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DISSERTATION

# IMAGE - A FACTOR IN TOURISM

Submitted by

John D. Hunt

In partial fulfillment of the requirements

for the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

August, 1971

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COLORADO STATE UNIVERSITY

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ABSTRACT OF DISSERTATION

IMAGE - A FACTOR IN TOURISM

The images of Colorado, Montana, Utah, and Wyoming, as perceived by non-residents of these states were identified and compared. The data were collected by a mail questionnaire administered to respondents from the cities and surrounding suburbs of Rochester, New York; Cleveland, Ohio; Des Moines, Iowa; Phoenix, Arizona; and Fresno, California. While the socio-economic characteristics of the respondents did not conform closely to the general population of these areas they were similar to those of tourists recently visiting the Rocky Mountain states. Consequently, it was postulated that the state images described in this study would be similar to those held by other individuals most likely in the tourist market for Colorado, Montana, Utah, and Wyoming.

It was concluded that non-residents, from a particular region of the United States, generally perceived land, climate, population, and recreational characteristics of a state similarly. In addition, they perceived significant differences in these characteristics between states.

While residents of different regions generally agreed upon the characteristics of a given state, such agreement was not unanimous. Coupled with the fact that different regions of the United States represent markets of different magnitude, this lack of image agreement supports the concept that state tourist promotion must be different in both quantity and content.

From limited subanalysis of the data, it was suggested that respondents who had lived and/or visited in one or more of the four states did not perceive



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image characteristics significantly different from those who had not lived and/or visited in the states. In addition, respondents from different occupational classes did not perceive image characteristics significantly different.

In the final analysis, based upon an expression of respondent vacation destination preferences for the four states, Colorado was thought to have the "best" vacation image. It was generally perceived as a mountainous state with moderate summer temperatures and much winter snow. (Colorado's snow quantity was perceived as significantly more than Utah but significantly less than Montana and Wyoming.) Colorado residents were perceived to have family incomes above national average, middle-of-the-road political tendencies, and progressive attitudes. All recreational activities and attractions were thought to be very impressive.

Montana and Wyoming images were perceived as similar. They were lower in vacation preference than Colorado but higher than Utah.

The Utah image was suggested to be the least attractive of the four states. It was perceived as a desert state considerably hotter and drier than the other states. Utah residents were thought to have family incomes below national average and conservative political tendencies. Many respondents perceived Utah residents to look and dress much like the western pioneer of the late 1800's or similar to certain religious sects such as the Amish Mennonites and Hutterites.

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# CHAPTER I

## INTRODUCTION

Although many Americans do not travel for vacations because of income and time limitations (Mueller and Gurin, 1961), each year millions of others spend large sums of money and time seeing new places, visiting friends and relatives, and taking part in many recreational activities. "An estimate by the American Society of Travel Agents, based on government statistics, indicates that in 1965 Americans spent over $32 billion on all types of travel, travel services, equipment for facilities (Floor, 1966, p. 79)."

"The travel industry is not only big business, but is growing at a much faster rate than that of the total economy (Floor, 1966, p. 79)." Similar statements are common throughout outdoor recreation and tourism literature. Katona (1964, p. 278) noted that, "studies indicate that there is only a small minority who have no desire to travel." Omitting only those in the lowest one-quarter of the socio-economic scale, Judson (1967) found that only four percent of the United States heads of households expressed an unwillingness for vacation travel. Mueller and Gurin (1961, p. 122), said, "it appears that the desire to travel is strong and widespread among the American people. Nearly half of all families take a vacation trip in any given year. . . ."

Realizing a burgeoning market, state and community leaders have become increasingly interested in attracting a share to their regions. The Chamber of Commerce of the United States (1965, p. 1) says:

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> Tourist promotion is a key operation in any region, state, or community development program.
>
> Basically, there are three ways in which to bring new money and business into a given area. There are agricultural development, industrial development, and tourist development. Tourist development is probably the quickest, least difficult method of the three.

However, tourism is a highly competitive industry. Arthur D. Little, Inc. (1967, p. 78), in its "state-of-the-arts" study on tourism and recreation observed that, "there is considerable competition between one tourist/recreation region and the next. Promotion and advertising are essential if an area is to maximize the economic benefit to be derived from the tourist." Not only the competitiveness of the tourist industry but also its magnitude is evident in the myraid of programs and size of expenditure devoted to travel promotion. In 1965, over 46 million dollars were spent for advertising travel in magazines alone (Floor, 1966). Millions more were spent in radio, television, newspapers, and other advertising media to stimulate tourist travel and visitation to particular countries, states, regions, towns, and businesses.

State government tourist and vacation advertising and promotion organizations reported expenditures of over 23 million dollars during the fiscal year 1967-68 (Arnold, 1967). Another 25 million dollars were expended by the larger cities and counties in an effort to promote tourist and vacation travel (Arnold, 1967). Hunt (1969, p. 93) suggested that the total state, region, and community tourist promotion expenditure is probably minor "when compared to that spent by the major airlines, oil companies, hotel and motel chains, and other industries bent on stimulating travel."

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All segments of the tourist industry spend large sums of money attempting to build an image. States, for example, attempt to create an image through various message themes and through a myraid of advertising and promotion techniques. Most of these efforts are directed towards extolling the quantity and quality of a state's outdoor attractions such as national parks and monuments, forests, historical areas, lakes, rivers, and other natural resources. However, an examination of the magnitude of many state tourist industries (Business Research Division, University of Colorado, 1969) in comparison to the number of national parks monuments, forests, and other tourist attractions suggests very little correlation. For example, Colorado, while having only three-quarters as many National Park Service areas as Utah (United States Department of the Interior, 1968) receives five times as much in tourist expenditures (Bichert, Oldham, and Ryan, 1969 and Hunt and Brown, 1970). While tourists visiting Colorado are estimated to stay an average of over five days in the state (Bichert, Oldham, and Ryan, 1969), Utah visitors (summer months) are estimated to stay less than one and one-half days (Hunt and Brown, 1969).

Such discrepancies in resource base and tourist visitation and expenditures suggest that many other factors may be involved in characterizing a successful tourist state or region. Although many of these other factors are undoubtedly of a physical nature such as highway locations and tourist and resort services, state image, as perceived by non-residents or potential tourists, may also be an important determining factor of the success or nature of a state's tourist industry. An examination of the impressions of non-residents of a

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selected group of states should indicate whether or not different and identifiable state images are maintained. If images are recognized, they might provide some indication of the various reasons why some states maintain successful tourist industries while others with similar attractions and physical characteristics are less successful. Identification of images should also give direction to improving both tourist promotional campaigns and other informational and industrial development efforts.

## Objectives

I. To identify image or "personality" variables for which non-residents within different regions of the United States agree as describing land, climate, resident population, and recreational character of Colorado, Montana, Utah, and Wyoming.

II. To determine if the perception of selected image variables for selected states differs between individuals who have and who have not lived and/or visited in the states.

III. To determine if the perception of selected image variables for selected states differs between individuals of different occupation classes.

IV. To determine the images of Colorado, Montana, Utah, and Wyoming as perceived by non-residents.

V. To recommend tourism promotion and advertising strategy which may change or reinforce image percpetions.

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## Definitions

### Tourist

In the Arthur D. Little, Inc. (1967) "state-of-the-art" study, Tourism and Recreation, it was noted that many definitions of "a tourist" are utilized and there is little consistency in definition between numerous studies.

After a discussion of these definitional problems, Arthur D. Little, Inc. (1967, p. 7) admitted "that the entire issue of whom to include as 'a tourist' is very nebulous." The Committee on Research Methods of the Western Council for Travel Research (1963) in preparing its publication, Standards for Traveler Studies, recognized similar problems in defining the tourist. It finally suggested that such a definition is not necessary. Arthur D. Little, Inc. (1967) also suggested that a universal definition of a tourist for use in all tourist studies is not necessary or particularly desirable. It believes the definition utilized should be tailored to the study in question. However, it offers a common definition of a tourist that would best fit studies that are directed towards measuring tourist expenditures in a given state.

After reviewing the various definitions of tourists utilized by many groups, it was determined that the following was the simplest and most comprehendable:

> Tourists can best be defined as individuals visiting an attraction or area for recreation or touring purposes, who reside outside of an established limit or boundary (Hunt and Brown, 1969, p. 2).

The established boundary for this dissertation is the combined state lines of Colorado, Montana, Utah, and Wyoming. Any reference to a tourist or

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tourists will be made with regard to the definition by Hunt and Brown (1969). Any reference to "tourism" will imply any industry, business, or activity generated by individuals fitting the above definition, unless otherwise specified.

Non-resident

A non-resident is defined as a person who does not presently reside in Colorado, Montana, Utah, or Wyoming, unless otherwise specified.

State Image

State image is defined as the impressions that a person or persons hold about a state in which they do not reside. The impressions may be derived from numerous sources: from actual experience and hearsay about the state; from the types of people living or who have lived or visited in the state with whom the individual may have contact; from reading material of an informal or academic nature; from what may be said in state promotion or advertising, and so forth. This image may be made up of impressions about the land, climate, resident population, and recreational characteristics of the state. All of these impressions may be synonymously defined as a "state personality." Images are implied to mean the aggregate impressions of the public in general or any stratified segment thereof.

## Limitations

The data included within this paper have the following limitations. No attempt should be made to interpret or extrapolate the results beyond the limits.

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1. This study should be regarded as an exploratory or "pilot" study since the literature indicates that effort beyond that mentioned has never been made to ascribe image profiles to states or to other political or geographical regions.
2. This study was limited to selected image characteristics of Colorado, Montana, Utah, and Wyoming. These characteristics include the following: land type; amount of winter snow; level of summer temperature; population distribution; average annual family income; political tendencies; receptiveness of local residents; overall progressiveness; impressiveness of national parks, cities, and national forests; impressiveness of camping, sightseeing, skiing, hunting, and fishing; and looks and dress of residents.
3. The initial population from which the study sample was drawn was limited to the following test market areas selected from five of the nine Bureau of the Census geographical subdivisions (see Appendix A for definition of the Bureau of the Census geographical subdivisions):

| Test Market | Geographical Subdivision |
|---|---|
| I. Rochester, New York | Middle-Atlantic |
| II. Cleveland, Ohio | East North Central |
| III. Des Moines, Iowa | West North Central |
| IV. Phoenix, Arizona | Mountain |
| V. Fresno, California | Pacific |

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For ease of discussion these test markets will be referred to as Regions throughout the remainder of this paper.

4. The initial population was also limited to families or individuals listed in the telephone directories of the above five regions.
5. The final population for which results of this study were interpreted was limited to that percentage of the total population represented by the percentage return of the questionnaire.
6. No attempt was made to describe the portion of the initial population represented by non-response to the questionnaire.
7. The results of this study are limited to the specific places and time under study. They are related only to a static rather than to a changing situation. The future influences of population growth, changes in advertising and promotion programs, and other changes in state images can not be predicted from the results of this study.
8. Data for analysis in this study are limited to those contained in mail questionnaires returned within four weeks after the second mailing.
9. No attempt was made to extrapolate the data of this dissertation to the total United States population or to any of its geographical subdivisions.

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# CHAPTER II

# REVIEW OF LITERATURE

## Tourism and Image

The magnitude of the travel market has prompted a deluge of research, the majority of which is quantitative. In general, this research is a catalog of socio-economic characteristics and leisure or vacation habits of tourists visiting specific regions, states, or communities. Each state has studies which describe the characteristics of its visitors (Goeldner and Allen, 1967). Numerous other studies examine general national travel patterns as well as more specific information about camping, air travel, motel-hotel businesses, trailer travel, travel advertising, boating, skiing, and so forth (United States Department of Commerce, 1964; Lansing and Blood, 1964; Air Transport Association of America, 1966; Edwards, 1966; United States Department of Agriculture, 1966; Hartung, 1962; Morgan, 1964; and Herrington, 1967). A 71 page publication, Bibliography of Tourism and Travel Research Studies, Reports and Articles, attests to the multitude of research publications developed from 1960 to 1966. In addition, considerable effort is devoted to outdoor recreation and leisure research (United States Department of the Interior, 1967 and 1968).

The Business Research Division, University of Colorado (1969), has also drawn together all of the available statistics on travel in the United States and Canada. This volume contains data on tourist visitations to national park

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areas, state parks and similar areas, national forests, states, and Canadian provinces. In addition, it catalogues and compares tourist expenditures, advertising, transportation, and economic impact.

Probably the most definitive work on tourism in general is a problem analysis prepared by Arthur D. Little, Inc. (1967). The analysis was designed as a "state-of-the-art" study and contained a minimum of original research. Major emphasis is devoted to an examination and critical analysis of available literature pertaining to research of various segments of the recreation and tourism field. In general, the study results indicate a wide variety, often inaccurate, of recreation and tourism research methodology. Techniques of measuring tourist expenditures and their impact on the economy of a state or region were found to be lacking in agreement.

Efforts to determine why particular areas or regions are popular tourist destinations receive little attention. The majority of related research is undertaken to discover the general reasons people travel (Judson, 1967). Casual observation of tourist travel patterns and destinations suggests that there are particular areas which are popular and therefore more frequently visited. Hunt (1968) recognized that several locations in the Western United States seem to be particularly popular on tourist itineraries. He suggested, "because of reputation and tradition, these areas emerge as primary destination points or 'tourism nodes' (p. 36)."

The "reputation and tradition" of these areas hint that tourists have a degree of knowledge about them. The level of knowledge or attitude toward

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these and other areas may provide insight in the developing of other destination areas or "nodes." "How best to market such a varied package as outdoor recreation has been little studied (Brown and Hunt, 1968, p. 2)." Although some research has been concerned with examining what visitors think of a particular place after having visited it, little has been done to determine images or attitudes that are perceived about an area or state before it is visited.

The majority of image research has been devoted to interpreting corporate, product, and brand image profiles. The concept of corporate image "is based on the recognition that clients buy brand products not only because of their inherent qualities but also because of a bias, a disposition toward products of selected manufacturer (Sepctor, 1961, p. 47)." Bayton (1959) suggested that companies are often perceived as having personalities and may be characterized as being mature, liberal, friendly, conservative, unfriendly, etc.

Anastasi (1964, p. 305), in recognizing the complexity of the corporate image, noted:

> The corporate image is affected by every aspect of a company's operation, from the quality of its products and the nature of its employee relations to the appearance of its buildings and grounds and the printing type used on its letterhead.

Herzog (1967a) pointed out that products have various meanings to consumers which may be both rational and symbolic. She noted that "the application of behavioral science concepts, particularly the various psychological theories, has been useful in helping us toward a better understanding of the 'product' (p. 354)." These concepts help to identify the "subjective component in

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perceptions" and aid "in determining how the consumer sees the product, not what it is technically (Herzog, 1967a, p. 354)."

Engel (1961, p. 29) recognized that research on consumer motivation strongly suggested "that the consumer follows logical patterns of behavior to attain more or less clearly defined objectives." However, he noted that it has become apparent that consumers buy a product or service not only because of what it "will do for him performancewise [sic.] but also on what it means to him (p. 29)." Emotional or psychological reactions to a product or service are of major importance in understanding the image.

Woods (1964, p. 99), in discussing the success of a new product, noted that the extent of that success is based on "the proudct concept and the physical characteristics of the product." He suggested that products are initially tried on the basis of percepts and are "repurchased or discarded on the basis of tangible satisfaction (p. 99)." Other writers believe that the conceptual appeal of many products continues to be an important factor as long as the products are utilized by the consumer (Herzog, 1958; Engle, 1969; and Nelson, 1962).

Nelson (1962, p. 67) offered several principles for image formation. He suggested that "the creation of markets for products is as necessary as the creation of products for the market." He noted that the combination of attitudes which people hold toward a product constitutes an image. When these images are influenced, consumer behavior is influenced. He further suggested that, "people have hidden urges or desires which have been repressed or buried in the subconscious areas of the mind (p. 68)." If a product image is constructed which

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satisfies these needs, people will buy the product. Nelson (1962, p. 68) indicated:

> Physical attributes of a product act only as stimuli capable of developing certain associations in the minds of individuals. Such associations may be pleasant or unpleasant. The image makers strive to translate these stimuli into images favorable to their product.

Brand image is equally as complex as corporate and product image. It too comprises a conglomerate of consumer impressions which constitute a brand personality. Herzog (1967b, p. 375) explained that:

> Brands, like products, are perceived by the consumer in the form of "brand images." This is the sum total of impressions the consumer receives from any sources: from actual experience and heresay about the brand itself as well as its packaging, its name, the company making it, the types of people the individual has seen using the brand, what was said in its advertising, as well as from the tone, format, type of advertising vehicle in which the product story was told.
>
> All these impressions amount to sort of a brand personality which is similar for the consuming public at large, although different consumer groups may have different attitudes toward it.

In explaining that a brand's technical virtues constitute only a part of the reason for its consumption, Herzog (1967b, p. 376) noted: "we find rather frequently that consumers tend to prefer the brand whose image is congenial to them."

