Black, op. cit., p. 43.

<sup>71</sup> Edwards, op. cit., p. 2.

money's worth when buying unknown or private brands.<sup>72</sup>

Purchase motivations of Negro Americans are strongly influenced by race consciousness. A poignant need which most Negroes consciously recognize is to establish themselves as persons of consequence in the eyes of the Caucasian community. The perceptions of Negro Americans which affect their purchase motivations are a product of a Negro social and cultural heritage, in the United States, of segregation from the Caucasian community. Social segregation and a barrier system which affect economic and social life among Negro Americans are alive and operative today. Their impact is still felt in the market place.

#### Expenditure Patterns

Expenditure patterns among Negroes exhibit distinct differences when compared to those of Caucasians. It has been known for a long period of time that Negroes save more of their annual incomes and balance their budgets better than do Caucasians in the same income levels. The percentages of annual income spent by Negroes for various products and services also show distinct differences. This

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<sup>72</sup>Johnson, op. cit., p. 97.

logically follows if the Negroes save more than Caucasians from a given income.

A relatively greater portion of annual income is spent by Negroes for food, clothing, and personal care, while substantially smaller portions are spent for housing and medical care.<sup>73</sup>

An Ebony Magazine study indicated that the average Negro consumer spends more for cosmetics, toiletries, automobiles, and liquor than does his Caucasian counterpart.<sup>74</sup> Negro expenditures for hats and shoes are proportionally greater than among Caucasians.<sup>75</sup>

One of the most pronounced differences in Negro expenditure patterns stems from the limited access of Negroes to the services market and to the real estate market. A brochure entitled How Do You Sell To Urban Negro Consumers?, published by Johnson Publishing Co., Inc., of Chicago in January 1967 discusses this phenomenon in some detail:

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<sup>73</sup>Black, op. cit., p. 46.

<sup>74</sup>La Vine, op. cit., p. 169.

<sup>75</sup>Schwartz, op. cit., p. 230.

Negroes are discouraged from spending in certain categories. Generally they are unable to spend money for housing commensurate with incomes. Patronizing a first class eating establishment in a comfortable manner is not always easy. Outlays of money for country clubs, resorts, and similar recreation in most instances is out of the question.<sup>76</sup>

This remarkable restraint upon Negro expenditure patterns is described by Andrew F. Brimmer in this way:

Partly because of the resulting limited ability to earn--but also because of additional barriers--the Negro in turn has a restricted access to the market for consumer goods and services. The effect of these constraints has been essentially the same as that produced by a protective tariff in international trade: two markets have emerged. One is open to the white public virtually without limitations, and whites are free to purchase both goods and services with complete freedom of choice. However, for Negroes entry into this market is extremely circumscribed. While they enjoy considerable freedom of choice in the purchase of goods (except housing), a wide range of services (especially personal services) offered to the general market is unavailable to them. Consequently, a second market has arisen. This is basically a Negro market, and the provision of personal services lies at its core. Thus the Negro market is entirely derivative; it has evolved behind the walls of segregation to meet a demand left unfilled by business firms operating in the general market.<sup>77</sup>

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<sup>76</sup>Johnson Publishing Co., Inc., How Do You Sell To Urban Negro Consumers?, p. 4.

<sup>77</sup>Brimmer, A. F., "The Negro in The National Economy," in The American Negro Reference Book, p. 253.

A consideration of paramount importance in discussing the differences in Negro expenditure patterns is that sub-standard incomes among Negro families and individuals do not completely explain these differences. Schwartz comments on this point as follows: "The lower economic position of the average Negro in the American class system does not, per se, provide sufficient information for predicting his patterns of consumption, relative to those of whites."<sup>78</sup> Concerning this same phenomenon, Marcus Alexis comments on L. R. Klein and H. W. Mooney's, "Negro-White Savings Differentials and the 'Consumption Function Problem'," Econometrics, Vol. 21, July, 1953, pp. 425-446 as follows:

Perhaps one of the more significant contributions of Klein and Mooney is their observation that economic variables alone do not reveal the factors making for the differences in the consumption of Negroes and comparable whites: 'Negroes can work only in certain occupations; they have less job security than whites; they are not fully permitted to buy certain types of goods and services; they have a different family structure; they have a peculiar population distribution. Surely these factors cannot be altogether neglected while one looks only at income and wealth variables for the study of savings behavior.'<sup>79</sup>

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<sup>78</sup> Schwartz, op. cit., p. 224.

<sup>79</sup> Alexis, Marcus, "Some Negro-White Differences in Consumption," American Journal of Economics and Sociology, 21:15, January, 1962.

Alexis comments on this topic further by pointing to the implications of studies made by various economists:

The studies of Mendershausen, Brady and Friedman, Dusenberry Tobin, Klein and Mooney, and the Bureau of Labor Statistics consistently reveal a higher propensity to save for Negroes than for whites at comparable income levels. It follows that if Negroes save more than whites at each income level, Negroes and whites must differ in the way they allocate their income to various classes of consumer goods. More specifically, there must be at least one class of consumer goods for which Negroes and whites in the same income class spend different amounts. If this were not true, it would be impossible for Negroes and whites to have different amounts of saving (or dissaving) at the same income level.<sup>80</sup>

A large percentage of the increased Negro income of recent years is being used to buy a wider variety of food and a better quality of food, more and better quality clothing, to buy more drugs and medicines, and to buy furniture, appliances and other household maintenance items. The Negro is spending more than previously for medical services, education, travel, insurance, recreational, and other leisure time products. The Negro also is spending more for housing, but the bulk of such spending is still largely restrained by discrimination on the part of real estate dealers who sell houses and rent

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<sup>80</sup>Ibid., p. 16.

apartments, as well as by traditional community patterns of segregated housing. This is the nature of the Negro's expression in the market place of his increased buying power.

The differences between Negro and Caucasian expenditure patterns cannot be completely explained on the basis of a greater proportion of Negro savings. Negro buying behavior is the effect also of differences in values, attitudes, expectations, preferences, and psychological needs.<sup>81</sup> These differences, in turn, stem from physiological, social, cultural, political, and economic differences among Negroes.