Brink and Kelley (1963, p. 158), in elaborating on seven types of marketing images presented by Harris (1958), suggested that:

> Since there are no objective, easily dramatized product distinctions among soaps, whiskeys, cigarettes, and most packaged grocery and drug items, the advertiser must give his brand a sharply defined personality. He must treat it symbolically and give it a feeling tone specifically oriented to support the symbolism.

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Levy (1959, p. 410) further supported the importance of symbolism in consumer buying habits and product purchases:

> The things people buy are seen to have personal and social meanings in addition to their functions. Modern goods are recognized as psychological things, as symbolic of personal attributes and goals, as symbolic of social patterns and strivings. In this sense, all commercial objects have a symbolic character, and making a purchase involves an assessment--implicit or explicit--of symbolism to decide whether or not it fits. Energy (and money) will be given when the symbols are appropriate ones, and denied or given parsimonously when they are not. What determines their appropriateness?
>
> A symbol is appropriate--and the product will be used and enjoyed when it joins with, meshes with, adds to, reinforces, the way the consumer thinks about himself. In the broadest sense, each person aims to enhance his sense of self, to behave in ways that are consistent with a set of ideas he has about the kind of person he is or wants to be.

It seems hardly debatable that image development plays an important role in tourist promotion. A review of the promotion literature utilized by states in an effort to attract visitors leads to the conclusion that states are attempting to construct some kind of image. The majority of state promotional material, including brochures, posters, leaflets, media advertising, maps, packaging and labeling material, stationery, and so forth, is characterized by a common thread which attempts to ascribe an image. While Colorado attempts to create a "colorful" image, Montana and Wyoming encourage a perception of vastness through their "Big Wyoming" and "Big Sky Country" promotional mottos (Colorado Advertising and Publicity Section, date unknown; Montana Highway Commission Advertising Department, date unknown; and Wyoming Travel Commission, date unknown). Utah seeks a variety image by encouraging visitors to "Discover the Different World of Utah (Utah Travel Council, date unknown)."

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Hunt's (1968) research on tourist vacation planning habits suggested that the tourist's knowledge about a state or region may be very important as to whether or not it becomes a destination on a vacation itinerary since the itinerary is generally formulated prior to the departure and adhered to throughout the trip. Hunt (p. 33) noted:

> At some time prior to the vacation departure . . . tourists develop a vacation plan. They draw upon their knowledge, various printed information, friends, planning organizations and others to assist in formulating the vacation plan. The majority of the tourist parties sampled in the Bear Lake area planned their trip before departure. They planned for each day and were generally scheduled to be in a predetermined area and take part in a predetermined activity. They knew the general area in which they would spend each night.

Very little research has been conducted to determine state or region image and its relationship to selling or buying tourism. In 1962, the United States Travel Service conducted market research in Great Britain, France, West Germany, Italy, Brazil, Venezuela, Mexico, Japan, and Australia to determine the attitudes of potential travelers to the United States (United States Department of Commerce, 1962). The study generally described the Americans and the United States as perceived by a sample of respondents from each of the countries.

The Australians, on one hand, suggested that Americans are "friendly, interesting, rich, warm hearted, hard working, cosmopolitan, honest, courteous, and happy (p. 11)." On the other hand, sizable numbers of Australians "consider the American hard, materialistic, tense, vulgar, insecure, and childish (p. 11)."

In reference to attitudes and opinions toward the United States, Italians "believe the United States has good roads, modernity, variety, many large cities,

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efficient transportation, and much interesting entertainment (p. 54)." On the negative side, Italians indicated that the United States has "expensive food, poor food, lack of variety in foods, poor weather, expensive living, and over industrialization (p. 54)."

Casual review of the entire study suggests that the citizens of the above-mentioned countries who had visited the United States generally had a more favorable opinion of the United States and Americans than those who had not visited the U.S. In discussing brand image, Herzog (1967b, p. 375) noted that "users generally interpret the brand image more favorably than non-users although both groups agree on its essential outline."

Marketing research strongly suggests that opinions influence consumer buying habits. Morrissett (1957, p. 227) suggested that consumer behavior is predicated upon "enabling conditions" (income, assets, etc.), "precipitating circumstances, which re-orient spending habits" (income changes, marriage, childbirth, moving, etc.), and "attitudes" (motives, general opinions, expectations, etc.) "which can be thought of as a filter through which the first two sets of factors must pass before they can influence the behavior of consumers."

Hennessy (1965) in discussing various approaches to opinion holding (rational, psychological or Freudian, and economic determinism) felt that there was no single explanation for opinions. He contended that people have "existing or possible points of view on matters of relevance to the issue under consideration" and that limits on these points of view are "determined not only by what the

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individual knows, and what he thinks about what he knows, but also the physical and cultural facts or prohibitions that make controversy, and therefore public opinion, impossible (p. 166)."

Rogers (1962) concluded that the rate of adoption of new products is influenced by certain basic consumer perceived product attributes. He noted that, among other things, consumer compatability of a product is a significant factor in its rate of adoption.

Shaw (1965, p. 11) noted:

> Compatability is the degree to which an innovation is consistent with existing values and past experiences of the adopters. An idea that is not compatable with the cultural beliefs and values of a group will not be adopted so rapidly as an idea that is compatible.

The majority of the tourist research has devoted attention to studying the characteristics of the "adopters" or visitors who have accepted a particular vacation destination or route. Tourism and travel research in Colorado, Montana, Utah, and Wyoming has produced a myraid of publications, reports, and articles. The majority of this research examines the status of the general tourist industry or specific tourist markets.

In the past, L. J. Crampon researched many tourism problems and characteristics in Colorado. His research considered tourist expenditures, market analysis, and development (Crampon, 1963; 1963a; and Crampon and Droste, 1964). The most recent and complete study of Colorado tourism examines both resident and non-resident recreationists (Bickert, Oldham, and Ryan, 1969). Bickert et al.(1969, p. VII) indicated that "tourism produced $473

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million in direct sales and services in 1968" in Colorado. They determined that out-of-state tourist expenditures accounted for $319 million of that total. In addition to expenditures and trip patterns of both non-resident and resident vacationers, they examined skiing, national attitudes toward vacationing in Colorado, and economic impact of Colorado's "tourist" industry.

The quantity of tourism research done in Montana has been considerably less than has been produced in Colorado, Utah, or Wyoming. In 1966, the Economic Development Administration produced four volumes on the economic evaluation of tourism and recreation in Flathead, Lake, Deer Lodge, and Silver Bow counties, Montana (United States Department of Commerce, 1966, 1966a, 1966b, and 1966c). The Montana State Highway Commission (1963) summarized five years of tourist studies in Montana. Wallace and Blake (1966) examined the Montana travel industry for 1963-64. They analyzed characteristics of travelers in Montana taken from a lodging survey conducted by the Bureau of Business and Economic Research, University of Montana, and a roadside survey conducted by the Montana Highway Commission.

Wallace and Blake (1966) estimated that approximately 2.3 million out-of-state motoring tourists visited Montana during 1963-64 (July, 1963 to August, 1964) and spent a total of $76,695,815. Including tourists who traveled by air, railroad, or bus, it is estimated that all out-of-state visitors to Montana spent about $83,730,000 per year.

In Utah, until recently, the majority of the tourist research had been conducted by the Bureau of Economic and Business Research, University of Utah,

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and the Utah State Department of Highways. This research, like that conducted in the other states, contained the nature of tourist visitations during specific years and economic evaluations of potential tourist or recreation developments (Bureau of Economic and Business Research, University of Utah, 1958 and 1961; Nelson, 1965; Stewart and Lueck, 1966; Peery and Richardson, 1967; and Utah State Department of Highways, 1960).

Peery and Richardson (1967, p. 34) noted that "visitors traveled to Utah from every region of the country as well as from foreign countries." They estimated that "total visitor spending in 1965 reached $183 million up 103 percent from the $90 million in 1959 (p. 128)." It was estimated that summer visitors spend an average of 5.3 days and $33 per person while in Utah.

In 1966, Lueck and Uno (1966) prepared the 100 page Bibliography of Recreation and Tourism in Utah. This publication contains reference to a myraid of articles and publications which pertain to a wide variety of subjects.

Bradley and Lawson (1966 and 1967) developed the Utah Traveler Index which attempted to measure percentage change in non-resident travel to Utah from a base time period to some other comparable time period. Bradley and Lawson (1967) estimated that 6,639,000 travelers, who spent an estimated $219 million in the state, visited Utah in 1966. They noted that the Utah Traveler Index indicated, "during 1966, out-of-state automobile traffic to Utah increased 14 percent over 1965 (p. 3)."

Other Utah tourism research has studied consumer behavior, expenditures, and potential markets (Hunt and Brown, 1967 and 1969; and Brown and Hunt, 1968).

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Hunt and Brown (1969) determined Utah tourist expenditure and length-of-stay data, which differed appreciably from estimations by Peery and Richardson (1967) and Bradley and Lawson (1967). Hunt and Brown (1969) estimated an average length-of-stay per summer tourist party of 1.43 days with an average expenditure of $11.28 per person during the summer of 1968. They obtained their estimates by distributing diaries to travelers on each of the major highways entering Utah. They are continuing to gather information on Utah's non-resident traveler for each quarter of the year beginning the summer of 1969 (Brown and Hunt, 1969, 1970a, 1970b and Hunt and Brown, 1969, 1970a).

Brown and Hunt (1968) identified Utah's target markets for summer promotion. They were able to identify five geographical regions as primary or secondary market areas. Within these regions, market segments were described on the basis of party or family composition, education of head of household, family income, and various vacation characteristics. Hunt (1968), in a pilot study of Utah tourists, examined vacation planning characteristics and patterns.

Research on the Wyoming travel industry is generally quantitative in nature. Lund (1961 and 1961a) examined Wyoming's significance in the Western tourism industry. His work accounts for the most definitive research conducted on tourism in Wyoming.

Wyoming's annual tourist visitation is estimated at between seven and eight million (Wyoming Research Associates, 1968). However, a sizable part of these visitors is believed to be of a transient nature. Lund (1961a) indicated that less than 30 percent of all out-of-state highway travelers consider Wyoming

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to be their primary destination. Generally speaking, length-of-stay data suggest a visit of short duration by most out-of-state visitors. Lund (1961) also determined that an estimated total of 1.4 million travel parties, comprising 4.6 million persons, visited Wyoming in 1960. Wyoming Research Associates (1968, p. 11) estimated that, "between 1959 and 1964, annual expenditures by out-of-state travelers in Wyoming increased from $58.5 million to $78.5 million, an average annual compound rate of approximately six percent."

In June of 1968, Wyoming Research Associates (1968, p. 21) conducted a study "of the image which others have in mind when the name Wyoming is brought up." Several hundred questionnaires were sent to a selected group of in-state and out-of-state individuals believed to be in a position to appraise investment potential.

Although the study was designed to determine overall development potential, several portions of the study related specifically to tourism. While a wide variety of impressions about Wyoming were expressed, a general theme seemed evident in the majority of the replies:

> . . . out-of-state respondents invariably commented on space, size, attractions of Yellowstone and Grand Teton National Parks, remoteness, friendliness of Wyoming people, slow tempo, sparsity of population, scenery, and the like. Wyoming respondents commented on growth potential, problems of adjusting to change within the state, lack of capitalization, stage of underdevelopment, and the richness of the natural resource base. (Wyoming Research Associates, 1968, p. 21)

In addition to a general impression of Wyoming, the respondents indicated how Wyoming's investment potential in recreation and tourism compared with the potential of other states (table 1).

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TABLE 1. A comparison of how in-state and out-of-state respondents ranked Wyoming's investment potential in recreation and tourism with the potentials of other states.[a]

| State | No basis for comparison | Wyoming not as favorable | Opportunities the same | Wyoming more favorable |
|---|---|---|---|---|
| Colorado | 1 (1)[b] | 13 (5) | 8 (16) | 3(6) |
| Montana | 0 (0) | 1 (2) | 14 (15) | 10 (10) |
| Utah | 2 (1) | 4 | 11 (14) | 7 (12) |

[a]Source: Adapted from Wyoming Research Associates, 1968, Economic Development in Wyoming, Staff Report 68-1, Cheyenne, Wyoming, p. 23.

[b]Figures in parenthises are for in-state responses.

The only known research which examines and compares Colorado, Montana, Utah, and Wyoming from the consumer point-of-view is a recent publication by Better Homes and Gardens Research Department (1968). In a cooperative effort, John D. Hunt and Perry J. Brown, Institute for the Study of Ourdoor Recreation and Tourism, Utah State University, Ross Jurney and Associates, Inc., advertising firm in Salt Lake City, Utah, and Better Homes and Gardens Research Department conducted a comparative study following publication of a four-state advertisement which appeared in May and July, 1968, issues of Better Homes and Gardens Magazine.

A random sample of names was selected from those who responded to the May, 1968, Better Homes and Gardens Rocky Mountain West (Colorado, Montana, Utah, and Wyoming) advertisement. Names were also selected from respondents to the July, 1968, advertisement. Although this study sample was

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highly stratified, it produced some comparative opinions concerning the attractions and recreational activities in the four states.

A total of 500 questionnaires were mailed to the respondents. Both the initial mailing and the subsequent return were divided almost equally between the individuals who had responded to the May and July advertisements. A total of 401 completed questionnaires, accounting for an 80 percent return, were tabulated. Approximately 40 percent of the respondents had not visited any of the four states at any time prior to the survey.

Respondents were asked to give their impressions of the national parks, state parks, cities, national forests, and historical areas in each state. A five-interval semantic differential scale was used which ranged from very impressive to very unimpressive.

Although many respondents had not visited the states, they still volunteered some impressions of the attractions within the states. For example, while only 49 percent of the sample had visited Colorado, 81 percent expressed an opinion of the Colorado national parks. Without exception, more respondents than actual visitors expressed some opinion of all attractions in each of the four states. Generally speaking, Colorado and Wyoming were considered to have more impressive attractions than Montana and Utah.

Respondents were also asked to give their impression of eight different recreational activities--camping, sightseeing, cultural entertainment, winter skiing, nightlife, boating, hunting and fishing--in each state.

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The percentage of respondents who volunteered no impression of an activity and the percentage who had not visited a state were about the same. One notable exception was the opinion regarding sightseeing where 10 to 30 percent more of the respondents than had visited the state gave some expression of its impressiveness.

The recreational activities in Colorado and Wyoming were more favorably rated than those in the other states. Of the two less favorable states, Utah held a slight edge over Montana in impressiveness of recreational activities.

Although the Better Homes and Gardens Research Department (1968) sample was highly stratified, the income and occupational characteristics of its respondents generally compared to those of recent visitors to Utah (Hunt and Brown, 1967 and Brown and Hunt, 1968), Montana (Wallace and Blake, 1966), and Wyoming (Lund, 1961a).

In addition to cooperative research, Colorado, Montana, Utah, and Wyoming have been forerunners in the state regional approach to advertising and promotion. In 1959, the four states decided to pool part of their promotion programs on the premise that the Rocky Mountain West is a unit area for the tourist. Full-color advertising supplements have been placed in leading newspapers and magazines beginning with the New York Times in 1960 (Stalker, 1964). Other regions of the United States have undertaken similar cooperative regional promotion programs on a smaller or larger scale. Several authors have supported the concept of regional advertising.

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In commenting on the high degree of mobility evident in today's tourist, Arthur D. Little, Inc. (1967, p. 78) noted that, "the effective response to this mobility is obviously regional, rather than local promotion." Hunt (1968, p. 34), in discussing tourist vacation planning characteristics, observed that, "the indication of this study that tourists do plan (and the manner in which they plan) strongly suggests that promotion and information programs oriented to attracting the tourist should be combined efforts on regional and state scales."

Bowden (1963, p. 33) observed that regional approach to travel promotion has the advantage of "combining a large enough variety of attractions so as to appeal in one or more ways to every member of almost any family or group; of increasing the total 'pull' of the area so as to bring tourists longer distances than they would travel to any one attraction or activity; and of sustaining a higher level of tourist dollar inflow throughout the year by emphasizing attractions which do not all reach their peak at the same time."

## Review of Methodological Techniques

### Semantic Differential Scale

The semantic differential scale provides a technique whereby highly subjective data can be quantified. It is frequently used by advertising and marketing researchers when attempting to measure difficult-to-verbalize reactions of people to company, product, or brand image (Mindak, 1961).

The technique of the semantic differential was developed by Osgood, Suci, and Tannenbaum (1957). It "attempts to measure what meaning a concept

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might have for people in terms of dimensions which have been empirically defined and factor analyzed (Mindak, 1961, p. 28)." The most popular semantic differential scale is a seven-point equal interval ordinal scale bounded by descriptive polar-adjectives. Subjects or respondents make judgements of the concept in question at the interval on the scale which most nearly describes their feelings. Osgood and his associates tested and established 50 pairs of polar-adjectives for use with the semantic differential.

An example would be:

Good (1): (2): (3): (4): (5): (6): (7): bad

From left to right on the scale, the intervals are (1) extremely good, (2) very good, (3) slightly good, (4) undecided or about "equally good and bad," (5) slightly bad, (6) very bad, and (7) extremely bad. Respondents are encouraged not to ponder over the concept but to make a judgement as quickly and honestly as possible. The scale is not designed to determine if the respondent has made "the correct answer" but rather attempts to collect the respondent's "opinion."