Negro expenditures on food, drugs, clothing, and furniture and appliances are, for purposes of this study, considered to be representative at the present time of the direction which the Negro's spending is taking as he raises his standard of living and his social status by the purchase of material things.

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<sup>81</sup>Broom and Glenn, op. cit., p. 28.

Appendix B  
Survey Questionnaire



## INSTRUCTIONS

Please read the following instructions carefully and then ask questions if they are not clear.

1. Each of the six factors listed on the following pages may influence your decisions concerning which stores you patronize in Tuscaloosa with different intensity or power.
2. The objective is to indicate how you feel about these factors right now--not how you felt last month or how you think you will feel in the future.
3. The factor which you feel is most powerful in influencing your decisions as to which store you will patronize should be numbered 1.
4. The factor which you feel is second most powerful in influencing your decisions as to which store you will patronize should be numbered 2.
5. The factor which you feel is third most powerful in influencing your decisions should be numbered 3.
6. The factor which you feel is fourth most powerful in influencing your decisions should be numbered 4.
7. The factor which you feel is fifth most powerful in influencing your decisions should be numbered 5.
8. The factor which you feel is sixth most powerful in influencing your decisions should be numbered 6.
9. Please indicate the power of each factor to influence your store patronage decisions with respect to four different kinds of stores: food stores, drug stores, clothing stores, and furniture and appliance stores.

10. Please consider only one kind of store at a time.
11. Please write the numbers which represent your first impressions and do not change a number once it is written.
12. Be sure to write a number beside each of the six factors shown on the following four pages.

## FOOD STORES (GROCERY STORES AND SUPERMARKETS)

retail price levels \_\_\_\_

\_\_\_\_ local newspaper advertising

employment of Negro personnel \_\_\_\_

\_\_\_\_ local radio advertising

availability of credit \_\_\_\_

Availability of nationally advertised brands \_\_\_\_

## DRUG STORES

retail price levels \_\_\_\_

\_\_\_\_ local newspaper advertising

employment of Negro personnel \_\_\_\_

\_\_\_\_ local radio advertising

availability of credit \_\_\_\_

Availability of nationally advertised brands \_\_\_\_

---

Note:

In the original questionnaire the list of operating characteristics appeared on separate pages for each kind of store.

## CLOTHING STORES (MEN'S, WOMEN'S, CHILDREN'S APPAREL)

retail price levels \_\_\_\_\_

\_\_\_\_\_ local newspaper advertising

employment of Negro personnel \_\_\_\_\_

\_\_\_\_\_ local radio advertising

availability of credit \_\_\_\_\_

Availability of nationally advertised brands \_\_\_\_\_

## FURNITURE AND APPLIANCE STORES

retail price levels \_\_\_\_\_

\_\_\_\_\_ local newspaper advertising

employment of Negro personnel \_\_\_\_\_

\_\_\_\_\_ local radio advertising

availability of credit \_\_\_\_\_

Availability of nationally advertised brands \_\_\_\_\_

## QUESTIONNAIRE

1. In what food stores in Tuscaloosa have you shopped since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_
2. In what food stores in Tuscaloosa have you made purchases since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_
3. In what drug stores in Tuscaloosa have you shopped since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_
4. In what drug stores in Tuscaloosa have you made purchases since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_
5. In what clothing stores in Tuscaloosa have you shopped since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_
6. In what clothing stores in Tuscaloosa have you made purchases since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_
7. In what furniture and appliance stores in Tuscaloosa have you shopped since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_
8. In what furniture and appliance stores in Tuscaloosa have you made purchases since September 15, 1967? \_\_\_\_\_  
\_\_\_\_\_

Appendix C

Normalized Scores of Rank Order Numbers 1 Through 6

NORMALIZED SCORES OF RANK ORDER  
NUMBERS 1 THROUGH 6

The ordinal numbers 1 through 6 are converted to normalized scores, using a formula adopted from Ghiselli, E. E. Theory of Psychological Measurement, McGraw-Hill, Inc., New York, 1964, p. 82.

The formula used is: Per cent position =  $100 \frac{(n - \text{rank}) + .05}{n}$  where n is the number of stimuli to be ranked.

<u>Rank Order Score</u>	<u>Computations</u>	<u>Per Cent Score</u>	<u>Normalized Score</u>
1	$100 \frac{(6-1) + 0.5}{6} = (100) (.916) =$	91.6	1.38
2	$100 \frac{(6-2) + 0.5}{6} = (100) (.75) =$	75.	.67
3	$100 \frac{(6-3) + 0.5}{6} = (100) (.583) =$	58.3	.21
4	$100 \frac{(6-4) + 0.5}{6} = (100) (.416) =$	41.6	-0.21
5	$100 \frac{(6-5) + 0.5}{6} = (100) (.25) =$	25.	-0.67
6	$100 \frac{(6-6) + 0.5}{6} = (100) (.083) =$	8.3	-1.38

The normalized scores are obtained by reading appropriate values corresponding to per cent scores in a table for a normal frequency distribution shown in Ghiselli, E. E., Theory of Psychological Measurement, McGraw-Hill, Inc., New York, 1964, pp. 379-391.

Appendix D

Statistical Symbols Used in the Study

## STATISTICAL SYMBOLS

The statistical symbols that are used in the analysis of the data are shown below. These symbols were adopted from Croxton, F. E. and Cowden, D. J., Applied General Statistics, second edition, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1955, pp. 706-715.