For scoring purposes, weights can be assigned to each scale interval and the values from each scale are totaled to determine individual or group mean scores. These scores are presented as an "image profile." Mindak (1961, p. 28) argues that the "reliability of the differential is reasonably high, and the measure has a high degree of face validity."

Mindak (1961, p. 28) listed six specific advantages of the semantic differential for measuring company, product, or brand image:

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1. It is a quick, efficient means of getting in readily quantifiable form and for large samples not only the direction but intensity of opinions and attitudes toward a concept . . .

2. It provides a comprehensive picture of the "image" or meaning of a product or personality.

3. It represents a standardized technique for getting at the multitude of factors which go to make up a brand or product "image."

4. It is easily repeatable and quite reliable. Therefore, it can be used as a continuing measure sensitive enough to note changes in consumer reactions from year to year.

5. It avoids stereotyped responses and allows for individual frames of reference.

6. It eliminates some of the problems of question phrasing, such as ambiguity and overlapping of statements. In addition, it facilitates the interviewing of respondents who may not be too articulate in describing their reactions to such abstruse factors as a brand, product, or company image.

Many consumer products are extremely close in physical and utilitarian characteristics and, therefore, their producers or marketers attempt to create for them highly distinctive "personalities" or images. Many modifications of the semantic differential have been utilized by market researchers to make the technique more sensitive in determining subtle distinctions in images of similar products. Descriptive nouns and phrases have been used in conjunction with or as a substitute for simple one-word adjectives.

Some researchers feel the accepted list of adjective pairs lacks flexibility and so tailor-made scales have been constructed to better fit the product type under consideration. Both the selection of polar opposites and the degree of points or intervals on the scale may be modified. The tailor-made word and

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phrase lists are constructed from content analysis of the firm's and competitor's advertising, consumer word association tests, and depth interviews.

Occasionally, respondents hesitate to rate well-known companies or advertising content "using the negative side of the scales or to gradate a concept negatively (Mindak, 1961, p. 30)." To avoid this problem, some researchers have attempted to develop connotative and non-polar opposites. This is done "by 'heightening' the level of the dimensions or by using phrases which, although not necessarily denotatively opposite, still seem to fit logically and naturally into people's frame of reference (Mindak, 1961, p. 30)."

The semantic differential can quantifiably provide a "personality profile" of a given brand, product, or company. And it provides valuable information for identifying weaknesses and strengths which may be corrected or emphasized. It provides guidelines to developing advertising and marketing plans.

Projective Techniques

Although most popularly utilized in clinical psychology, motivation research has made extensive use of almost all kinds of projective technqiues (Anastiasi, 1964). In addition, projective techniques have been employed for personnel selection and executive evaluation in industry. Projective testing techniques are generally designed as an unstructured task, which allows the respondent a wide variety of possible responses.

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Vicary (1951, p. 39), in discussing six approaches of projective techniques which might be applied to market research, noted that such techniques can "get behind these rationalizations" which people often give as the reasons they think are responsible for their behavior and preferences. It is generally held that projective techniques force a respondent to solve or answer vague questions and partially defined situations by drawing upon his inner psychological resources or feelings (Vicary, 1951; Gustafson, 1958; and Anastasi, 1964). Britt (1954, p. 64) defined projective testing techniques as those in "which a person 'projects' himself and his own feelings and desires in his interpretation of special materials presented to him."

Projective techniques are considered to be less susceptible to faking them more direct techniques of testing (Anastasi, 1964). Such bias or faking is considered to be minimal because respondents are generally unaware of the way their responses will be evaluated or scored.

Sentence Completion and Word Association. Sentence completion and word association tests were some of the earliest projective techniques utilized. In sentence completion tests, respondents are given the beginning words of a series of sentences and instructed to write appropriate endings.

Word association tests are thought to be "one of the commonest devices for getting through people's defenses (Gustafson, 1958, p. 79)." Several variations of the word association test are employed in motivation research. In some cases, the respondent is given a list of disconnected stimulus words and instructed to reply with the first word which comes to mind. In other cases,

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the respondent may be encouraged to discuss, at length, whatever thought the word has stimulated. Responses to both sentence completion and word association tests can be evaluated or coded in several ways (Anastasi, 1964).

Picture Association. One of the most widely known projective instruments is the Rorscharch that utilized bilaterally symmetrical, irregular ink blots (Roscharch, 1942). A high degree of qualitative interpretation is necessary to translate responses to the Rorscharch ink blots into personality characteristics.

In motivation and marketing research, several picture interpretation tests patterned after the Thematic Apperception Test (Murray, 1943) have been utilized. The Thematic Apperception Test provides a series of pictures for which the respondent is to make up a story.

A technique similar to the Thematic Apperception Test is the cartoon test patterned after the Rosenzweig Picture-Frustration Study (Rosenzweig, 1947). The cartoon test is the most widely used projective technique for motivation research (Gustafson, 1958). Respondents are presented cartoon drawings which commonly have two netural looking persons. One of the persons is depicted as saying something that calls for a significant response from the other. The respondent is asked to supply the response in the blank speech balloon of the other person. Gustafson (1958, p. 79) suggested that the respondent "will usually project his own attitudes or feelings into the situation."

The utilization of various motivation and marketing research techniques in tourism research has been limited. In the future, with increased

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understanding and use of these techniques, considerable contribution to both the tourist and tourism will be realized.

Test Marketing

Test marketing is a widely accepted technique among producers for evaluating opportunities for new or changed products. Sales Management (1962, p. 55) noted that, "the market test is no longer an occasional operation launched by a cautious manufacturer; it is a fact of marketing life." Over the years the increasing sophistication of test marketing has, according to Day (1964, pp. 79-80), resulted in:

> Reduction, to some extent, of the risks involved in bringing the product to the test market stage.
>
> More willingness to marketers to pay the price for a meaningful, rather than a superficial market test.
>
> Increasing independence on larger test areas which can reproduce the approximate climate of the national market.

In reporting on a survey conducted by Sales Management of United States marketing men, Day (1964, p. 104) listed seven advantages of the test market in order of their importance:

1. Provides evidence on how product performs in competition.
2. Provides guidelines on whether to move into new markets.
3. Gives guidance on correctness of media.
4. Gives guidance on correctness of price.
5. Stops wasteful spending on a dubious product.
6. Gives direction on product improvement, if needed.
7. Gives guidance on the correctness of name.

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Test markets are selected with considerable care. These markets are tested to determine product acceptance on a national level. Sales Management (1962, p. 60) listed eight characteristics of a good test market.

1. Typicality of distributive outlets.
2. Relative isolation from other cities.
3. Availability of advertising media that will cooperate.
4. Diversified cross section as to ages, religion, etc.
5. Representative as to population size.
6. Typicality as to per capita income.
7. Previous good record as a test city.
8. Stability of year-round sales.

Ladik, Kent, and Nahl (1960, p. 33), in discussing the necessity for projectability and comparability of test market results, listed nine requirements which markets selected for testing should meet:

1. The market or markets should not be over-tested. On the other hand, there may be instances when using a market with a "track record" should be considered.
2. The market should have normal historical development in the product class.
3. The market should represent a typical competitive advertising situation.
4. The market should not be dominated by one industry.
5. State capitols, highly industrialized areas (where shutdowns could seriously impair buying power), college towns and other areas where population characteristics are not normal to the product's target market usually should be avoided.

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6. Projectability of results is an important factor. Therefore, the markets selected should represent different geographical regions, where varying conditions of use might influence sales.

7. The markets selected should be relatively independent, with little strong media competition and relatively little of the test market media circulation going outside the areas. The same principle applies to the movement of the product class being tested.

8. The markets should have a media pattern which conforms closely to the proposed national media plan. For example, TV set saturation should be close to the U.S. average.

9. Markets selected should not be too small to provide meaningful results nor so large that testing becomes too expensive in terms of the results expected.

Generally speaking, typical test markets are medium sized cities. They should not be so large or complex as to be atypical and not so small as to fail to reflect buying power. Most test markets fit in the 150,000 to 550,000 population range (Sales Management, 1963).

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# CHAPTER III

## METHODOLOGY

Data for this study were obtained from the return derived from an initial mailing of 4,000 questionnaires sent to a sample of households drawn from five United States regions or test markets during the summer of 1969. The data were compared and analyzed during the spring and summer of 1970.

The questionnaire was mailed to the sample respondents with an introductory cover letter (Appendix B), a business-address card, and a post-paid return envelope. The introductory cover letter was printed on letterhead of the Institute for the Study of Outdoor Recreation and Tourism, Utah State University, Logan, Utah.

The business-address card was enclosed with the questionnaire package to serve as an incentive to increase return. The incentive was a promise to supply respondents with information about the study and the four states upon request.

Kimball (1961) suggests that "useful incentive approaches are available, such as information sharing through promise of results, attractive premiums, intensive follow-ups, or attractive and appealing art work or formal design (p. 64)." Approximately one hundred requests for information were received.

In addition to use of the incentive listed above, a second questionnaire was mailed to the respondents who had not returned the first questionnaire within three weeks of initial mailing. A cover letter (Appendix C) and

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business-address card were included with the questionnaire in the second mailing.

## The Questionnaire

The questions in the final questionnaire utilized to gather the data for this dissertation evolved from personal knowledge of the states under consideration, from state promotion program emphasis, problem analysis of state images as expressed by various state leaders, assistance from the staff of the Institute for the Study of Outdoor Recreation and Tourism, Utah State University, and pre-testing.

Although mail-questionnaires may be characterized by various biases and limited return (Anastasi, 1964), their use seemed to be the only applicable technique for gathering the data necessary for completion of this study. Budget limitations prevented in-depth personal interviews of a nation-wide sample. However, it was recognized that mail surveys have both advantages and disadvantages. Holms (1966, p. 238) listed the following advantages of the mail survey:

1. It eliminates the possible bias of the interviewer.
2. The respondent may give more time and thought in answering the questions.
3. Rural areas and remote places can be reached with less expense.
4. Some types of respondents who are difficult to interview personally can be reached.

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Following a review of tourism, motivation research, marketing, consumer psychology, and related literature, the pre-test questionnaire (Appendix D) was prepared for testing.

During construction of the questionnaire, every effort was made to formulate a testing apparatus which would assure the maximum possible return. It was assumed that questionnaire length, simplicity, and attractiveness or appeal were paramount to influencing the rate of return (Kimball, 1961). However, the pre-test questionnaire contained a quantity and complexity of questions from which those most significant were drawn for the final draft. Several motivation research techniques were explored in the pre-test questionnaire that were eliminated in the final questionnaire.

Following the pre-test, the final questionnaire was organized and coded for computer analysis (Appendix E). The final questionnaire contained several recognized and modified motivation research techniques. In addition to direct questions, semantic differential scales and multiple choice techniques were utilized.

The semantic differential was utilized both as a seven-point scale and a five-point scale. In the questions which were similar to those used in the Better Homes and Gardens Research Department (1968) study a five-point scale was utilized in order that comparisons could be made between the data obtained in this study and those obtained by the Better Homes and Gardens Research Department. However, after compilation of the data, comparison with the Better Homes and Garden Research Department data proved undesirable. Comparison

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proved difficult because of the differences in primary data gathering, differences in instructions to the respondents, and lack of information about the Better Homes and Gardens Research Department sample.

A multiple choice question incorporating drawings was utilized in this study. Question number 12 (Appendix E) depicted five drawings of man and woman couples. Although numerous couples might have been selected, the five - cowboy, pioneer one, farmer, average, and pioneer two, were chosen arbitrarily. However, it was assumed that several of the couples might represent stereotypes thought to exist in the Western United States. Respondents were asked to indicate their impression of how couples in Colorado, Montana, Utah, and Wyoming might look and dress.

The Pre-test Questionnaire

In February, 1969, the questionnaire (Appendix D) was pre-tested in an effort to remove ambiguities and repitition and to eliminate questions or parts of questions that seemed irrelevant to the study objectives or tended to confuse respondents.

The pre-test questionnaire was administered to approximately sixty undergraduate students enrolled in the Colorado State University, Psychology 445 - Consumer Psychology class. It was recognized at the outset that the students represented a highly biased sample and the resulting data would be invalid for describing state images. However, the class was chosen since it was believed that the students, because of course content, would be highly sensitive to question meaning and relevance. They were instructed to complete

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the questionnaire as rapidly as possible and record the time it took. Following completion of the questionnaire, the students were asked to review again the questions and offer criticism or comment regarding relevance, difficulty, and any suggested deletions or additions they believed would improve the questionnaire.

The tabulated results of the pre-test are not given here. However, a brief discussion of consequent questionnaire changes follows (reference to question numbers applies to numbers used in the pre-test questionnaire found in Appendix D).

Time. As was anticipated, the pre-test questionnaire was too long for use as the final questionnaire. Questionnaire length is an important determinant factor in encouraging or discouraging return of mail surveys (Kimball, 1961). Although there seems to be no accepted length for mail questionnaires, it is generally agreed that the shorter they are, the better they are. For purposes of this study it was decided that 15 minutes should be the average time necessary to complete the questionnaire.

In the pre-test, the students completed the questionnaire in ten to 40 minutes, with the majority of students taking approximately 25 to 30 minutes. Many of them complained that the questionnaire was too long. In an effort to shorten the questionnaire, the results and criticisms for each question were tabulated to determine which could be eliminated or changed.

Question Deletion. The sixth, seventh, and eighth parts of question number seven yielded similar results. Analysis of the data of these three parts

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suggested that they were interrelated and any separate part would provide adequate information on the subject. Consequently, the sixth and seventh parts were eliminated.

In question number ten, the students were unable to express their impressions of "state parks." They expressed an inability to recognize state parks as separate or specific attractions within the states. Similar results were obtained in the Better Homes and Gardens Research Department (1968) study that utilized the same question. With the exception of Colorado, over 40 percent of the respondents were unable to offer any opinion regarding the impressiveness of state parks in Montana, Utah, or Wyoming. In the case of Colorado, although slightly less than 40 percent, more respondents offered no impression for state parks than for the other four attraction categories. Consequently, the "state parks" category was eliminated from question number ten.

In question number 11, the students were unable to express their impressions of "nightlife" as a recreational activity. Although other categories of recreational activities in some states received greater numbers of no impression results, "nightlife" was consistently high in the percentage. In the Better Homes and Gardens Research Department (1968) study, between 64 and 71 percent of the respondents offered no impression on the "nightlife" of the four states. Consequently the "nightlife" category was eliminated from question number 11.

Question number 12 was eliminated in its entirety. Although questions of this nature have been successfully used in other image studies (Wells,

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Andriuli, Goi, and Seader, 1957; Wells, Goi, and Seader, 1958; and Winick, 1960), the length and complexity of the question seemed excessive for use in the final questionnaire. Many students objected to question number 12 and complained that it was too long and boring. In addition, many of the adjectives from the original list (Wells, Andriuli, Goi, and Seader, 1957) did not seem to be applicable to describing vacationing families.

Although it was decided to maintain questions four and nine in the final questionnaire, it was necessary to eliminate them at the last minute due to space limitations. While question nine seemed highly desirable because it was an original projective technique, it was decided that the purpose of this study was not to test methodology and, therefore, it was a prime candidate to be deleted. Question four provided little information for fulfilling the objectives of this study.

Wording and Layout. Criticisms from the pre-test yielded several suggestions for the rewording and layout of several questions. Changes resulting from pre-test comments are found in the final questionnaire (Appendix E). Generally speaking, the major changes in rewording involved increased emphasis in explaining that the questions were asking for "opinions" or "impressions," rather than for absolute "right" or "wrong" answers.

Expansion of the Semantic Differential Scales. Initially a five-point interval scale was utilized for the semantic differentials in question number seven. It was thought that, in the interest of questionnaire length, the five-point scale would yield adequate image profiles. In addition, since image

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research had never been applied to states, the definition of a general state image was considered more important than any attempt to recognize definite differences in image variables.

However, experience with the semantic differential led to the conclusion that a seven-point scale would yield more sensitive results and more meaningful image profiles. As a result, the semantic differentials in question number seven were expanded to seven-point interval scales in the final questionnaire. As previously stated, the five-point scale was maintained in questions number ten through eleven in anticipation that the results of this study could be compared with the results of the Better Homes and Gardens Research Department (1968) study.

The Final Questionnaire

The final questionnaire for mailing was printed in two forms. One-half of the questionnaires were printed in the format outlined in Appendix E. In the remaining one-half, the order of presentation of states was reversed. It was anticipated that the double questionnaire format would eliminate possible bias resulting from question or item positioning. Approximately 2000 of each questionnaire schedule were distributed in the initial mailing.

## Test Markets or Regions

During the fall of 1968, an exerted effort was made to locate a national sample from which results could be extrapolated to the national population. While numerous mailing lists were available, they all contained very highly

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stratified samples. Standard Rate and Data Service, Inc., (1968) offered over 4,000 separate mailing lists. They maintained over 30 lists under the "travel and touring" section of their catalog, not to mention numerous other lists which were related to vacation travel. Each list, however, was restricted to very particular socio-economic classes and life styles.

Although numerous public opinion and motivation research firms maintain national survey samples, they do not make their lists of respondents available for out-of-firm projects. These firms gather data for a research project of the nature outlined in this study at a cost ranging from a minimum of 20,000 to 40,000 dollars or more (National Opinion Research Center, 1968).

Correspondence with Louis Harris and Associates, Inc.,; United States Department of Commerce, Bureau of the Census; American Marketing Association; ORC Caravan Surveys, Inc.; National Family Opinion Research Center, University of Chicago; Survey Research Center, University of Michigan; Survey Research Center, University of California; and others led to the conclusion that a current national sample was not available and such a sample could only be drawn at a cost prohibitive to this study.

Because of the difficulty encountered in locating an adequate unbiased sample for this study, it was decided that the identification of national test markets frequently used for marketing and consumer research would serve as a starting point for describing regional populations and subsequently selecting

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study samples. Although it was recognized that test markets represent somewhat stratified populations, it was believed that they represented one of the best possible sources for eventually isolating a study sample other than drawing a completely new national sample.

For this study, approximately 30 test markets most frequently utilized in the last few years (Sales Management, 1962 and 1963; and Day, 1964) were grouped into five Bureau of the Census geographical subdivisions (United States Department of Commerce, 1960). One test market was drawn at random from each of the five groups.

## The Sample

### Size

The determination of size of sample was a difficult problem. Since no information about the regional populations was available, the necessary variables for sample size could not be calculated. Consequently, it was necessary to make several assumptions about the populations. Because of the nature of the study, it was necessary to utilize a sample size formula recommended for marketing research. The following formula was taken from Marketing Research (Boyd, Jr. and Westfall, 1964, p. 379).

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$$2\,\frac{\sigma}{M}\left(\frac{1}{\sqrt{N}}\right) = .05$$

Where

N = Size of sample
M = Mean
$\sigma$ = Standard deviation

For the purpose of this study, it was arbitrarily assumed that the sample size should be adequate to assure a 1 in 20 chance or .95 probability that the sample would provide an estimate which would not exceed 5 percent of the mean. Consequently, it was necessary to make the following assumptions:

1. The populations are normally distributed around the mean and therefore, a mean of 3.5 exists for the seven-point semantic differential scales and 2.5 for the five-point scales.

2. Standard deviations of 1.25 for the seven-point semantic differential scales and 1.00 for the five-point scales would be the maximum tolerated for acceptance of the data.

With these assumptions the following sample sizes were calculated:

Seven-Point Scales

$$2\,\frac{\sigma}{M}\left(\frac{1}{\sqrt{N}}\right) = .05$$

$$\frac{1.25}{3.5}\left(\frac{1}{\sqrt{N}}\right) = .025$$

$$\sqrt{N} + \frac{.357}{.025}$$

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$$\sqrt{N} = 14.28$$

$$N = 204$$

Five-Point Scales

$$2\frac{\sigma}{M}\left(\frac{1}{\sqrt{N}}\right) = .05$$

$$\frac{1.00}{2.5}\left(\frac{1}{\sqrt{N}}\right) = .025$$

$$\sqrt{N} = \frac{.40}{.025}$$

$$\sqrt{N} = 16$$

$$N = 256$$

A minimum of 204 questionnaires was deemed necessary for describing the seven-point semantic differential scales and 256 questionnaires for describing the five-point scales for each region. Since it was assumed that a 100 percent return could never be achieved, 800 questionnaires were distributed to each population (region). However, this further compounded the problem of analyzing the data since a return of 204 to 256 questionnaires was adequate to describe the population, but would not necessarily reflect a proper distribution since they would represent a sample of a sample. Therefore, it was recognized that, assuming a minimum return equal to or greater than the calculated sample size, only that portion of the total population represented by the percentage of

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questionnaire return could be described. In other words, since approximately 800 questionnaires were distributed to respondents in each region, a return of 204, or approximately twenty-five percent, could be utilized to make inferences about only 25 percent of a region's total population in the case of the seven-point semantic differential scales. Essentially, a potentially large non-response bias could be evident if the data were extrapolated to the total populations.

Non-response

Non-response bias is a problem encountered in most all mail surveys. There is generally no way by which the researcher can determine if the non-response portion of his sample is equivalent to the response portion. Occasionally, follow-up personal interviews of the non-response portion of the sample can be made where funds and time permit. In other cases, control data can be maintained and checked against the response portion of the sample (Hunt and Brown, 1969).

As mentioned previously, no effort was made to determine non-response bias. However, effort was made to compare the data with the Bureau of Census and other tourist study data in order to recognize any major differences or similarities with sample return data. Review of previous research strongly suggested that images, which are the major concern in this study, do not differ appreciably between social classes. Therefore, although no attempt was made to extrapolate the data to the total regional or national populations, it is suggested that images as perceived by the non-response segment of the sample are probably similar to those perceived by the response segment.

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It should be noted that "there seems to be great homogeneity in brand perception (Brink and Kelley, 1963, p. 158," and that product, brand, and corporate images are generally perceived similarly, regardless of socio-economic classification. Munn (1960) found that brand perception for various brands within several product classes was independent of consumer socio-economic class. He found no significant difference by income, education, or age.

Herzog (1967b, p. 375), in discussing the many variables of brand image, suggested that "all these impressions amount to a sort of brand personality which is similar for the consuming public at large . . ." She further noted that although users of a brand will "generally interpret the brand more favorably than non-users . . . both groups agree on its essential outline."

Sample Selection

The sample was drawn from the telephone directory of each region selected for study. Telephone directories were believed to be the best available source of addresses for sample respondents. While city directories were considered as a possible source of sample respondents, they were discarded because they were often restricted to the city limit boundaries. Many smaller cities or suburban areas do not have city directories. Telephone directories, although having limitations, generally contain the addresses of residents of the central city as well as surrounding suburban areas. It was believed that telephone directories allowed a better sample of both urbanites and suburbanites.

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The major difficulty with telephone directories is that some families are not listed and lower socio-economic classes may not own telephones. In the first case, the number of unlisted family or individual telephones is considered minimal. In the second case, the number of lower economic non-telephone owning families is considered both minimal and of little relation to the study. In 1967, approximately 88 percent of all United States households had telephone service (U.S. Department of Commerce, 1968).

Since families in the lower socio-economic strata do not generally travel for vacations, they are of little concern here. Luck, Wales, and Taylor (1961) suggested that past studies indicated that the most desirable surveys consist of people who are current and likely users in the product field. Judson (1967, p. 23), in his study of vacation travel attitudes, completely eliminated the lowest quarter of the socio-economic scale from consideration, "in order to focus as realistically as possible on the actual market for vacation travel . . ."

All sample respondents were selected at random, assuring that every family or individual listed in the directory had an equal opportunity to be chosen.

## Analysis

Three basic steps constitute the analysis of the collected data: (1) summarization of results and calculation of mean weighted scores, (2) comparisons using Chi-square, and (3) integration of the data to delineate probable state images.

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The following steps and assumptions constitute the analysis:

At the outset, an attempt was made to delineate regional state image profiles. The semantic differential scales were utilized to describe the images. Weights were assigned to each scale interval and then the values for each scale were totaled to determine an individual mean score. Weights of one through seven and one through five were assigned to the seven and five-point scales, respectively, moving from left to right on each scale. Verbal descriptions of the scores were derived from those found in the questionnaire.

Since a realistic score for each scale must be founded upon a clustering of scores around a particular scale interval or mean, a standard deviation of no more 1.25 for the seven-point scales and 1.00 for the five-point scales was required to accept the variable as valid for describing state image. If the standard deviations for any variable exceeded these maximums for two or more cases in three or more regions, the variable was deleted from all image analysis.

Following the description of the regional state images, limited comparisons were made of selected data on the basis of occupational class of respondents and whether or not the respondents had lived and/or visited in Colorado, Montana, Utah, and/or Wyoming. At the outset, it was arbitrarily determined that this limited analysis would be conducted for the two regions having the least and most respondents who had lived and/or visited in the four states and the two states which exhibited the highest and lowest vacation destination preference as calculate from question six. In addition, one seven-point semantic differential

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scale and one five-point scale was randomly selected and question ten was arbitrarily selected for this analysis.

An attempt was made to determine if image variable scores were similar between regions and could be applied to a general state image. It was arbitrarily assumed that if the regional values of a particular variable were not significantly different for four or more of the regions, the variable could be applied to a general state image.

In calculating the Chi-square values in this study, the weighted mean scores or percentages are not utilized. Chi-square values are calculated from the number and distribution of respondent choices over the semantic differential scales and multiple choice selections. However, since reporting of the data in the form utilized for Chi-square calculation would have increased the number of tables four and five fold and possibly confused comparisons between states and regions, only the weighted scores and percentages are presented in the tables and described in the narrative.

The number of respondents not completing various questions was not shown in the final analysis, and percentages and mean scores were calculated on the basis of the number of respondents completing each question. In no case did the number of "no replies" exceed 30, and in the majority of cases it ranged between five and ten.

Finally, it was assumed that the state having the highest vacation destination preference would exhibit the most favorable image characteristics. In the

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final analysis, an attempt was made to identify the nature of land, climate and population characteristics which are relatively most desirable for creating a tourist destination state.

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# CHAPTER IV

# RESULTS AND DISCUSSION

## The Sample

### Questionnaire Return

Table 2 indicates the effective questionnaire distribution and return for each region. While 800 questionnaires were sent to each region, slightly less reached the sample. In the final analysis, 34.8 percent of the effective distribution was returned. Regional return ranged from a low of 28.5 percent from Rochester to a high of 40.0 percent from Des Moines.

TABLE 2. Effective questionnaire distribution and return by region.

| Region | Sent | Returned[a] | Distribution | Unused[b] | Effective Distribution | Return | Percent Return |
|---|---|---|---|---|---|---|---|
| I | 800 | 54 | 746 | 13 | 733 | 209 | 28.5 |
| II | 800 | 38 | 762 | 9 | 753 | 218 | 29.0 |
| III | 800 | 20 | 780 | 8 | 772 | 309 | 40.0 |
| IV | 800 | 37 | 763 | 16 | 747 | 297 | 39.8 |
| V | 800 | 24 | 776 | 15 | 761 | 276 | 36.8 |
| TOTAL | 4000 | 173 | 3827 | 61 | 3766 | 1309 | 34.8 |

[a]Questionnaires returned unopened due to insufficient address, no forwarding address, addressee decreased, etc.

[b]Questionnaires returned unanswered, more than 50 percent incomplete, or after return deadline.

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Distribution

Using educational level as a comparative factor, the regional samples are not similar to the U.S. Bureau of the Census Standard Metropolitan Statistical Areas (table 3); while both the samples and SMSA's contained similar levels of heads of households who had attended high school (9-12 grades), the regional samples contained a larger percentage of respondents from the college education level and the SMSA's contained more from the 0-8 grade level.

As was discussed previously, marketing studies are often more desirable when directed to an examination of people who are likely consumers or users of a product. When comparing educational level of the sample respondents from each region with recent Colorado (Bickert, et al., 1969) and Utah (Brown and Hunt, 1968) tourists, there is no significant difference (table 4). A similar comparison using occupational class suggests that there is no significant difference between the occupations of the respondents from each region and Utah tourists (Brown and Hunt, 1968) (table 5).

In conclusion it is suggested that the sample size for each region is generally adequate for consideration in this study. However, the sample sizes in Regions I and II are less than desired for consideration of the five-point semantic differential scales. Therefore, any inferences made from these regions and scales must be considered less reliable than from the others. In addition, while the samples' education and occupation distribution are not representative of the SMSA's of each region, they do conform closely to that of recent Colorado and Utah tourists.

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TABLE 3. Comparison of educational level of respondents from five regions with U.S. Bureau of Census Standard Metropolitan Statistical Areas.[a]

| Grade in School Completed | Region I % | Rochester SMSA % | Region II % | Cleveland SMSA % | Region III % | Des Moines SMSA % | Region IV % | Phoenix SMSA % | Region V % | Fresno SMSA % |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-8 | 2.5 | 33.9 | 2.8 | 34.7 | 3.6 | 29.0 | 4.5 | 36.5 | 5.5 | 43.0 |
| 9-12 | 45.6 | 44.4 | 40.9 | 45.4 | 43.8 | 47.0 | 37.5 | 39.9 | 36.4 | 38.3 |
| College | 52.0 | 21.7 | 56.3 | 19.9 | 52.6 | 24.1 | 58.0 | 23.6 | 58.1 | 18.8 |

[a]Source: U.S. Census of Population, 1960.

TABLE 4. Comparison of educational level of respondents from five regions with recent Colorado[a] and Utah[b] tourists.

| Grade in School Completed | Region I[c,h] % | II[d,i] % | III[e,j] % | IV[f,k] % | V[g,l] % | Colorado | Utah |
|---|---|---|---|---|---|---|---|
| 0-8 | 2.5 | 2.8 | 3.6 | 4.5 | 5.5 | 5.5 | 4.5 |
| 9-12 | 45.5 | 40.9 | 43.8 | 37.5 | 36.4 | 39.3 | 37.5 |
| College | 52.0 | 56.3 | 52.6 | 58.0 | 58.1 | 55.2 | 58.0 |

[a]Source: Bickert, C. V. E., et al., 1969. A profile of the tourist market in Colorado-1968. Denver Research Institute, University of Denver, Denver, Colorado. 130 pp.

[b]Source: Brown, P. J. and J. D. Hunt. 1968. An Analysis of target markets for promotion of summer tourism in Utah. Institute for the Study of Outdoor Recreation and Tourism, Utah State University, Logan, Utah. 84 pp.

[c-g]are region comparisons with Colorado:

[c]Necessary Chi-square for significance at the .95 probability level is 5.991, at two degrees of freedom; this difference is not significant: $X^2 = 1.64$,

[d]this difference is not significant: $X^2 = .88$,

[e]this difference is not significant: $X^2 = .80$,

[f]this difference is not significant: $X^2 = .20$, and

[g]this difference is not significant: $X^2 = .16$.

[h-l]are region comparisons with Utah:

[h]Necessary Chi-square for significance at the .95 probability level is 5.991, at two degrees of freedom; this difference is not significant: $X^2 = 1.64$,

[i]this difference is not significant: $X^2 = .54$,

[j]this difference is not significant: $X^2 = .78$,

[k]this difference is not significant: $X^2 = 0$, and

[l]this difference is not significant: $X^2 = .10$.

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TABLE 5. Comparison of occupation class of respondents from five regions with recent Utah[a] tourists.

| Occupation Class | Region I[b] % | II[c] % | III[d] % | IV[e] % | V[f] % | Utah % |
|---|---|---|---|---|---|---|
| White Collar | 58.5 | 58.4 | 64.0 | 60.7 | 56.9 | 61.5 |
| Blue Collar | 28.3 | 30.8 | 25.5 | 25.0 | 23.7 | 25.5 |
| Other | 13.0 | 10.8 | 10.5 | 14.3 | 19.4 | 13.0 |

[a]Source: Brown, P. J. and J. D. Hunt, 1968. An Analysis of target markets for promotion of summer tourism in Utah. Institute for the Study of Outdoor Recreation and Tourism, Utah State University, Logan, Utah. 84 pp.

[b-f]are region comparisons with Utah:

[b]Necessary Chi-square for significance at the .95 probability level is 5.991, at two degrees of freedom; this difference is not significant: $X^2 = .20$,

[c]this difference is not significant: $X^2 = .76$,

[d]this difference is not significant: $X^2 = .30$,

[e]this difference is not significant: $X^2 = .06$, and

[f]this difference is not significant: $X^2 = 1.48$.

The following results, while not necessarily indicative of the attitudes of the general or regional United States population, are suggested to be a likely description of attitudes of those people in the United States who most likely would be in the tourism market for Colorado, Montana, Utah, and Wyoming.

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## The Combined Respondents

Because of regional differences in population and sample return, no effort was made to examine image variables for the total sample. However, descriptive information about the total sample is presented in anticipation that it will be of interest to the reader. Throughout the remainder of this study, this information is only referred to indirectly.

### Lived or Visited in the States

Colorado has been the home or vacation destination for more of the respondents than any of the other states (table 6). Montana and Wyoming have been the home of the least number of respondents. Montana has been visited by considerably fewer of the respondents than have the other states.

TABLE 6. Respondents who have lived or visited in Colorado, Montana, Utah, and/or Wyoming.

| | Lived | | | | Visited | | | |
|---|---|---|---|---|---|---|---|---|
| | Have Not | | Have | | Have Not | | Have | |
| State | No. | % | No. | % | No. | % | No. | % |
| Colorado | 1171 | 90.0 | 117 | 9.0 | 533 | 41.3 | 755 | 58.6 |
| Montana | 1253 | 97.2 | 35 | 2.7 | 837 | 64.9 | 451 | 35.0 |
| Utah | 1238 | 96.1 | 50 | 3.8 | 636 | 49.3 | 652 | 50.6 |
| Wyoming | 1253 | 97.2 | 35 | 2.7 | 657 | 51.0 | 631 | 48.9 |

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Vacation Habits

Nearly 93 percent of all the respondents indicated that within a year they usually have one or more vacation periods of one week or more. Approximately two-fifths of these indicated that their vacation is spent traveling to several areas. Another two-fifths were divided almost evenly between a vacation in one area or visiting relatives.