$N$ , the number of responses

$N_c$ , the number of responses in a column

$N_r$ , the number of responses in a row

$N_b$ , the number of responses in a box

$k_c$ , the number of columns

$k_r$ , the number of rows

$k_b$ , the number of boxes

$\sum_1^{N_r}$ , a sum over the  $N_r$  responses in a row

$\sum_1^{k_r}$ , a sum over the  $k_r$  rows

$\sum_1^{N_b}$ , a sum over the  $N_b$  responses in a box

$\sum_1^{k_b}$ , a sum over the  $k_b$  boxes

$N_c$   
 $\sum_1$ , a sum over the  $N_c$  responses in a column

$k_c$   
 $\sum_1$ , a sum over the  $k_c$  columns

$X$ , a response

$\Sigma$ , a summation

$n_1$ , number of degrees of freedom in numerator

$n_2$ , number of degrees of freedom in denominator

Appendix E

Frequency Distributions of Rank Order Data for Negro Seniors  
and Negro Freshmen as a Group, Negro Seniors, and  
Negro Freshmen

TABLE 5. FREQUENCY DISTRIBUTION OF RANK ORDER DATA FOR NEGRO SENIORS AND NEGRO FRESHMEN, AGGREGATED BY STORE TYPE\*

Store Type	Rank Order	Retail Price Levels	Local Newspaper Ads.	Local Radio Ads.	Availability of Nationally Advertised Brands	Availability of credit	Employment of Negro Personnel					
Food	1	36	0	3	17	4	20					
	2	16	9	6	14	12	23					
	3	13	13	11	17	17	9					
	4	7	16	16	15	11	15					
	5	3	27	22	13	9	6					
	6	5	15	22	4	27	7					
Total (RO)* (freq.)*	180	1	346	5	354	6	245	3	330	4	225	2
Drug	1	35	1	2	19	5	18					
	2	18	5	5	27	12	13					
	3	8	21	7	15	15	14					

4	14	14	18	8	13	13
5	2	22	28	4	13	11
6	3	17	20	7	22	11
<hr/>						
Total	179	1	342	5	365	6
(RO) (freq.)	1	2	212	2	323	4
						259
						3
<hr/>						
1	25	0	1	22	18	14
2	19	6	2	25	18	11
3	12	8	8	13	19	19
4	15	13	15	6	13	19
5	3	31	30	6	4	5
6	6	22	24	8	8	12
<hr/>						
Total	210	1	375	5	383	6
(RO) (freq.)	1	2	213	2	231	3
						266
						4

\* Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

\* (RO) = Rank Order.

\*\* (freq.) = frequency.

TABLE 5 (Continued)

Store Type	Rank Order	Retail Price Levels	Local News paper Ads.	Local Radio Ads.	Availability of Nationally Advertised Brands	Availability of Credit	Employment of Negro Personnel					
	1	32	1	5	15	16	11					
	2	16	9	1	20	25	9					
	3	13	10	6	12	19	20					
	4	11	18	12	17	11	11					
	5	5	25	27	5	5	13					
	6	3	17	29	11	4	16					
Furniture & Appliances												
Total (RO) (freq.)	190	1	420	6	382	5	250	3	216	2	294	4

TABLE 6. FREQUENCY DISTRIBUTION OF RANK ORDER DATA FOR NEGRO SENIORS, AGGREGATED BY STORE TYPE\*

Store Type	Rank Order	Retail Price Levels	Local News-paper Ads.	Local Radio Ads.	Availability of Nation-ally Adver-tised Brands	Availabil-ity of credit	Employment of Negro Personnel					
Food	1	21	0	2	10	1	6					
	2	8	5	2	9	3	13					
	3	7	9	7	6	5	6					
	4	2	8	10	6	6	8					
	5	1	11	12	7	6	3					
	6	1	7	7	2	19	4					
Total (RO) * (freq.) ±	77	1	166	4	169	5	117	2	190	6	121	3
Drug	1	22	0	1	11	1	5					
	2	12	0	1	17	3	7					
	3	2	13	5	4	7	9					

4	1	10	14	3	5	7
5	0	10	13	1	8	8
6	3	7	6	4	16	4
Total (RO) (freq.)	74	171	175	98	184	138
1	15	0	0	12	9	4
2	10	3	0	15	9	3
3	3	5	5	6	9	12
4	8	7	7	1	5	12
5	2	13	19	2	2	2
6	2	12	9	4	6	7
Total (RO) (freq.)	98	186	192	98	120	147

\* Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

\* (RO) = Rank Order.

\* (freq.) = frequency.

TABLE 6 (Continued)

Store Type	Rank Order	Retail Price Levels	Local Newspaper Ads.	Local Radio Ads	Availability of Nationally Advertised Brands	Availability of Credit	Employment of Negro Personnel				
	1	22	0	2	9	4	3				
	2	10	5	0	10	12	3				
	3	4	6	4	5	9	12				
	4	2	11	7	8	8	4				
	5	1	11	11	4	4	9				
	6	1	7	16	4	3	9				
Furniture & Appliances											
Total (RO) (freq.)	73 <sup>1</sup>	169	5	194	6	120	2	125	3	160	4

TABLE 7. FREQUENCY DISTRIBUTION OF RANK ORDER DATA FOR NEGRO FRESHMEN, AGGREGATED BY STORE TYPE\*

Store Type	Rank Order	Retail Price Levels	Local News-paper Ads.	Local Radio Ads.	Availability of Nation-ally Adver-tised Brands	Availabil-ity of credit	Employment of Negro Personnel
Food	1	15	0	1	7	3	14
	2	8	4	4	5	9	10
	3	6	4	4	11	12	3
	4	5	8	6	9	5	7
	5	2	16	10	6	3	3
	6	4	8	15	2	8	3
Total (RO)*(freq.)*	103	180	185	6	128	140	104
Drug	1	13	1	1	8	4	13
	2	6	5	4	10	9	6
	3	6	8	2	11	8	5

4	13	4	4	5	8	6
5	2	12	15	3	5	3
6	0	10	14	3	6	7

Total (RO) (freq.)	105 <sup>1</sup>	171 <sup>5</sup>	190 <sup>6</sup>	114 <sup>2</sup>	139 <sup>4</sup>	121 <sup>3</sup>
Clothing	1	10	0	1	10	9
	2	9	3	2	10	8
	3	9	3	3	7	10
	4	7	6	8	5	8
	5	1	18	11	4	2
	6	4	10	15	4	2

Total (RO) (freq.)	112 <sup>2</sup>	189 <sup>5</sup>	191 <sup>6</sup>	115 <sup>3</sup>	111 <sup>1</sup>	120 <sup>4</sup>
Furniture & Appliances	1	10	1	3	6	12
	2	6	4	1	10	13
	3	9	4	2	7	10
	4	9	7	5	9	3

TABLE 7 (Continued)

Score Type	Rank Order	Retail Price Levels	Local News-paper Ads.	Local Radio Ads.	Availability of Nation-ally Adver-tised Brands	Availabil-ity of credit	Employment of Negro Personnel
	5	4	14	16	1	1	4
	6	2	10	13	7	1	7
Total (RO) (freq.)	117 2	179 5	189 6	130 3	91 1	134 4	

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

\* (RO) = Rank Order.

\* (freq.) = frequency.

Appendix F

Frequency Distributions and Analysis of Variance Computations  
of Normalized Rank Order Data for Negro Seniors and  
Negro Freshmen as a Group, by Kind of Store

TABLE 8. FREQUENCY DISTRIBUTION OF NORMALIZED RANK ORDER DATA AND SUMS FOR COLUMNS AND ROWS FOR NEGRO SENIORS AND NEGRO FRESHMEN, AGGREGATED BY STORE TYPE\*

Store Type	Normal- Rank Order	Retail Price Levels	Local News- paper Advertising	Local Radio Advertising
Food	1.38	36	0	3
	.67	16	9	6
	.21	13	13	11
	-0.21	7	16	16
	-0.67	3	27	22
	-1.38	5	15	22
Total (NRO)* (freq.)*		52.65	-33.39	-37.99
Drug	1.38	35	1	2
	.67	18	5	5
	.21	8	21	7
	-0.21	14	14	18
	-0.67	2	22	28
	-1.38	3	17	20
Total (NRO) (freq.)		53.62	-32.00	-42.56

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

\*(NRO) = Normalized Rank Order

\*(freq.) = frequency

TABLE 8 (Continued)

Availability of Nation- ally Adver- tised Brands	Availability of Credit	Employment of Negro Personnel	$N_r$ $\Sigma X$ 1
17	4	20	
14	12	23	
17	17	9	
15	11	15	
13	9	6	
4	27	7	
19.03	-28.47	28.07	= -.10
19	5	18	
27	12	13	
15	15	14	
8	13	13	
4	13	11	
7	22	11	
33.44	-23.71	11.21	= 0.00

TABLE 8 (Continued)

Store Type	Normal- ized Rank Order	Retail Price Levels	Local News- paper Advertising	Local Radio Advertising
	1.38	25	0	1
	.67	19	6	2
Clothing	.21	12	8	8
	-0.21	15	13	15
	-0.67	3	31	30
	-1.38	6	22	24
Total (NRO) (freq.)		36.31	-48.16	-51.97
	1.38	32	1	5
	.67	16	9	1
Furniture & Appliances	.21	13	10	6
	-0.21	11	18	12
	-0.67	5	25	27
	-1.38	3	17	29
Total (NRO) (freq.)	47.81	-34.48	-51.80	24.18
$\sum_{I=1}^{N_c} X$		190.39	-148.03	-184.32

TABLE 8 (Continued)

Availability of Nation- ally Adver- tised Brands	Availability of Credit	Employment of Negro Personnel	$N_r$ $\sum X$ $l$
22	18	14	
25	18	11	
13	19	19	
6	13	19	
6	4	5	
8	8	12	
33.52	24.44	6.78	
15	16	11	
20	25	9	
12	19	20	
17	11	11	
5	5	13	
11	4	16	
110.17	3.90	38.37	= 10.48 = $\sum X$
			( $\sum X$ ) <sup>2</sup> = 109.83

TABLE 9. FREQUENCY DISTRIBUTION OF SQUARES AND SUMS OF SQUARES OF NORMALIZED RANK ORDER DATA FOR COLUMNS AND ROWS FOR NEGRO SENIORS AND NEGRO FRESHMEN, AGGREGATED BY STORE TYPE\*

Store Type	NRO <sup>*</sup> Squared	Retail Price Levels	Local News- paper Advertising	Local Radio Advertising
Food	1.90	36	0	3
	.45	16	9	6
	.04	13	13	11
	.04	7	16	16
	.45	3	27	22
	1.90	5	15	22
Total (NRO) <sup>2*</sup> (freq.)#		87.25	45.86	61.18
Drug	1.90	35	1	2
	.45	18	5	5
	.04	8	21	7

\*Source of data: Self-administered survey form, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

\*NRO = Normalized Rank Order

<sup>\*</sup>(NRO)<sup>2</sup> = Normalized Rank Order Squared

# (freq.) = frequency

TABLE 9 (Continued)

Availability of Nation- ally Adver- tised Brands	Availability of Credit	Employment of Negro Personnel	$N$ $r^2$ $\sum X$ $l$
17	4	20	
14	12	23	
17	17	9	
15	11	15	
13	9	6	
4	27	7	
53.33	66.47	65.31	= 379.40
19	5	18	
27	12	13	
15	15	14	

TABLE 9 (Continued)

Store Type	NRO* Squared	Retail Price Levels	Local News- paper Advertising	Local Radio Advertising
	.04	14	14	18
Drug	.45	2	22	28
	1.90	3	17	20
<hr/>				
Total (NRO) <sup>2</sup> (freq.)		82.08	47.75	57.65
	1.90	25	0	1
	.45	19	6	2
Clothing	.04	12	8	8
	.04	15	13	15
	.45	3	31	30
	1.90	6	22	24
<hr/>				
Total (NRO) <sup>2</sup> (freq.)		69.88	59.29	62.82
	1.90	32	1	5
	.45	16	9	1
Furniture & Appliances	.04	13	10	6
	.04	11	18	12

TABLE 9 (Continued)

Availability of Nation- ally Adver- tised Brands	Availability of Credit	Employment of Negro Personnel	$\frac{N_r}{\sum X_i}$
8	13	13	
4	13	11	
7	22	11	
64.27	63.67	66.98	= 382.40
22	18	14	
25	18	11	
13	19	19	
6	13	19	
6	4	5	
8	8	12	
71.71	60.58	58.12	= 382.40
15	16	11	
20	25	9	
12	19	20	
17	11	11	

TABLE 9 (Continued)