## State Comparisons by Region

Socio-economics

The socio-economic characteristics of the respondents are not significantly different between regions. In the preceding discussion of the sample size and distribution, no significant difference was noted between the education level (table 4) and occupation class (table 5) of the respondents of each region.

Examination of the age classes of regional respondents indicates no significant differences (table 7). Approximately two-thirds to three-quarters of each region's respondents are divided nearly equally between the 25-34, 35-44, and 45-54 year age classes. The remaining respondents are found in the other three age classes with the 20-24 year age class accounting for the least respondents from each region.

Acceptable Variables

In the following discussion, all variables are examined with the exception of one. Population distribution is the only variable which, by virtue of definitional limitation, is considered invalid. The semantic differential scores

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exceeded a standard deviation of 1.25 in all regions for three or more of the states (tables 10, 19, 28, 37, and 46).

TABLE 7. Age distribution of respondents from five regions.[a]

| Age Class | Region I | | Region II | | Region III | | Region IV | | Region V | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| 20-24 | 9 | 4.4 | 3 | 1.4 | 18 | 5.8 | 18 | 6.3 | 15 | 5.5 |
| 25-34 | 41 | 20.2 | 52 | 24.1 | 69 | 22.4 | 77 | 26.9 | 58 | 21.3 |
| 35-44 | 53 | 26.1 | 51 | 23.6 | 75 | 24.4 | 58 | 20.3 | 55 | 20.2 |
| 45-54 | 52 | 25.6 | 64 | 29.6 | 69 | 22.4 | 70 | 24.5 | 55 | 20.2 |
| 55-64 | 30 | 14.8 | 27 | 12.5 | 43 | 14.0 | 35 | 12.2 | 59 | 21.7 |
| 65 over | 18 | 8.9 | 19 | 8.8 | 34 | 11.0 | 28 | 9.8 | 30 | 11.0 |

[a]Necessary Chi-square for significance at the .95 probability level is 31.41 at 20 degrees of freedom; this difference is not significant: $X^2 = 28.58$.

## Region I - Rochester, New York

### Land and Climate Variables

Land Types. Region I respondents expressed predominate and significantly different opinions of the land types most characteristic of the four states (table 8). The differences were most evident between Wyoming and each of the other states. When examined separately, Montana and Wyoming were not seen as significantly different by the Region I respondents. Necessary Chi-square

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for significance at the .95 probability level is 9.49 at 4 degrees of freedom, and the difference between Montana and Wyoming is not significant: $X^2 = 4.737$.

With the exception of Utah, more than fifty-six percent of the respondents chose one land type for each of the states. Colorado is thought by this majority to be predominately mountainous while Montana and Wyoming are believed to be mostly grass and range land. Although over two-fifths of the sample characterized Utah as being desert, the remainder was divided among the other four land classes.

TABLE 8. Land types characteristic of Colorado, Montana, Utah and Wyoming as perceived by Region I respondents.[a]

| | Colorado | | Montana | | Utah | | Wyoming | |
|---|---|---|---|---|---|---|---|---|
| Land Type | No. | % | No. | % | No. | % | No. | % |
| Cities and Towns | 29 | 16.1 | 7 | 3.8 | 18 | 9.6 | 4 | 2.1 |
| Mountains | 102 | 56.7 | 35 | 17.0 | 36 | 19.1 | 39 | 20.6 |
| Desert | 11 | 6.1 | 8 | 3.9 | 82 | 43.6 | 16 | 8.5 |
| Grass and Range land | 27 | 15.0 | 105 | 56.8 | 24 | 12.8 | 107 | 56.6 |
| Farm Crop land | 11 | 6.1 | 29 | 15.7 | 27 | 14.4 | 22 | 11.6 |
| Other[b] | 0 | 0.0 | 1 | 0.5 | 1 | 0.5 | 1 | 0.5 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 322.71$.

[b]Because of the small number of entries this category was deleted in the Chi-square calculation.

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Snow. The respondents expressed a significantly different opinion of the quantity of snow between the states (table 9). However, examination of these differences suggests that Utah varied appreciably from the other states. The Utah scores accounted for nearly 54 percent of the contribution to the Chi-square value.

While the majority of the respondents chose snow quantity scores on the larger end of the scale, Montana received a weighted score indicating the greatest quantity with Utah the least. Montana is believed to have very much to much snow. Utah is perceived as a state receiving much to moderate winter snow

TABLE 9. Semantic differential weighted scores (SDWS) and standard deviations (SD) for quantity of snow and level of summer temperature for Colorado, Montana, Utah, and Wyoming as perceived by Region I respondents.

| State | Snow[a] SDWS (SD) | Temperature[b] SDWS (SD) |
|---|---|---|
| Colorado | 2.74 (1.20) | 3.28 (1.02) |
| Montana | 2.43 (1.22) | 3.49 (1.11) |
| Utah | 3.36 (1.26) | 2.91 (1.04) |
| Wyoming | 2.86 (1.28) | 3.36 (1.10) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 65.12$, and

[b]this difference is significant: $X^2 = 47.36$.

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Temperature. The respondents expressed a significantly different opinion of the summer temperature level between the states (table 9). However, as with the snow quantity, Utah varies considerably from the other states and accounts for approximately 50 percent of the contribution to Chi-square.

While a majority of the respondents favored the hotter end of the scale for all states, Utah is the only state which scored in the slightly hot to very hot range. The other states ranged in the slightly hot to moderate area. Montana received the highest weighted score which suggests an opinion that the summer temperature is the lowest of the four states.

Population Variables

Average Family Income. Region I respondents expressed significantly different opinions of the average family income of Colorado, Montana, Utah and Wyoming residents (table 10). However, Colorado scores contributed nearly 60 percent to the Chi-square value. Colorado residents are believed to be the only group to have incomes which are near to slightly above the national average.

Montana, Utah, and Wyoming residents are thought to have incomes below the national average annual income.

Political Tendencies. Region I respondents expressed significantly different opinions of the political tendencies of the residents of Colorado, Montana, Utah, and Wyoming (table 10). Although all states were scored on the conservative side of the scale, Colorado residents were perceived as

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significantly less conservative than those of the other states. Montana, Utah, and Wyoming residents were perceived to have similar political tendencies.

Receptiveness. Region I respondents expressed significantly different opinions of the receptiveness of local residents of the four states to vacation visitors (table 10). While all states are seen as having relatively receptive residents, Colorado obtained a semantic differential score .42 to .50 points lower than the other states which suggests a slightly higher receptiveness. Colorado scores contributed nearly 60 percent of the Chi-square value. Montana was the only state with a score in the slightly receptive to some receptive - some not receptive range. All other states scored in the next higher receptiveness area. However, it should be noted that Montana, Utah, and Wyoming all scored within 0.08 points of one another and are probably not significantly different.

Progressiveness. As with the majority of the other population variables, Region I respondents expressed significantly different opinions of the overall progressiveness of the residents of the four states (table 10). Colorado's semantic differential score again appears isolated from the other three states. Colorado scores contributed more than 55 percent to the Chi-square value.

Colorado's semantic differential weighted score is the only one which fell into the slightly to very progressive range. While no significant difference exists between Montana and Wyoming scores, Wyoming rated the largest score of the states which suggests least progressiveness.

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TABLE 10. Semantic differential weighted scores (SDWS) and standard deviations (SD) for population distribution, income level, political tendencies, receptiveness, and progressiveness of Colorado, Montana, Utah, and Wyoming residents as perceived by Region I respondents.

| State | Population[a] SDWS (SD) | Income[b] SDWS (SD) | Politics[c] SDWS (SD) | Receptiveness[d] SDWS (SD) | Progressiveness[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 4.32 (1.33) | 3.88 ( .92) | 4.19 (1.12) | 2.51 (1.08) | 2.96 (1.06) |
| Montana | 5.38 (1.33) | 4.67 ( .86) | 4.67 (1.01) | 3.01 (1.05) | 3.71 (1.01) |
| Utah | 4.70 (1.46) | 4.27 (1.02) | 4.70 (1.09) | 2.93 (1.08) | 3.42 (1.06) |
| Wyoming | 5.42 (1.26) | 4.57 ( .92) | 4.66 (1.06) | 2.96 (1.18) | 3.75 ( .99) |

[a]Necessary Chi-aquare for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 117.85$.

[b]this difference is significant: $X^2 = 109.92$,

[c]this difference is significant: $X^2 = 47.71$,

[d]this difference is significant: $X^2 = 48.78$, and

[e]this difference is significant: $X^2 = 79.06$.

Number of National Parks

Region I respondents expressed significantly different opinions of the states' rank in number of national parks (table 11). Colorado was believed to have the most national parks by a large majority of the respondents. Montana and Utah were thought to have the least number of national parks.

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The perceived rank order of national parks does not compare with the actual rank in the states (table 12). Utah, actually with the largest number of national parks and National Park Service areas, is ranked third by Region I respondents. Colorado, which has fewer national parks than Utah and an equal number to Montana and Wyoming, is ranked as having the most by the respondents.

## Attractions

National Parks. Region I respondents expressed significantly different opinions of the impressiveness of the national parks in the four states (table 13). Colorado, whose parks were thought to be appreciably better than the other three states, contributed over 45 percent to the Chi-square value. Utah, although receiving a score on the positive side of the scale, was thought to have the least impressive parks of the four states.

TABLE 11. Rank order in number of national parks thought to exist for Colorado, Montana, Utah, and Wyoming by Region I respondents.[a]

| | Rank in number of National Parks | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | Weighted | |
| State | No. | % | No. | % | No. | % | No. | % | score | rank |
| Colorado | 109 | 55.6 | 37 | 18.9 | 33 | 16.8 | 17 | 8.7 | 1.78 | 1 |
| Montana | 19 | 9.7 | 47 | 24.1 | 59 | 30.3 | 70 | 35.9 | 2.92 | 4 |
| Utah | 22 | 11.2 | 50 | 25.5 | 53 | 27.0 | 71 | 36.2 | 2.87 | 3 |
| Wyoming | 46 | 23.6 | 62 | 31.8 | 50 | 25.6 | 37 | 19.0 | 2.40 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 160.83$.

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Cities. The impressiveness of the cities of the four states was rated significantly different by the respondents (table 13). However, while cities in Colorado and Utah were thought to be equally impressive, the cities in Montana and Wyoming were equally unimpressive. Over 50 percent of the respondents were unable to give any impression of the cities of Montana and Wyoming.

National Forests. Region I respondents expressed significantly different impressions of the national forests of the four states (table 13). As with impressions of national parks, Colorado and Utah tended to be isolated on opposite ends of the range. The semantic differential scores for Montana and Wyoming were nearly equal.

TABLE 12. Number of National Park Service areas[a] in Colorado, Montana, Utah, and Wyoming and comparison with rank order thought to exist by Region I respondents.

| State | National Park Service Areas[b] | | | | Total | Rank | Region I Rank |
|---|---|---|---|---|---|---|---|
| | NP[c] | NM[d] | NRA[e] | Hist[f] | | | |
| Colorado | 2 | 6 | 1 | | 9 | 2 | 1 |
| Montana | 2 | | | 1 | 3 | 4 | 4 |
| Utah | 3 | 8 | 1 | 1 | 13 | 1 | 3 |
| Wyoming | 2 | | | 2 | 4 | 3 | 2 |

[a]Source: U.S. Department of the Interior. 1968. National Parks and landmarks, National Park Service, U.S. Government Printing Office, Washington, D.C. 127 pp.
[b]States which share areas are each given one count. For example, Yellowstone National Park is counted twice, once for Montana and once for Wyoming.
[c]National Parks
[d]National Monuments
[e]National Recreation Areas
[f]National Historical Sites

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Recreational Activities

In the case of all the recreational activities for which respondents gave impressions, there was a significant difference between the states (table 14). While the activities for all states were scored on the positive side of the scale, Colorado was consistently rated more impressive than the other states, and Utah was rated less impressive in all activities except sightseeing.

In the cases of sightseeing and skiing, Colorado is favorably isolated from the other states. Impressions of camping, hunting, and fishing in Utah tend to be unfavorably isolated. As with previous variables, Montana and Wyoming tend to fall between Colorado and Utah and are nearly equal in scores.

TABLE 13. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impression of national parks, cities, and national forests in Colorado, Montana, Utah, and Wyoming as perceived by Region I respondents.

| State | National Parks[a] SDWS (SD) | Cities[b] SDWS (SD) | National Forests[c] SDWS (SD) |
|---|---|---|---|
| Coloardo | 1.55 ( .72) | 2.26 ( .83) | 2.03 ( .88) |
| Montana | 2.08 ( .79) | 3.05 ( .84) | 2.22 ( .84) |
| Utah | 2.22 ( .90) | 2.36 ( .89) | 2.62 ( .89) |
| Wyoming | 1.81 ( .78) | 3.08 ( .84) | 2.21 ( .86) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 95.38$,
[b]this difference is significant: $X^2 = 156.07$, and
[c]this difference is significant: $X^2 = 62.71$.

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TABLE 14. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impression of camping, sightseeing, skiing, hunting, and fishing in Colorado, Montana, Utah, and Wyoming as perceived by Region I respondents.

| State | Camping[a] SDWS (SD) | Sightseeing[b] SDWS (SD) | Skiing[c] SDWS (SD) | Hunting[d] SDWS (SD) | Fishing[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 1.75 ( .75) | 1.52 ( .70) | 1.79 ( .99) | 2.13 ( .88) | 2.02 ( .85) |
| Montana | 2.09 ( .89) | 2.10 ( .83) | 2.57 ( .78) | 2.15 ( .85) | 2.19 ( .84) |
| Utah | 2.43 ( .85) | 1.94 ( .82) | 2.80 ( .85) | 2.60 ( .80) | 2.64 ( .78) |
| Wyoming | 1.90 ( .76) | 1.91 ( .86) | 2.61 ( .90) | 2.10 ( .87) | 2.20 ( .92) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 82.85$,

[b]this difference is significant: $X^2 = 67.85$,

[c]this difference is significant: $X^2 = 185.50$,

[d]this difference is significant: $X^2 = 57.07$, and

[e]this difference is significant: $X^2 = 74.59$.

Looks and Dress

Region I respondents imagined residents of Colorado, Montana, Utah, and Wyoming to look and dress significantly different (table 15). Generally speaking, respondents agreed strongly in their choice of a stereotyped couples which represented looks and dress of each state's residents.[1]

[1]For ease of discussion couples 1, 2, 3, 4, and 5 are referred to as the "cowboy" couple, "pioneer" couple #1, "farmer" couple, "average" couple, and "pioneer" couple #2, respectively.

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Nearly 65 percent of the respondents chose the "average" couple as most typical of Colorado residents. While over two-fifths of the respondents picked the "cowboy" couple for representation of Montana residents, one-third chose the "farmer" couple. While Utah residents were represented by the "average" couple to more than 37 percent of the respondents, over 43 percent combined to choose "pioneer" couples 1 and 2. The "cowboy" couple represented Wyoming residents to more than three-fifths of the respondents.

The strong association of particular couples with certain states is very evident. While all states received a share of votes for the "average" couple, Colorado received significantly more than the other states. The "cowboy" couple; while the majority choice for both Montana and Wyoming, was picked significantly more for Wyoming. The "farmer" couple, although not the most popular for any state, was chosen significantly more for Montana. While both "pioneer" couples 1 and 2 were infrequently identified as typifying Colorado, Montana, and Wyoming residents, they were relatively strongly identified with Utah residents.

Vacation Preference

Region I respondents expressed significantly different preferences for vacations in the four states (table 16). Colorado was the first preference as a vacation destination for the large majority of respondents. Likewise, Colorado received the least number of selections as a fourth vacation preference. While Montana, Utah, and Wyoming were the first preference of about an equal number

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of respondents, Wyoming received considerably more second preference selections. Generally speaking, Montana and Utah were the most popular third and fourth vacation preference which accounted for their nearly equally weighted scores. Their scores were not significantly different at the .95 probability level.

TABLE 15. How the residents of Colorado, Montana, Utah, and Wyoming look and dress as perceived by Region I respondents.

| | Couple[b] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | |
| State | No. | % | No. | % | No. | % | No. | % | No. | % |
| Colorado | 43 | 21.3 | 2 | 1.0 | 19 | 9.4 | 131 | 64.9 | 7 | 3.5 |
| Montana | 86 | 42.8 | 8 | 4.0 | 61 | 30.3 | 43 | 21.4 | 3 | 1.5 |
| Utah | 15 | 7.4 | 60 | 29.7 | 24 | 11.9 | 75 | 37.1 | 28 | 13.9 |
| Wyoming | 123 | 61.2 | 3 | 1.5 | 27 | 13.4 | 41 | 20.4 | 7 | 3.5 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03 at 12 degrees of freedom; this difference is significant: $X^2 = 375.71$.