Store Type	NRO* Squared	Retail Price Levels	Local News- paper Advertising	Local Radio Advertising
Furniture & Appliances	.45 1.90	5 3	25 17	27 29
Total (NRO) <sup>2</sup> (freq.)		76.91	50.62	77.92
$\sum_{i=1}^{N_c} X_i$		316.12	203.52	259.57

TABLE 9 (Continued)

Availability of Nation- ally Adver- tised Brands	Availability of Credit	Employment of Negro Personnel	$N_r^2$ $\Sigma X$ 1
5	5	13	
11	4	16	
61.81	52.70	62.44	= 382.40
251.12	243.42	252.85	= 1,526.60 = $\Sigma X^2$

TABLE 10. SUMS AND SQUARES OF SUMS FOR BOXES FOR NEGRO SENIORS AND NEGRO FRESHMEN, AGGREGATED BY STORE TYPE\*

Store Type	Box	$\sum \frac{N_b}{I}$	$(\sum \frac{N_b}{I})^2$
Food	Row 1, Col. 1	52.65	2,772.023
	Col. 2	-33.39	1,125.892
	Col. 3	-37.99	1,444.230
	Col. 4	19.03	362.141
	Col. 5	-28.47	810.541
	Col. 6	28.07	787.925
Drug	Row 2, Col. 1	53.62	2,875.104
	Col. 2	-32.00	1,024.000
	Col. 3	-42.56	1,812.354
	Col. 4	33.44	1,118.234
	Col. 5	-23.71	562.164
	Col. 6	11.21	125.664
Clothing	Row 3, Col. 1	36.31	1,318.416
	Col. 2	-48.16	2,305.386
	Col. 3	-51.97	2,700.881
	Col. 4	33.52	1,123.590
	Col. 5	24.44	597.314
	Col. 6	6.78	45.968
Furniture and Appliances	Row 4, Col. 1	47.81	2,285.796
	Col. 2	-34.48	1,188.870
	Col. 3	-51.80	2,483.240
	Col. 4	24.18	584.672

TABLE 10 (Continued)

Store Type	Box	$N_b$ $\sum X$	$(\sum X)^2$ $N_b$
Furniture and Appliances	Col. 5	31.64	1,001.090
	Col. 6	-7.69	59.136
Total		10.48	$30,514.631 = k \frac{N_b}{\sum 1} (\sum X)^2$

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

COMPUTATIONS FOR ANALYSIS OF VARIANCE OF  
 NORMALIZED RANK ORDER DATA FOR NEGRO  
 SENIORS AND NEGRO FRESHMEN,  
 AGGREGATED BY STORE TYPE

Variation between operating characteristics =

$$\begin{aligned} & \frac{\sum_1^{k_c} \frac{N_c}{N_c} (\sum_1^N X)^2 - (\sum X)^2}{N_c} \\ = & \frac{(190.39)^2 + (-148.03)^2 + (184.32)^2 + (110.17)^2 +}{320} \\ & (3.90)^2 + (38.37)^2 - \frac{109.83}{1920} \\ = & \frac{(36,248.35) + (21,912.88) + (33,973.86) + (12,137.43) +}{320} \\ & (15.21) + (1472.26) - \frac{109.83}{1920} \\ = & \frac{105,759.99}{320} - \frac{109.83}{1920} \\ = & 330.50 - .06 \\ = & .330.44 \end{aligned}$$

Variation between stores =

$$\frac{\sum_1^{k_r} \frac{N_r}{N_r} (\sum_1^N X)^2 - (\sum X)^2}{N_r}$$

$$= \frac{(0.10)^2 + (0.00)^2 + (0.92)^2 + (9.66)^2}{480} - \frac{109.83}{1920}$$

$$= \frac{94.18}{480} - \frac{109.83}{1920}$$

$$= .20 - .06$$

$$= .14$$

Variation due to interaction between operating characteristics and stores = total variation - (variation between operating characteristics + variation between stores + variation within stores.

$$= 1,526.54 - (330.44 + .14 + 1145.17)$$

$$= 1,526.54 - 1,475.75$$

$$= 50.79$$

Variation within stores =

$$\frac{\sum X^2 - \sum \frac{k_b}{N_b} (\sum X)^2}{N_b}$$

$$= 1,526.60 - \frac{30,514.631}{80}$$

$$= 1,526.60 - 381.43$$

$$= 1,145.17$$

Total variation =

$$\sum X^2 - \frac{(\sum X)^2}{N}$$

$$= 1,526.60 - \frac{109.83}{1920}$$

$$= 1,526.54$$

Degrees of freedom within stores =

$$k_b (N_b - 1)$$

$$= 24 (80 - 1)$$

$$= 24 (79)$$

$$= 1,896$$

Degrees of freedom for interaction = total degrees of freedom - (degrees of freedom between operating characteristics + degrees of freedom between stores + degrees of freedom within stores)

$$= 1919 - (5 + 3 + 1896)$$

$$= 1919 - 1904$$

$$= 15$$

TABLE 11. SUMMARY OF COMPUTATIONS FOR ANALYSIS OF  
 VARIANCE OF NORMALIZED RANK ORDER DATA FOR NEGRO SENIORS  
 AND NEGRO FRESHMEN, AGGREGATED BY STORE TYPE

Source of Variation	Degrees of Freedom	Amount of Variation	Estimated Variance
Between Operating Characteristics	5	330.44	66.10
Between Stores	3	.14	.05
Interaction Between Operating Character- istics and Stores	15	50.79	3.39
Within Stores	1896	1,145.17	.60
Total Variation	1919	1,526.54	.80

F TEST COMPUTATIONS FOR ANALYSIS OF  
 VARIANCE OF NORMALIZED RANK ORDER  
 DATA FOR NEGRO SENIORS AND NEGRO  
 FRESHMEN, AGGREGATED BY  
 STORE TYPE

All tests shown below are at the .05 level of significance. The values of F from the F distribution are taken from a table of the F distribution in Richmond, S.B., Statistical Analysis, second edition, The Ronald Press Co., New York, 1964, pp. 578-586.

Testing the estimated variance of interaction between operating characteristics and stores against the estimated variance within stores:

$$\text{Computed value of } F = \frac{3.39}{.60} = 5.616 \quad \begin{array}{l} \text{Values of } F \text{ from } F \\ \text{distribution with} \\ \text{degrees of freedom} \\ (n_1 = 15, n_2 = 1896) = 1.66 \end{array}$$

Since the estimated variance of interaction is significantly larger than the estimated variance within stores, test: (1) the estimated variance between operating characteristics against the estimated variance of interaction,

$$\text{Computed value of } F = \frac{66.10}{3.39} = 19.496 \quad \begin{array}{l} \text{Values of } F \text{ from } F \text{ distribution} \\ \text{with degrees of freedom} \\ (n_1 = 5, n_2 = 15) = 2.90 \end{array}$$

and (2) the estimated variance between stores against the estimated variance of interaction.

$$\text{Computed value of } F = \frac{.05}{3.39} = .015$$

Value of F from F distribution  
with degrees of freedom  
( $n_1 = 3, n_2 = 15$ ) = 3.29

The differences between operating characteristics are real, i.e., too great to be attributable to chance alone. Therefore, the influence of the operating characteristics upon Negro patronage decisions is significant.

The differences between store means are not real, i.e., they can be attributed to chance alone. Therefore, the influence of store type upon Negro patronage decisions is not significant.

Appendix G.

Frequency Distributions and Analysis of Variance Computations  
of Normalized Rank Order Data for Negro Seniors and Negro  
Freshmen, with Respect to Clothing Stores Only

TABLE 12. FREQUENCY DISTRIBUTION OF NORMALIZED RANK ORDER DATA AND SUMS FOR COLUMNS AND ROWS FOR NEGRO SENIORS AND NEGRO FRESHMEN, AGGREGATED BY NEGRO SENIORS AND NEGRO FRESHMEN, WITH RESPECT TO CLOTHING STORES ONLY\*

Student Group	Normal- ized Rank Order	Retail Price Levels	Local News- paper Advertising	Local Radio Advertising
	1.38	15	0	0
	.67	10	3	0
	.21	3	5	5
Negro Seniors	-0.21	8	7	7
	-0.67	2	13	19
	-1.38	2	12	9
Total (NRO) * (freq.) *		22.25	-25.06	-25.57
	1.38	10	0	1
	.67	9	3	2
	.21	9	3	3
Negro Freshmen	-0.21	7	6	8
	-0.67	1	18	11
	-1.38	4	10	15
Total (NRO) (freq.)		14.06	-24.48	-26.40
$\sum_{i=1}^N C_i X_i$		36.31	-49.54	-51.97

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

\* (NRO) = Normalized Rank Order. \* (freq.) = frequency.

TABLE 12 (Continued)

Availability of Nation- ally Adver- tised Brands	Availability of Credit	Employment of Negro Personnel	$N_r$ $\Sigma X$ 1
12	9	4	
15	9	3	
6	9	12	
1	5	12	
2	2	2	
4	6	7	
20.80	9.67	3.43	= 5.52
10	9	10	
10	9	8	
7	10	7	
5	8	7	
4	2	3	
4	2	5	
12.79	14.77	10.21	= 0.95
33.59	24.44	13.64	= 6.47 = $\Sigma X$
			( $\Sigma X$ ) <sup>2</sup> = 41.86

TABLE 13. FREQUENCY DISTRIBUTION OF SQUARES AND SUMS OF SQUARES OF NORMALIZED RANK ORDER DATA FOR COLUMNS AND ROWS FOR NEGRO SENIORS AND NEGRO FRESHMEN, AGGREGATED BY NEGRO SENIORS AND NEGRO FRESHMEN, WITH RESPECT TO CLOTHING STORES ONLY\*

Student Group	Normal- ized Rank Order	Retail Price Levels	Local News- paper Advertising	Local Radio Advertising
Negro Seniors	1.90	15	0	0
	.45	10	3	0
	.04	3	5	5
	.04	8	7	7
	.45	2	13	19
	1.90	2	12	9
Total (NRO) <sup>2</sup> (freq.)*		38.14	30.48	26.13
Negro Freshmen	1.90	10	0	1
	.45	9	3	2
	.04	9	3	3
	.04	7	6	8
	.45	1	18	11
	1.90	4	10	15
Total (NRO) <sup>2</sup> (freq.)		31.74	28.81	28.50
$\sum_{i=1}^N \sum_{j=1}^C X_{ij}^2$		69.88	59.29	54.63

\* Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

\* (NRO)<sup>2</sup> = Normalized Rank Order Squared.

(freq.) = frequency

TABLE 13 (Continued)

Availability of Nation- ally Adver- tised Brands	Availability of Credit	Employment of Negro Personnel	$N_r$ $\Sigma X$ 1
12	9	4	
15	9	3	
6	9	12	
1	5	12	
2	2	2	
4	6	7	
38.33	34.01	24.11	= 191.20
10	9	10	
10	9	8	
7	10	7	
5	8	7	
4	2	3	
4	2	5	
33.38	26.57	34.01	= 183.01
71.71	60.58	58.12	= 374.21 = $\Sigma X^2$

TABLE 14. SUMS AND SQUARES OF SUMS FOR BOXES FOR  
 NORMALIZED RANK ORDER DATA FOR NEGRO SENIORS AND  
 NEGRO FRESHMEN, AGGREGATED BY NEGRO SENIORS AND  
 NEGRO FRESHMEN, WITH RESPECT TO CLOTHING STORES  
 ONLY\*

Student Group	Box	$\left( \sum_{i=1}^{N_b} X_i \right)$	$\left( \sum_{i=1}^{N_b} X_i^2 \right)$
Negro Seniors	Row 1, Col. 1	22.25	495.06
	Col. 2	-25.06	628.00
	Col. 3	-25.57	653.82
	Col. 4	20.80	432.64
	Col. 5	9.67	93.51
	Col. 6	3.43	11.76
Negro Freshmen	Row 2, Col. 1	14.06	197.68
	Col. 2	-24.48	599.27
	Col. 3	-26.40	696.96
	Col. 4	12.79	163.58
	Col. 5	14.77	218.15
	Col. 6	10.21	104.24
Total		6.47	4,294.67 = $\sum_{i=1}^{k_b} \left( \sum_{i=1}^{N_b} X_i \right)$