[b]See Appendix E for pictures of couples.

TABLE 16. Vacation preferences for Colorado, Montana, Utah, and Wyoming expressed by Region I respondents.[a]

| | Order of Preference | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | Weighted | Weighted |
| State | No. | % | No. | % | No. | % | No. | % | score | rank |
| Colorado | 131 | 66.2 | 40 | 20.2 | 16 | 8.1 | 11 | 5.6 | 1.52 | 1 |
| Montana | 22 | 11.2 | 43 | 21.8 | 66 | 33.5 | 66 | 33.5 | 2.92 | 3 |
| Utah | 20 | 10.1 | 47 | 23.7 | 48 | 24.2 | 83 | 41.9 | 2.97 | 4 |
| Wyoming | 25 | 12.7 | 68 | 34.5 | 67 | 34.0 | 37 | 18.8 | 2.60 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at 9 degrees of freedom; this difference is significant: $X^2 = 290.27$.

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## Region II - Cleveland, Ohio

### Land and Climate Variables

Land Types. Region II respondents expressed significantly different opinions of the land types thought to be predominate in each of the four states (table 17). While Montana and Wyoming were characterized as mostly grass and range lands by the larger group of respondents, Montana was scored in this class by relatively fewer respondents. Montana is seen as mountainous by considerably more respondents than is Wyoming.

Colorado is characterized as mountainous by more than two-thirds of the respondents. Utah is believed to be predominately desert by more than 44 percent of the respondents, with another two-fifths divided almost equally between grass and range land and farm crop land as their choice of Utah land type.

Snow. Region II respondents expressed a significantly different opinion of the quantity of snow thought to exist in the four states (table 18).

Colorado and Wyoming were not seen as significantly different in the quantity of winter snow. However, Montana and Utah were generally isolated at opposite extremes of the range of values for perceived snow quantity. Montana, with a relatively low score, was perceived as having significantly more snow than the other states and ranged from very much to much. Utah, with a relatively high score, was believed to have significantly less snow than the other states and was the only state to range in the much to moderate range.

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Temperature. The respondents expressed a significantly different opinion of the summer temperature level between the four states (table 18). However, Utah's score is generally isolated from the other three states and accounts for more than 40 percent of the contribution to the Chi-square value. Utah's smaller semantic differential score suggests that the respondents perceived its temperature as relatively hotter than the other states. Colorado and Wyoming temperatures are perceived as mid-way between slightly hot and moderate, while Montana's score favors the moderate side of the range. However, the three temperature scores of these states are probably not significantly different.

TABLE 17. Land types characteristic of Colorado, Montana, Utah, and Wyoming as perceived by Region II respondents.[a]

| Land Type | Colorado | | Montana | | Utah | | Wyoming | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Cities and Towns | 25 | 13.0 | 5 | 2.6 | 15 | 7.4 | 3 | 1.5 |
| Mountains | 130 | 67.7 | 57 | 29.4 | 27 | 13.4 | 25 | 12.5 |
| Deserts | 10 | 5.2 | 10 | 5.2 | 89 | 44.1 | 13 | 6.5 |
| Grass and Range Land | 18 | 9.4 | 84 | 43.3 | 30 | 18.9 | 147 | 73.5 |
| Farm Crop Land | 8 | 4.2 | 36 | 18.6 | 41 | 20.3 | 12 | 6.0 |
| Other[b] | 1 | 0.5 | 2 | 1.0 | 0 | 0.0 | 0 | 0.0 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 477.60$.

[b]Because of the small number of entries this category was deleted from the Chi-square calculation.

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TABLE 18. Semantic differential weighted scores (SDWS) and standard deviations (SD) for quantity of snow and level of summer temperature for Colorado, Montana, Utah, and Wyoming as perceived by Region II respondents.

| State | Snow[a] SDWS (SD) | Temperature[b] SDWS (SD) |
|---|---|---|
| Colorado | 2.69 (1.16) | 3.45 (1.04) |
| Montana | 2.18 (1.03) | 3.62 (1.22) |
| Utah | 3.32 (1.16) | 3.01 (1.13) |
| Wyoming | 2.66 (1.11) | 3.46 (1.10) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 125.32$, and [b]this difference is significant: $X^2 = 65.51$.

Population Variables

Average Family Income. Region II respondents expressed significantly different opinions of the average family income of the residents of the four states (table 19). However, Colorado is generally isolated from the other three states and accounts for more than 66 percent of the contribution to the Chi-square value. It is the only state which is perceived as having residents with family incomes above the national average. The other states all rate in the slightly below to about national average family income range.

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TABLE 19. Semantic differential weighted scores (SDWS) and standard deviations (SD) for population distribution, income level, political tendencies, receptiveness, and progressiveness of Colorado, Montana, Utah, and Wyoming residents as perceived by Region II respondents.

| State | Population[a] SDWS (SD) | Income[b] SDWS (SD) | Politics[c] SDWS (SD) | Receptiveness[d] SDWS (SD) | Progressiveness[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 4.14 (1.37) | 3.71 ( .92) | 4.37 (1.04) | 2.51 (1.13) | 2.96 (1.07) |
| Montana | 5.32 (1.32) | 4.42 ( .98) | 4.60 (1.03) | 2.87 (1.17) | 3.80 ( .98) |
| Utah | 4.76 (1.38) | 4.36 ( .97) | 4.68 (1.18) | 2.87 (1.15) | 3.65 (1.01) |
| Wyoming | 5.53 (1.32) | 4.49 (1.04) | 4.51 (1.07) | 2.82 (1.18) | 3.85 ( .98) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 144.90$,

[b]this difference is significant: $X^2 = 96.50$,

[c]this difference is not significant: $X^2 = 28.11$, (significant difference at .90 probability level),

[d]this difference is not significant: $X^2 = 27.82$, (significant difference at .90 probability level), and

[e]this difference is significant: $X^2 = 120.42$.

Political Tendencies. While the political tendencies of the four state residents were not thought to be significantly different by the Region II respondents, the scores all fell on the conservative side of the scale (table 19). However, when examining the data at the .90 probability level, there is significant

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difference. Although, Colorado is seen as leaning to the conservative side of the scale, its score is closer to middle-of-the-road and significantly more liberal than the other states.

Receptiveness. Cleveland (Region II) respondents did not perceive a significant difference in the receptiveness of Colorado, Montana, Utah, and Wyoming residents to vacation visitors from other states (table 19). Residents of all states were perceived as being slightly to very receptive.

However, examination of the data at the .90 probability level suggests a significant difference in the four states' receptiveness. While Montana, Utah, and Wyoming only range 0.05 points in scores, Colorado is perceived as positively more receptive.

Progressiveness. Region II respondents perceived the progressiveness of Colorado, Montana, Utah, and Wyoming residents as being significantly different (table 19). However, Colorado's score is conspicuously isolated from the others and contributes approximately two-thirds to the Chi-square value. Montana, Utah, and Wyoming residents are seen as just-up-to-date to slightly progressive, while Colorado residents are believed to be slightly progressive to very progressive.

Number of National Parks

Cleveland (Region II) respondents expressed significantly different opinions of the states' rank in number of national parks (table 20). Colorado was believed to have the most national parks by the majority of the the respondents, and Montana was perceived as having the least.

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The perceived rank order of national parks does not compare with the actual rank of the four states (table 21). Colorado, which is second in total number of National Park Service administered areas, is ranked as having the most; while Utah, which has the largest number of areas, is ranked third by the respondents.

TABLE 20. Rank order in number of national parks thought to exist for Colorado, Montana, Utah, and Wyoming by Region II respondents.[a]

| State | Rank in number of National Parks | | | | | | | | Weighted score | Weighted Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | | |
| | No. | % | No. | % | No. | % | No. | % | | |
| Colorado | 115 | 54.8 | 47 | 22.4 | 28 | 13.3 | 20 | 9.2 | 1.77 | 1 |
| Montana | 27 | 13.0 | 39 | 18.8 | 59 | 28.4 | 83 | 39.9 | 2.95 | 4 |
| Utah | 29 | 13.9 | 54 | 25.8 | 59 | 28.2 | 67 | 32.1 | 2.78 | 3 |
| Wyoming | 41 | 19.6 | 70 | 33.5 | 62 | 29.7 | 36 | 17.2 | 2.45 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 171.21$.

Attractions

National Parks. Region II respondents expressed significantly different impressions of the national parks in the four states (table 22). The Colorado national parks were perceived as more impressive than the other three states. The Colorado scores contributed over 56 percent to the Chi-square value.

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Montana and Utah parks, although throught to be impressive, scored relatively lower than Colorado and Wyoming.

Cities. Cleveland (Region II) respondents expressed significantly different impressions of the cities in Colorado, Montana, Utah, and Wyoming (table 22). The Colorado and Utah scores were isolated from the other states. However, Colorado cities are seen as the most impressive with Utah the second. While the impressions of Montana and Wyoming cities were not significantly different, Montana scored on the negative or unimpressive side of the scale. In the case of both states, a majority of the respondents were unable to express an opinion either positively or negatively.

TABLE 21. Number of National Park Service areas[a] in Colorado, Montana, Utah, and Wyoming and comparison with rank order thought to exist by Region II respondents.

| State | National Park Service Areas[b] | | | | Total | Rank | Region II Rank |
|---|---|---|---|---|---|---|---|
| | NP[c] | NM[d] | NRA[e] | Hist[f] | | | |
| Colorado | 2 | 6 | 1 | | 9 | 2 | 1 |
| Montana | 2 | | | 1 | 3 | 4 | 4 |
| Utah | 3 | 8 | 1 | 1 | 13 | 1 | 3 |
| Wyoming | 2 | | | 2 | 4 | 3 | 2 |

[a]Source: U.S. Department of the Interior. 1968. National Parks and landmarks. National Park Service, U.S. Government Printing Office, Washington, D.C. 127 pp.

[b]States which share areas are each given one count. For example, Dinosaur National Monument is counted twice, once for Colorado and once for Utah.

[c]National Parks

[d]National Monuments

[e]National Recreation Areas

[f]National Historical Sites

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National Forests. The impressiveness of the national forests of the four states was rated significantly different by the respondents (table 22). While all states were rated on the impressive side of the scale, Colorado was relatively more impressive and Utah relatively less impressive of the states. Opinions of Montana and Wyoming national forests were not significantly different.

TABLE 22. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impression of national parks, cities, and national forests as perceived by Region II respondents.

| State | National Parks[a] SDWS (SD) | Cities[b] SDWS (SD) | National Forests[c] SDWS (SD) |
|---|---|---|---|
| Colorado | 1.71 ( .77) | 2.20 ( .80) | 2.05 ( .88) |
| Montana | 2.16 ( .88) | 3.01 ( .81) | 2.23 ( .88) |
| Utah | 2.15 ( .84) | 2.45 ( .89) | 2.54 ( .91) |
| Wyoming | 2.00 ( .91) | 2.94 ( .86) | 2.14 ( .93) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 48.31$,

[b]this difference is significant: $X^2 = 147.83$, and

[c]this difference is significant: $X^2 = 41.35$.

Recreational Activities

Cleveland (Region II) respondents expressed significantly different opinions of the impressiveness of all the recreational activities between Colorado, Montana, Utah, and Wyoming (table 23). All activities for all the

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states were rated on the impressive side of the scale. However, Colorado was consistently rated more impressive for all activities with the exception of hunting. In this case, Montana and Wyoming received identical scores, slightly more impressive than Colorado. Utah was rated consistently least impressive for all activities except sightseeing. However, the Utah sightseeing score is not significantly different from those scores received by Montana and Wyoming.

In the cases of sightseeing and skiing, Colorado's scores appear noticeably and positively isolated from the other states. And in the cases of camping, hunting, and fishing, Utah appears to be negatively isolated from the other states.

TABLE 23. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impression of camping, sightseeing, skiing, hunting, and fishing in Colorado, Montana, Utah, and Wyoming as perceived by Region II respondents.

| State | Camping[a] SDWS (SD) | Sightseeing[b] SDWS (SD) | Skiing[c] SDWS (SD) | Hunting[d] SDWS (SD) | Fishing[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 1,89 ( .79) | 1.58 ( .68) | 1.80 ( .88) | 2.15 ( .91) | 2.03 ( .82) |
| Montana | 2.11 ( .82) | 2.10 ( .85) | 2.59 ( .88) | 2.07 ( .80) | 2.17 ( .84) |
| Utah | 2.46 ( .81) | 1.99 ( .82) | 2.77 ( .92) | 2.56 ( .87) | 2.59 ( .90) |
| Wyoming | 2.00 ( .79) | 2.00 ( .88) | 2.57 ( .86) | 2.07 ( .85) | 2.16 ( .81) |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 60.54$,
[b]this difference is significant: $X^2 = 56.95$,
[c]this difference is significant: $X^2 = 169.28$,
[d]this difference is significant: $X^2 = 62.43$, and
[e]this difference is significant: $X^2 = 66.14$.

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Looks and Dress

Cleveland (Region II) respondents expressed significantly different opinions of how the residents of the four states look and dress (table 24). With the exception of Utah residents, the respondents generally agreed in their choice of a single stereotyped couple which most typified each state's residents.

Nearly 70 percent of the respondents selected the "average" couple as most typical of the looks and dress of Colorado residents. The "cowboy" couple was the first choice of the respondents for both Montana and Wyoming residents; however, Wyoming received considerably more choices in the "cowboy" category. Nearly one-third of the respondents chose the "farmer" couple as representing Montana residents.

About two-thirds of the respondents were divided nearly equally between the "pioneer" 1 and "average" couples for representation of Utah residents. In total nearly one-half of the respondents chose either "pioneer" 1 or "pioneer" 2 as the couples which most looked and dressed like Utah residents.

Vacation Preference

Region II respondents expressed significantly different preferences for vacations in the four states (table 25). Colorado was chosen as the first preference for a vacation by nearly 70 percent of the respondents. In addition, Colorado was chosen as a fourth preference by significantly fewer people than the other states. Although Utah was the last vacation destination preference of more respondents than the other states, it rated slightly higher than Montana in

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TABLE 24. How the residents of Colorado, Montana, Utah, and Wyoming look and dress as perceived by Region II respondents.[a]

| State | Couples[b] 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | 5 No. | 5 % |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado | 47 | 22.4 | 2 | 1.0 | 10 | 4.8 | 146 | 69.5 | 5 | 2.4 |
| Montana | 89 | 42.2 | 7 | 3.3 | 66 | 31.3 | 42 | 19.9 | 7 | 3.3 |
| Utah | 20 | 9.5 | 60 | 28.6 | 25 | 11.9 | 69 | 32.9 | 36 | 17.1 |
| Wyoming | 147 | 70.0 | 4 | 1.9 | 17 | 7.8 | 36 | 17.1 | 6 | 2.9 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 468.49$.

TABLE 25. Vacation preference for Colorado, Montana, Utah, and Wyoming expressed by Region II respondents.

| State | Order of Preference[a] 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | Weighted Score | Weighted rank |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado | 148 | 69.5 | 35 | 16.4 | 16 | 7.4 | 14 | 6.5 | 1.51 | 1 |
| Montana | 23 | 10.8 | 40 | 18.9 | 81 | 38.2 | 68 | 32.1 | 2.92 | 4 |
| Utah | 16 | 7.5 | 69 | 32.4 | 52 | 24.4 | 76 | 35.7 | 2.88 | 3 |
| Wyoming | 26 | 12.3 | 69 | 32.5 | 63 | 29.0 | 54 | 25.5 | 2.69 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 329.62$.

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weighted score. While Montana and Utah weighted scores do not differ appreciably, the distribution of choices is significantly different.

## Region III - Des Moines, Iowa

### Land and Climate Variables

Land Types. Region III respondents expressed significantly different opinions of the land types which were thought to be most predominate in Colorado, Montana, Utah, and Wyoming (table 26). Paired examination of the states suggests no significant difference between the perceived land type description for Montana and Wyoming. Necessary Chi-square for significance at the .95 probability level is 9.49, at four degrees of freedom and the difference between Montana and Wyoming is not significant: $X^2 = 8.43$.

Over two-thirds of the respondents perceived Colorado as being predominately mountainous with cities and towns the second most popular land characteristic. Montana and Wyoming were seen as predominately grass and range land with mountains as a second most popular designation. Utah was thought to be desert by nearly one-half of the respondents with grass and range land the choice of over 21 percent of the respondents. Although less than one-fifth of the respondents chose mountains as the predominated Utah land type, it received the second largest percentage vote behind Colorado.

Snow. Des Moines (Region III) respondents expressed significantly different opinions of the quantity of snow received by Colorado, Montana, Utah, and Wyoming (table 27). Examination of these differences suggests that, while

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the impression of Wyoming and Colorado snow quantity did not differ significantly ($X^2 = 3.09$), Montana and Utah were significantly isolated at opposite ends of the scale. Combined Montana and Utah scores contributed over 92 percent to the Chi-square value.

While Montana was seen as approaching the very much snow quantity, Utah was perceived as receiving more moderate amounts. Colorado and Wyoming rated in the much to very much snow quantity range.

TABLE 26. Land types characteristic of Colorado, Montana, Utah, and Wyoming as perceived by Region III respondents.[a]

| Land Type | Colorado | | Montana | | Utah | | Wyoming | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Cities and Towns | 46 | 16.5 | 6 | 2.2 | 15 | 5.4 | 3 | 1.1 |
| Mountains | 189 | 67.7 | 41 | 15.0 | 49 | 17.6 | 42 | 14.9 |
| Desert | 1 | 0.4 | 9 | 3.3 | 128 | 45.9 | 20 | 6.5 |
| Grass and Range Land | 32 | 11.5 | 180 | 65.7 | 59 | 21.1 | 186 | 66.2 |
| Farm Crop Land | 10 | 3.6 | 38 | 13.9 | 24 | 8.6 | 24 | 8.5 |
| Other | 1 | 0.4 | 0 | 0.0 | 4 | 1.4 | 6 | 2.1 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 717.12$.

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Temperature. Region III respondents expressed significantly different opinions of the summer temperature levels of Colorado, Montana, Utah, and Wyoming (table 27). Colorado and Montana scores did not differ appreciably. However, both Utah and Wyoming scores were isolated from each other and the other two states.

While all four states scored on the hotter side of the scale, Colorado and Montana approached the mid-point with near moderate temperatures. Relatively speaking, they were perceived as significantly cooler than Utah and Wyoming. Utah was believed to be significantly hotter than the other states.

TABLE 27. Semantic differential weighted scores (SDWS) and standard deviations (SD) for quantity of snow and level of summer temperature for Colorado, Montana, Utah, and Wyoming as perceived by Region III respondents.

| State | Snow[a] SDWS (SD) | Temperature[b] SDWS (SD) |
|---|---|---|
| Colorado | 2.70 (1.04) | 3.78 ( .89) |
| Montana | 2.21 ( .99) | 3.75 (1.01) |
| Utah | 3.46 (1.14) | 3.03 (1.07) |
| Wyoming | 2.61 (1.04) | 3.39 (1.07) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 218.42$, and [b]this difference is significant: $X^2 = 118.77$.

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Population Variables

Average Family Income. Des Moines (Region III) respondents expressed significantly different opinions of the average family income of the four states' residents (table 28). Colorado scores contributed more than 60 percent to the Chi-square value. Colorado residents are believed to be the only group which has incomes above the national average. While Colorado was rated in the slightly above to above national average range, Utah was scored in the slightly below to about national average range. Montana and Wyoming, with similar scores, were perceived as having residents with slightly below to far below national average family incomes.

Political Tendencies. The political tendencies of the residents of Colorado, Montana, Utah, and Wyoming were thought to be significantly different by Region III respondents (table 28). Once again the Colorado score was isolated on the opposite side of the scale from the other states. While Colorado residents were perceived as middle-of-the road to slightly liberal in their political tendencies, Montana and Wyoming residents were perceived similarly with middle-of-the-road to slightly conservative political tendencies. Utah residents were scored significantly more conservative than the other states and were scored in the slightly conservative to middle-of-the-road range.

Receptiveness. Region III respondents expressed significantly different opinions of the receptiveness of Colorado, Montana, Utah, and Wyoming residents (table 28). Colorado's score is significantly isolated from the other states and accounted for over 60 percent of the contribution to Chi-square. While all

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the states' residents were perceived as generally receptive to vacation visitors from other states, Colorado residents were seen as significantly more receptive.

Although Montana, Utah, and Wyoming scores did not differ significantly, Utah rated the largest semantic differential weighted score suggesting least receptiveness of the states.

TABLE 28. Semantic differential weighted scores (SDWS) and standard deviations (SD) for population distribution, income level, political tendencies, receptivess, and progressiveness of Colorado, Montana, Utah, and Wyoming residents as perceived by Region III respondents.

| State | Population[a] SDWS (SD) | Income[b] SDWS (SD) | Politics[c] SDWS (SD) | Receptiveness[d] SDWS (SD) | Progressiveness[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 3.48 (1.28) | 3.35 (1.00) | 3.70 (1.12) | 2.13 ( .91) | 2.42 ( .96) |
| Montana | 5.28 (1.18) | 4.41 ( .94) | 4.36 (1.07) | 2.72 (1.05) | 3.71 ( .97) |
| Utah | 4.59 (1.34) | 4.20 ( .92) | 4.67 (1.18) | 2.75 (1.11) | 3.55 (1.09) |
| Wyoming | 5.31 (1.35) | 4.52 ( .97) | 4.44 (1.08) | 2.61 (1.13) | 3.71 (1.04) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 350.94$,

[b]this difference is significant: $X^2 = 237.62$,

[c]this difference is significant: $X^2 = 150.20$,

[d]this difference is significant: $X^2 = 88.77$, and

[e]this difference is significant: $X^2 = 312.54$.

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Progressiveness. As was the case with all the other population variables, Region III respondents expressed significantly different opinions of the progressiveness of the residents of Colorado, Montana, Utah, and Wyoming (table 28). However, the Colorado semantic differential score was extremely isolated from the other states and contributed nearly three-fourths to the Chi-square value.

While Colorado residents were perceived as being very progressive to slightly progressive, the other three states were scored in the just-up-to-date to slightly progressive range. Relatively speaking, Montana, Utah, and Wyoming residents were considered significantly less progressive than were Colorado residents.

Number of National Parks

Des Moines (Region III) respondents expressed significantly different opinions of the rank order of national parks in Colorado, Montana, Utah, and Wyoming (table 29). Colorado was thought to have the most national parks by over 60 percent of the respondents, while Montana and Utah were perceived as having the least.

The perceived rank order of national parks does not compare with actual rank in the states (table 30). Colorado and Wyoming, which each have fewer national parks or total National Park Service administered areas, are ranked above Utah.

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TABLE 29. Rank order in number of national parks thought to exist for Colorado, Montana, Utah, and Wyoming by Region III respondents.[a]

| State | Rank in number of National Parks | | | | | | | | Weighted score | Weighted rank |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | | |
| | No. | % | No. | % | No. | % | No. | % | | |
| Colorado | 188 | 61.6 | 75 | 24.6 | 21 | 6.9 | 21 | 6.9 | 1.58 | 1 |
| Montana | 33 | 10.9 | 64 | 21.1 | 96 | 21.6 | 111 | 36.5 | 2.95 | 4 |
| Utah | 31 | 10.2 | 76 | 25.0 | 92 | 30.3 | 105 | 34.0 | 2.90 | 3 |
| Wyoming | 52 | 17.1 | 90 | 29.6 | 94 | 30.9 | 68 | 22.4 | 2.58 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 350.14$.

Attractions

National Parks. Des Moines (Region III) respondents expressed significantly different opinions of the impressiveness of the national parks in Colorado, Montana, Utah, and Wyoming (table 31). Colorado's national parks were considered significantly more impressive than the parks of the other states and rated in the very impressive to impressive range. Wyoming was rated in the impressive to very impressive range for its national parks. Utah, with the highest semantic differential score, was considered to have impressive parks but the least impressive of the four states.

Cities. The respondents gave significantly different opinions of the impressiveness of the cities in the four states (table 31). Both Colorado and Utah scores were isolated favorably from those of Montana and Wyoming. All scores, however, were rated on the positive side of the scale.

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TABLE 30. Number of National Park Service areas[a] in Colorado, Montana, Utah, and Wyoming and comparison with rank order thought to exist by Region III respondents.

| State | National Park Service Area[b] | | | | Total | Rank | Region III |
|---|---|---|---|---|---|---|---|
| | NP[c] | NM[d] | NRA[e] | Hist[f] | | | |
| Colorado | 2 | 6 | 1 | | 9 | 2 | 1 |
| Montana | 2 | | | 1 | 3 | 4 | 4 |
| Utah | 3 | 8 | 1 | 1 | 13 | 1 | 3 |
| Wyoming | 2 | | | 2 | 4 | 3 | 2 |

[a]Source: U.S. Department of the Interior. 1968. National Parks and landmarks. National Park Service, U.S. Government Printing Office, Washington, D.C. 127 pp.

[b]States which share areas are each given one count. For example, Hovenweep National Monument is counted both in Colorado and Utah.

[c]National Parks

[d]National Monuments

[e]National Recreation Areas

[f]National Historical Sites

National Forests. The impressiveness of the national forests in Colorado, Montana, Utah, and Wyoming was rated significantly different by the Region III respondents (table 31). In this case Colorado and Utah scores were isolated at the opposite ends of the range. While Colorado's national forests were perceived as the most impressive, Utah's were perceived the least impressive of the four states.

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TABLE 31. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impression of national parks, cities, and national forests in Colorado, Montana, Utah, and Wyoming as perceived by Region III respondents.

| State | National Parks[a] SDWS (SD) | Cities[b] SDWS (SD) | National Forests[c] SDWS (SD) |
|---|---|---|---|
| Colorado | 1.49 ( .62) | 1.77 ( .70) | 1.79 ( .78) |
| Montana | 2.00 ( .84) | 2.83 ( .74) | 2.17 ( .83) |
| Utah | 2.14 ( .83) | 2.23 ( .88) | 2.45 ( .84) |
| Wyoming | 1.80 ( .81) | 2.85 ( .80) | 2.16 ( .85) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 118.53$,

[b]this difference is significant: $X^2 = 345.09$, and

[c]this difference is significant: $X^2 = 96.58$.

Recreational Activities

Des Moines (Region III) respondents expressed significantly different opinions of the impressiveness of all recreational activities between Colorado, Montana, Utah, and Wyoming (table 32). Colorado's activities rated most impressive for all activities except hunting, in which case Wyoming and Montana received slightly more impressive scores. However, the hunting scores for these three states are probably not significantly different. Utah's score accounted for over 70 percent of the contribution to Chi-square. Utah activities are rated the least impressive for all activities except sightseeing; however, its

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TABLE 32. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impressions of camping, sightseeing, skiing, hunting, and fishing in Colorado, Montana, Utah, and Wyoming as perceived by Region III respondents.

| State | Camping[a] SDWS (SD) | Sightseeing[b] SDWS (SD) | Skiing[c] SDWS (SD) | Hunting[d] SDWS (SD) | Fishing[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 1.76 ( .79) | 1.36 ( .53) | 1.65 ( .86) | 2.05 (. .89) | 1.90 ( .85) |
| Montana | 2.17 ( .87) | 2.06 ( .84) | 2.64 ( .86) | 1.96 ( .83) | 2.11 ( .85) |
| Utah | 2.53 ( .82) | 1.96 ( .83) | 2.75 ( .89) | 2.62 ( .84) | 2.64 ( .85) |
| Wyoming | 2.13 ( .91) | 1.95 ( .88) | 2.71 ( .94) | 1.92 ( .87) | 2.21 ( .90) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 127.44$,

[b]this difference is significant: $X^2 = 150.69$,

[c]this difference is significant: $X^2 = 310.33$,

[d]this difference is significant: $X^2 = 133.24$, and

[e]this difference is significant: $X^2 = 122.01$.

score is not significantly different from that of Montana or Wyoming. In all cases, the Montana and Wyoming scores are similar.

Looks and Dress

Region III respondents perceived residents of Colorado, Montana, Utah, and Wyoming as looking and dressing significantly different (table 33). In the case of each state, a single couple was identified as most typical of the residents of that state. In addition, each couple was strongly identified with predominately one state.

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While the "average" couple was chosen by the majority of respondents as most typical of both Colorado and Utah residents, nearly 80 percent selected it for Colorado while less than 50 percent chose it for Utah. Over two-fifths of the respondents thought the "cowboy" couple best typified Montana residents; however, over one-half were divided between the "farmer" couple and the "average" couple. Wyoming residents were nearly as strongly identified with the "cowboy" couple as Colorado residents were with the "average" couple.

A strong association is also evident with particular couples and certain states. All states received a share of selection under the "average" couple; however, Colorado received significantly more than any other state. The "cowboy" couple was related to the looks of Wyoming residents in significantly greater numbers than the other states. Although Montana residents were thought to look like the "cowboy" couple by many respondents, it rated over twenty-five percentage points behind Wyoming in respondent selections. The "farmer" couple, although not the most popular for any state, was chosen significantly more for Montana. While both "pioneer" couples 1 and 2 were infrequently identified as typifying Colorado, Montana, and Wyoming residents, they were relatively strongly identified with Utah residents.

Vacation Preferences

Des Moines (Region III) respondents expressed significantly different preferences for vacations in Colorado, Montana, Utah, or Wyoming (table 34). Colorado was the overwhelming first preference of the majority of the respondents. Colorado was also selected significantly less as a fourth vacation

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TABLE 33. How the residents of Colorado, Montana, Utah, and Wyoming look and dress as perceived by Region III respondents.[a]

| State | Couple[b] 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | 5 No. | 5 % |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado | 54 | 17.9 | 0 | 0.0 | 8 | 2.6 | 239 | 79.1 | 1 | 0.3 |
| Montana | 132 | 43.7 | 3 | 1.0 | 91 | 30.1 | 68 | 22.5 | 8 | 2.6 |
| Utah | 28 | 9.3 | 77 | 25.5 | 21 | 7.0 | 141 | 46.7 | 35 | 11.6 |
| Wyoming | 208 | 68.9 | 0 | 0.0 | 25 | 8.3 | 65 | 21.5 | 4 | 1.3 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 740.07$.

[b]See Appendix E for pictures of couples.

TABLE 34. Vacation preference for Colorado, Montana, Utah, and Wyoming expressed by Region III respondents.[a]

| State | Order of Preference 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | Weighted Score | Weighted Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado | 233 | 77.7 | 36 | 12.0 | 21 | 7.0 | 10 | 3.3 | 1.34 | 1 |
| Montana | 25 | 8.4 | 77 | 24.9 | 112 | 37.5 | 85 | 28.4 | 2.87 | 3 |
| Utah | 17 | 5.7 | 80 | 26.8 | 82 | 27.5 | 119 | 39.9 | 3.01 | 4 |
| Wyoming | 25 | 8.4 | 105 | 35.2 | 83 | 27.9 | 85 | 28.5 | 2.78 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 629.71$

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destination preference. While both Wyoming and Montana were selected as first and fourth destination preferences by an equal number of respondents, Wyoming's greater selection as a second preference accounted for its slightly higher over-all preference. Utah, with the least first vacation preferences and most fourth choices, accounted for its last place weighted score.

## Region IV - Phoenix, Arizona

### Land and Climate Variables

Land Types. Region IV respondents expressed significantly different opinions of the land types thought to most typify Colorado, Montana, Utah, and Wyoming (table 35). Colorado was perceived as being predominately mountainous by nearly three-quarters of the respondents. Both Montana and Wyoming were characterized as mostly range and grass lands by a majority of the respondents. However, Montana's lower percentage of grass and range land choices resulted from over one-third of the respondents choosing between mountains and farm crop land. Although nearly two-fifths of the respondents selected desert as the most typical of Utah, there was less ageeement among the remaining respondents. Over 55 percent of the respondents divided their selections between mountains, grass and range land, and farm crop land.

Snow. Phoenix (Region IV) respondents expressed significantly different opinions of the quantity of snow thought to exist in Colorado, Montana, Utah, and Wyoming (table 36). Montana and Utah scores were isolated at opposite ends of the range. The quantity of snow perceived to exist in Colorado and Wyoming was

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TABLE 35. Land types characteristic of Colorado, Montana, Utah, and Wyoming as perceived by Region IV respondents.[a]

| Land Type | Colorado | | Montana | | Utah | | Wyoming | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Cities and Towns | 31 | 12.4 | 2 | 0.8 | 15 | 5.7 | 2 | 0.8 |
| Mountains | 180 | 71.4 | 56 | 20.1 | 45 | 17.0 | 42 | 16.2 |
| Desert | 1 | 0.4 | 7 | 2.7 | 103 | 39.0 | 13 | 5.0 |
| Grass and Range Land | 29 | 11.6 | 153 | 59.3 | 41 | 15.5 | 191 | 73.5 |
| Farm Crop Land | 8 | 3.2 | 39 | 15.1 | 60 | 22.7 | 9 | 3.5 |
| Other[b] | 2 | 0.8 | 1 | 0.4 | 0 | 0.0 | 3 | 1.2 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 688.18$.

[b]Because of the small number of entries this category was deleted from the Chi-square calculation.

TABLE 36. Semantic differential weighted scores (SDWS) and standard deviations (SD) for quantity of snow and level of temperature for Colorado, Montana, Utah, and Wyoming as perceived by Region IV respondents.

| State | Snow[a] SDWS (SD) | Temperature[b] SDWS (SD) |
|---|---|---|
| Colorado | 2.34 ( .91) | 4.18 ( .92) |
| Montana | 2.16 ( .92) | 4.26 ( .99) |
| Utah | 3.19 (1.04) | 3.48 (1.04) |
| Wyoming | 2.42 ( .95) | 4.16 ( .92) |

[a]Necessary Chi-square for significance as the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 188.54$, and

[b]this difference is significant: $X^2 = 136.72$.