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

COMPUTATIONS FOR ANALYSIS OF VARIANCE OF  
 NORMALIZED RANK ORDER DATA FOR NEGRO  
 SENIORS AND NEGRO FRESHMEN, AGGRE-  
 GATED BY NEGRO SENIORS AND NEGRO  
 FRESHMEN, WITH RESPECT TO  
 CLOTHING STORES ONLY

Variation between operating characteristics =

$$\frac{\sum_{c=1}^k N_c (\Sigma X)^2}{N_c} - \frac{(\Sigma X)^2}{N}$$

$$= \frac{(36.31)^2 + (-49.54)^2 + (-51.97)^2 + (33.59)^2 + (13.64)^2}{80} - \frac{41.86}{480}$$

$$= \frac{8,383.16}{80} - \frac{41.86}{480}$$

$$= 104.79 - .09$$

$$= 104.70$$

Variation between seniors and freshmen =

$$\frac{\sum_{r=1}^k N_r (\Sigma X)^2}{N_r} - \frac{(\Sigma X)^2}{N}$$

$$= \frac{(5.52)^2 + (.95)^2}{240} - \frac{41.86}{480}$$

$$= \frac{30.47}{240} - \frac{41.86}{480}$$

$$= .13 - .09$$

$$= .04$$

Variation due to interaction between operating characteristics and (seniors and freshmen) = Total variation - (variation between operating characteristics + variation between seniors and freshmen + variation within seniors and freshmen)

$$= 374.12 - (104.70 + .04 + 266.84)$$

$$= 374.12 - 371.58$$

$$= 2.54$$

Variation within (seniors and freshmen) =

$$\sum X^2 - \frac{\sum_{b=1}^{k_b} N_b (\sum X)^2}{N_b}$$

$$= 374.21 - \frac{4,294.67}{40}$$

$$= 374.21 - 107.37$$

$$= 266.84$$

Total variation =

$$\sum X^2 - \frac{(\sum X)^2}{N}$$

$$= 374.21 - \frac{41.86}{480}$$

$$= 374.21 - .09$$

$$= 374.12$$

Degrees of freedom within (seniors and freshmen) =

$$k_b (N_b - 1)$$

$$= 12 (40 - 1)$$

$$= 12 (39)$$

$$= 468$$

Degrees of freedom for interaction = total degrees of freedom - (degrees of freedom between operating characteristics + degrees of freedom between seniors and freshmen + degrees of freedom within seniors and freshmen)

$$= 479 - (5 + 1 + 468)$$

$$= 5$$

TABLE 15. SUMMARY OF COMPUTATIONS FOR ANALYSIS OF VARIANCE OF NORMALIZED RANK ORDER DATA FOR NEGRO SENIORS AND NEGRO FRESHMEN, AGGREGATED BY NEGRO SENIORS AND NEGRO FRESHMEN, WITH RESPECT TO CLOTHING STORES ONLY\*

Source of Variation	Degrees of Freedom	Amount of Variation	Estimated Variance
Between Operating Characteristics	5	104.70	20.94
Between Seniors and Freshmen	1	.04	.04
Interaction Between Operating Charac- teristics and (Seniors and Freshmen)	5	2.54	.51
With (Seniors and Freshmen)	468	266.84	.57
Total Variation	479	374.12	.78

\*Source of data: Self-administered survey, students at Stillman College, Tuscaloosa, Alabama, October and November, 1967.

F TEST COMPUTATIONS FOR ANALYSIS OF VARIANCE  
 OF NORMALIZED RANK ORDER DATA FOR NEGRO  
 SENIORS AND NEGRO FRESHMEN, AGGREGATED  
 BY NEGRO SENIORS AND NEGRO FRESHMEN,  
 WITH RESPECT TO CLOTHING STORES ONLY

All tests shown below are at the .05 level of significance. The values of F from the F distribution are taken from a table of the F distribution in Richmond, S.B., Statistical Analysis, second edition, The Ronald Press Co., New York, 1964. pp. 578-586.

Testing the estimated variance of interaction between operating characteristics and (Negro seniors and Negro freshmen) against the estimated variance within (Negro seniors and Negro freshmen):

Computed value of  $F = \frac{.51}{.57} = .877$  Value of F from F distribution with degrees of freedom  
 $(n_1 = 5, n_2 = 468) = 2.23$

Since the estimated variance of interaction is smaller than the estimated variance within (Negro seniors and Negro freshmen), pool the variation and the degrees of freedom from these two sources and compute a new estimated variance to be used as the denominator of F for testing estimated variance between operating

characteristic means and estimated variance between Negro senior means and Negro freshmen means.

$$\frac{2.54 + 266.84}{5 + 468} = (\text{the denominator of } F \text{ for testing})$$

Testing for differences in the means of the operating characteristics.

$$\text{Computed value of } F = \frac{20.94}{.57} = 36.74 \quad \text{Value of } F \text{ from } F \text{ distribution with degrees of freedom}$$

$$(n_1 = 5, n_2 = 473) = 2.23$$

Since the computed value of  $F$  is greater than the  $F$  distribution value, the differences between the means of the operating characteristics are real, i.e., too great to be attributed to chance alone. Therefore, the influence of operating characteristics upon patronage decisions is significant.

Testing for differences in the means of normalized rank order scores of Negro seniors and Negro freshmen:

$$\text{Computed value of } F = \frac{.04}{.57} = .07 \quad \text{Value of } F \text{ from } F \text{ distribution with degrees of freedom}$$

$$(n_1 = 1, n_2 = 473) = 3.86$$

Since the computed value of  $F$  is smaller than the  $F$  distribution value of  $F$ , the differences between Negro seniors and Negro freshmen are not real, i.e., they can

Appendix H

Multiple Range Test of Normalized Rank Order Data for Negro  
Seniors and Negro Freshmen as a Group, by Kind of Store

MULTIPLE RANGE TEST FOR SIGNIFICANCE OF DIFFER-  
 ENCES AMONG THE MEANS OF NORMALIZED RANK ORDER  
 DATA FOR SIX SELECTED OPERATING CHARACTER-  
 ISTICS OF RETAIL STORES, RANK ORDERED BY  
 NEGRO SENIORS AND NEGRO FRESHMEN, AND  
 AGGREGATED BY STORE TYPE

The data that are necessary to apply the multiple range test, as developed by David B. Duncan,<sup>1</sup> are: (1) the means of the normalized rank order scores for each of the six retail store operating characteristics; (2) the standard error of the means of the normalized rank order scores for each of the six retail store operating characteristics; (3) the degrees of freedom on which the standard error is based; and (4) a table of special significant studentized ranges for a .05 level test.

The means of the normalized rank order scores for each of the six retail store operating characteristics are computed below:

$$\text{Retail price levels:} \quad \frac{190.39}{320} = .594$$

$$\text{Local newspaper advertising:} \quad \frac{-148.03}{320} = -.462$$

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<sup>1</sup>Duncan, D. B., "Multiple Range and Multiple F Tests," Biometrics, 2:1-42, 1955.

Local radio advertising:	$\frac{-184.32}{320}$	=	-.576
Availability of nationally advertised brands:	$\frac{110.17}{320}$	=	.344
Availability of credit:	$\frac{3.90}{320}$	=	.012
Employment of Negro personnel:	$\frac{38.37}{320}$	=	.119

For the purposes of this test the retail store operating characteristics will be coded as shown below:

- OC<sub>1</sub> - Retail price levels
- OC<sub>2</sub> - Local newspaper advertising
- OC<sub>3</sub> - Local radio advertising
- OC<sub>4</sub> - Availability of nationally advertised brands
- OC<sub>5</sub> - Availability of credit
- OC<sub>6</sub> - Employment of Negro personnel

The standard error of the means of the normalized rank order scores for each of the six retail store operating characteristics is computed by taking the square root of the variance due to interaction (see Table 11) divided by the total number of Negro responses.

$$\begin{aligned}\text{Standard error} &= \sqrt{\frac{3.39}{320}} \\ &= \sqrt{.010593} \\ &= .1029\end{aligned}$$

The degrees of freedom on which this standard error is based is 15 (see Table 11).

Significant studentized ranges are extracted for samples of sizes  $p = 2, 3, 4, 5, 6$ , by entering the row for  $n_2 = 15$  degrees of freedom in a table of special significant studentized ranges for a .05 level test shown in Duncan D. B., "Multiple Range and Multiple F Tests," Biometrics, Vol. 2, 1955, p. 3.

TABLE 16  
MULTIPLE RANGE TEST

Sample Sizes p =	(2)	(3)	(4)	(5)	(6)
Significant Studentized Ranges:	3.01	3.16	3.25	3.31	3.36
Shortest Significant Studentized Ranges (Significant Studentized Ranges x Standard Error)	.31	.33	.33	.34	.35
Retail Store Operating Characteristic	OC <sub>3</sub>	OC <sub>2</sub>	OC <sub>5</sub>	OC <sub>6</sub> OC <sub>4</sub>	OC <sub>1</sub>
Means of Retail Store Operating Characteristics	- .58	- .46		- .01	.12
				.34	.59

Note: Any two means not underscored by the same line are significantly different.

Any two means underscored by the same line are not significantly different.

The testing order and results are shown below:

1. The largest minus the smallest:  $OC_1 - OC_3 = (-.58) = 1.17 > .35$ ; hence  $OC_1 - OC_3$  is significant.
2. The largest minus the second smallest:  $OC_1 - OC_2 = .59 - (-.46) = 1.05 > .34$ ; hence  $OC_1 - OC_2$  is significant.
3. The largest minus the third smallest:  $OC_1 - OC_5 = .59 - (-.01) = .60 > .33$ ; hence  $OC_1 - OC_5$  is significant.
4. The largest minus the fourth smallest:  $OC_1 - OC_6 = .59 - .12 = .47 > .33$ ; hence  $OC_1 - OC_6$  is significant.
5. The largest minus the second largest:  $OC_1 - OC_4 = .59 - .34 = .25 < .31$ ; hence  $OC_1 - OC_4$  is not significant.
6. The second largest minus the smallest:  $OC_4 - OC_3 = .34 - (-.58) = .92 > .34$ ; hence  $OC_4 - OC_3$  is significant.
7. The second largest minus the second smallest:  $OC_4 - OC_2 = .34 - (-.46) = .80 > .33$ ; hence  $OC_4 - OC_2$  is significant.

8. The second largest minus the third smallest:  
 $OC_4 - OC_5 = .34 - (-.01) = .35 > .33$ ; hence  $OC_4 - OC_5$  is significant.
9. The second largest minus the fourth smallest:  
 $OC_4 - OC_6 = .34 - .2 - .22 < .31$ ; hence  $OC_4 - OC_5$  is not significant.
10. The third largest minus the smallest:  $OC_6 - OC_3 = .12 - (-.58) = .70 > .33$ ; hence  $OC_6 - OC_3$  is significant.
11. The third largest minus the second smallest:  
 $OC_6 - OC_2 = .12 - (-.46) = .58 > .33$ ; hence  $OC_6 - OC_2$  is significant.
12. The third largest minus the third smallest:  
 $OC_6 - OC_5 = .12 - (-.01) = .13 < .31$ ; hence  $OC_6 - OC_5$  is not significant.
13. The fourth largest minus the smallest:  $OC_5 - OC_3 = -.01 - (-.58) = .57 > .33$ ; hence  $OC_5 - OC_3$  is significant.
14. The fourth largest minus the second smallest:  
 $OC_5 - OC_2 = -.01 - (-.46) = .45 > .31$ ; hence  $OC_5 - OC_2$  is significant.

15. The fifth largest minus the smallest:  $OC_2 - OC_3 =$   
 $-.46 - (-.58) = .12 < .31$ : hence  $OC_2 - OC_3$  is not  
significant.