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not significantly different. Although all states were scored on the high quantity side of the scale, Utah was thought to have significantly less snow than the other states.

Temperature. Summer temperature levels of Colorado, Montana, Utah, and Wyoming were perceived as significantly different by the Region IV respondents (table 36). Of the four states, Utah was the only state rated on the hot temperature side of the scale and was perceived significantly hotter than the other states. While Colorado and Wyoming were rated near equal, Montana was perceived as slightly cooler than the other states.

Population Variables

Average Family Income. Region IV respondents expressed significantly different opinions of the average family income level of the residents of the four states (table 37). Montana and Wyoming residents were not perceived as having significantly different incomes and were believed to be below the national average. Utah residents, while seen as having incomes near or slightly below the national average, were believed to have significantly greater incomes than Montana and Wyoming residents. Colorado residents are the only ones which were thought to have incomes above the national average and rated near to slightly above the average.

Political Tendencies. The political tendencies of Colorado, Montana, Utah, and Wyoming residents were thought to be significantly different by Phoenix (Region IV) respondents (table 37). Although all state scores were rated on the conservative side of the scale, Colorado residents were perceived

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as being the least conservative and Utah residents the most conservative. Montana and Wyoming residents were not believed to be significantly different in their political tendencies.

TABLE 37. Semantic differential weighted scores (SDWS) and standard deviations (SD) for population distribution, income level, political tendencies, receptiveness, and progressiveness of Colorado, Montana, Utah, and Wyoming residents as perceived by Region IV respondents.

| State | Population[a] SDWS (SD) | Income[b] SDWS (SD) | Politics[c] SDWS (SD) | Receptiveness[d] SDWS (SD) | Progressiveness[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 3.95 (1.28) | 3.67 ( .90) | 4.10 (1.04) | 2.45 (1.08) | 2.87 (1.02) |
| Montana | 5.25 (1.28) | 4.38 ( .89) | 4.32 (1.06) | 2.92 (1.05) | 3.79 ( .96) |
| Utah | 4.38 (1.24) | 4.02 ( .83) | 4.80 (1.22) | 3.07 (1.16) | 3.44 (1.16) |
| Wyoming | 5.47 (1.28) | 4.36 ( .94) | 4.43 ( .97) | 2.75 (1.11) | 3.84 (1.02) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 277.65$,

[b]this difference is significant: $X^2 = 129.61$,

[c]this difference is significant: $X^2 = 92.68$,

[d]this difference is significant: $X^2 = 88.50$, and

[e]this difference is significant: $X^2 = 162.75$.

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Receptiveness. Region IV respondents expressed significantly different opinions of the receptiveness of residents of Colorado, Montana, Utah, and Wyoming to vacation visitors from other states (table 37). Colorado's score was favorably isolated from the other states and contributed 40 percent to the Chi-square value. Utah's score, although only .15 point from Wyoming's, was the only one which indicated that the residents were perceived as being slightly unreceptive.

Progressiveness. Phoneix (Region IV) respondents expressed significantly different opinions of the progressiveness of the residents of the four states (table 37). While all states were rated on the progressive side of the scale, Colorado's residents were thought to be significantly more progressive than those of the other states. Colorado was the only state to score in the slightly progressive to very progressive range.

Number of National Parks

Region IV respondents expressed singificantly different opinions of the rank order of Colorado, Montana, Utah, and Wyoming in number of national parks (table 38). Colorado was perceived as having the most national parks by the majority of the respondents, and Montana was thought to have the least. Although Wyoming's weighted score ranked second in number of national parks, it was not significantly different from Utah.

The perceived rank order of national parks does not compare with the actual rank (table 39).

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TABLE 38. Rank order in number of national parks thought to exist for Colorado, Montana, Utah, and Wyoming by Region IV respondents.[a]

| State | Rank in Number of National Parks | | | | | | | | Weighted score | Weighted rank |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | | |
| | No. | % | No. | % | No. | % | No. | % | | |
| Colorado | 138 | 49.1 | 74 | 26.3 | 43 | 15.3 | 26 | 9.3 | 1.87 | 1 |
| Montana | 24 | 8.6 | 49 | 17.5 | 87 | 31.1 | 120 | 41.7 | 3.07 | 4 |
| Utah | 63 | 22.5 | 77 | 27.5 | 64 | 22.9 | 76 | 27.1 | 2.55 | 3 |
| Wyoming | 56 | 20.0 | 82 | 29.3 | 84 | 30.0 | 58 | 20.7 | 2.51 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 186.62$.

Attractions

National Parks. Phoenix (Region IV) respondents expressed significantly different impressions of the national parks in the four states (table 40). The Colorado national parks were thought to be the most impressive; however, there was no significant difference between the Colorado and Wyoming scores. Necessary Chi-square at the .95 probability level is 7.82, at three degrees of freedom, and the difference is not significant: $X^2 = 5.11$.

Although rated impressive, Montana was scored least impressive of the states. However, there was no significant difference between the impressions of Montana and Utah.

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TABLE 39. Number of National Park Service areas[a] in Colorado, Montana, Utah, and Wyoming and comparison with rank order thought to exist by Region IV respondents.

| State | National Park Service Areas[b] | | | | Total | Rank | Region IV Rank |
|---|---|---|---|---|---|---|---|
| | NP[c] | NM[d] | NRA[e] | Hist[f] | | | |
| Colorado | 2 | 6 | 1 | | 9 | 2 | 1 |
| Montana | 2 | | | 1 | 3 | 4 | 4 |
| Utah | 3 | 8 | 1 | 1 | 13 | 1 | 3 |
| Wyoming | 2 | | | 2 | 4 | 3 | 2 |

[a]Source: U.S. Department of the Interior. 1968. National Parks and landmarks. National Park Service, U.S. Government Printing Office, Washington, D.C. 127 pp.

[b]States which share areas are each given one count. For example, Dinosaur National Monument is counted for both Colorado and Utah.

[c]National Parks

[d]National Monuments

[e]National Recreation Areas

[f]National Historical Sites

Cities. The impressiveness of the cities of Colorado, Montana, Utah, and Wyoming was thought to be significantly different by the Region IV respondents (table 40). While all states scored on the positive side of the scale, Colorado's cities were regarded as the most impressive with Montana and Wyoming cities regarded as the least impressive.

National Forests. The impressiveness of the national forests of Colorado, Montana, Utah, and Wyoming was rated significantly different by the

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Phoenix (Region IV) respondents (table 40). Although all states received scores on the positive side of the scale, Colorado and Utah were isolated at opposite extremes of the range. Montana and Wyoming scores were not significantly different.

TABLE 40. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impressions of national parks, cities, and national forests in Colorado, Montana, Utah, and Wyoming as perceived by Region IV respondents.

| State | National Parks[a] SDWS (SD) | Cities[b] SDWS (SD) | National Forests[c] SDWS (SD) |
|---|---|---|---|
| Colorado | 1.67 ( .70) | 2.16 ( .79) | 1.80 ( .79) |
| Montana | 2.01 ( .80) | 2.89 ( .80) | 2.22 ( .83) |
| Utah | 1.96 ( .88) | 2.30 ( .79) | 2.47 ( .85) |
| Wyoming | 1.74 ( .78) | 2.93 ( .82) | 2.18 ( .91) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 49.61$,

[b]this difference is significant: $X^2 = 213.89$, and

[c]this difference is significant: $X^2 = 95.08$.

Recreational Activities

Region IV respondents expressed significantly different impressions of all recreation activities between Colorado, Montana, Utah, and Wyoming

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(table 41). All activities for all states were rated on the positive side of the scale. However, Colorado was consistently rated most impressive for all the activities. Utah was rated least impressive for all activities except sightseeing. In the case of all activities except hunting, Colorado scores appear to be extremely and positively isolated from the other states; and in the cases of camping, hunting, and fishing, Utah scores appear to be extremely and negatively isolated from the other states.

TABLE 41. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impression of camping, sightseeing, skiing, hunting, and fishing in Colorado, Montana, Utah, and Wyoming as perceived by Region IV respondents.

| State | Camping[a] SDWS (SD) | Sightseeing[b] SDWS (SD) | Skiing[c] SDWS (SD) | Hunting[d] SDWS (SD) | Fishing[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 1.79 ( .78) | 1.50 ( .62) | 1.68 ( .85) | 1.84 ( .81) | 1.72 ( .78) |
| Montana | 2.15 ( .80) | 2.08 ( .83) | 2.53 ( .84) | 1.99 ( .81) | 2.04 ( .81) |
| Utah | 2.43 ( .88) | 1.89 ( .80) | 2.56 ( .88) | 2.38 ( .85) | 2.41 ( .84) |
| Wyoming | 2.10 ( .85) | 1.94 ( .84) | 2.49 ( .87) | 1.97 ( .83) | 2.02 ( .82) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 91.82$,

[b]this difference is significant: $X^2 = 92.61$,

[c]this difference is significant: $X^2 = 203.19$,

[d]this difference is significant: $X^2 = 75.61$, and

[e]this difference is significant: $X^2 = 105.96$.

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Looks and Dress

Phoenix (Region IV) respondents perceived residents of Colorado, Montana, Utah, and Wyoming as looking and dressing significantly different (table 42). In the case of each state, a single couple was identified as most typifying residents of that state. In addition, each of the five couples was strongly identified with predominately one state.

The "average" couple was most frequently identified as typical of both Colorado and Utah residents. However, over 75 percent of the respondents chose the "average" couple as most typical of Colorado residents while less than 45 percent chose it for Utah. The "cowboy" couple was most frequently identified with Montana and Wyoming residents. However, while less than one-half of the respondents selected the "cowboy" couple as typifying Montana residents, over 70 percent selected it as most typical of Wyoming residents.

Each couple was associated strongly with a particular state. While all states received a share of choices for each couple, Colorado received significantly more votes for the "average" couple. The "cowboy" couple, although the most popular for both Montana and Wyoming, was chosen significantly more for Wyoming. The "farmer" couple, while not the most popular for any state, was perceived to be more typical of Montana residents than those of any other state. While both "pioneer" couples 1 and 2 were seldom selected as looking and dressing like the residents of Colorado, Montana, or Wyoming, they were strongly identified with Utah residents. "Pioneer" couples 1 and 2 were the second and third most popular choice of respondents to represent Utah residents.

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Vacation Preference

Region IV respondents expressed significantly different preferences for vacations in Colorado, Montana, Utah, and Wyoming (table 43). Colorado was chosen as the first preference for a vacation by slightly less than two-thirds of the respondents. It was selected as a fourth vacation preference by fewer respondents than the other states. Utah was the last preferred vacation destination on the basis of weighted score. It received the least first preference and most fourth preferences of all the states. Montana and Wyoming scores do not differ significantly.

TABLE 42. How the residents of Colorado, Montana, Utah, and Wyoming look and dress as perceived by Region IV respondents.[a]

| | Couples[b] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | |
| State | No. | % | No. | % | No. | % | No. | % | No. | % |
| Colorado | 51 | 18.0 | 1 | 0.4 | 14 | 4.9 | 219 | 76.0 | 2 | 0.7 |
| Montana | 132 | 46.8 | 5 | 1.8 | 68 | 24.1 | 68 | 24.1 | 9 | 3.2 |
| Utah | 17 | 6.0 | 69 | 24.4 | 31 | 11.0 | 127 | 44.9 | 39 | 13.8 |
| Wyoming | 199 | 70.3 | 4 | 1.4 | 22 | 7.8 | 54 | 19.1 | 4 | 1.4 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 625.70$.

[b]See Appendix E for pictures of couples.

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TABLE 43. Vacation preference for Colorado, Montana, Utah, and Wyoming expressed by Region IV respondents.[a]

| | 1 | | 2 | | 3 | | 4 | | Weighted Score | Weighted Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | | |
| Colorado | 183 | 64.7 | 56 | 19.8 | 23 | 8.1 | 21 | 7.4 | 1.59 | 1 |
| Montana | 40 | 14.3 | 66 | 23.6 | 102 | 36.4 | 72 | 25.7 | 2.75 | 3 |
| Utah | 22 | 7.9 | 70 | 25.0 | 60 | 21.4 | 128 | 45.7 | 3.07 | 4 |
| Wyoming | 39 | 13.9 | 87 | 31.0 | 95 | 33.8 | 60 | 21.4 | 2.61 | 2 |

[a]Necessary Chi-square for significance at .95 probability is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 385.24$.

## Region V - Fresno, California

### Land and Climate Variables

Land Types. Region V respondents expressed significantly different opinions of the land types which were thought to be most predominate in Colorado, Montana, Utah, and Wyoming (table 44).

While the respondents chose very similar land types for Montana and Wyoming, Colorado and Utah differed appreciably. Nearly two-thirds of the respondents perceived Colorado as being predominately mountainous. Although the cities and towns classification was selected for Colorado by relatively few respondents, it was relatively higher than for the other three states.

Montana and Wyoming were thought to be mostly grass and range land and mountains by the majority of respondents. Utah was thought to be primarily desert by more than two-fifths of the respondents with another two-fifths

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selecting mountains and grass and range land. Although the mountain type was selected by the second largest group of respondents for Utah, it was the smallest group of respondents to choose this type for any state.

TABLE 44. Land types characteristic of Colorado, Montana, Utah, and Wyoming as perceived by Region V respondents.[a]

| Land Types | Colorado | | Montana | | Utah | | Wyoming | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Cities and Towns | 38 | 15.0 | 5 | 1.9 | 19 | 7.5 | 2 | 0.7 |
| Mountains | 162 | 63.8 | 66 | 25.5 | 52 | 20.6 | 62 | 23.9 |
| Desert | 8 | 3.1 | 4 | 1.5 | 109 | 43.3 | 20 | 7.7 |
| Grass and Range Land | 28 | 11.0 | 144 | 55.6 | 43 | 17.1 | 163 | 62.9 |
| Farm Crop Land | 17 | 6.7 | 37 | 14.3 | 28 | 11.1 | 10 | 3.9 |
| Other | 1 | 0.4 | 3 | 1.2 | 1 | 0.4 | 2 | 0.8 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 518.76$.

Snow. Region V respondents expressed significantly different opinions of the quantity of snow received by the four states (table 45). The respondent's opinions of the quantity of snow received in Colorado and Wyoming did not differ significantly. Necessary Chi-square for significance at the .95 probability level is 12.59, at six degrees of freedom, and this difference was not significant:

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$X^2 = 4.72$. However, Montana and Utah were isolated at opposite ends of the range. Combined Montana and Utah scores contributed over 90 percent to the Chi-square value.

Relatively, Montana was perceived as having the most snow and Utah the least of the four states. Utah was the only state rated in the much to moderate snow quantity range. The other states scores all fell within the next highest range.

TABLE 45. Semantic differential weighted scores (SDWS) and standard deviations (SD) for quantity of snow and level of temperature for Colorado, Montana, Utah, and Wyoming as perceived by Region V respondents.

| State | Snow[a] SDWS (SD) | Temperature[b] SDWS (SD) |
|---|---|---|
| Colorado | 2.45 (1.05) | 3.73 ( .92) |
| Montana | 2.19 ( .92) | 3.81 (1.04) |
| Utah | 3.29 (1.09) | 3.15 ( .92) |
| Wyoming | 2.57 (1.03) | 3.67 (1.03) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 171.73$, and

[b]this difference is significant: $X^2 = 90.02$.

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Temperature. Fresno (Region V) respondents expressed significantly different opinions of the summer temperature levels of Colorado, Montana, Utah, and Wyoming (table 45). However, the Utah score is significantly isolated from the scores of the other states. Utah scores contributed nearly 65 percent to Chi-square. Utah was perceived as being significantly hotter than the other states.

Population Variables

Average Family Income. Region V respondents expressed significantly different opinions of the average family income of residents of Colorado, Montana, Utah, and Wyoming (table 46). While Montana, Utah, and Wyoming residents were perceived as having incomes below the national average, Montana and Wyoming were similar and significantly lower than Utah. Although only Colorado residents are those perceived as having incomes above the national average, the weighted score falls only slightly above the average.

Political Tendencies. Region V respondents expressed significantly different opinions of the political tendencies of the residents of the four states (table 46). While the residents of all the states were scored on the conservative side of the scale, Utah residents were perceived as being significantly more conservative than the others, and Colorado residents were perceived as the least conservative. Montana and Wyoming residents were believed to be relatively similar in their political tendencies.

Receptiveness. Fresno (Region V) respondents expressed significantly different opinions of the receptiveness of the residents of Colorado, Montana,

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Utah, and Wyoming (table 46). However, Montana, Utah, and Wyoming residents were not perceived as being significantly different. Although all four states were rated on the receptive side of the scale, Colorado was favorably isolated from the other states. Colorado's score contributed more than 45 percent to the Chi-square value.

TABLE 46. Semantic differential weighted scores (SDWS) and standard deviations (SD) for population distribution, income level, political tendencies, receptiveness, and progressiveness of Colorado, Montana, Utah, and Wyoming residents as perceived by Region V respondents.

| State | Population[a] SDWS (SD) | Income[b] SDWS (SD) | Politics[c] SDWS (SD) | Receptiveness[d] SDWS (SD) | Progressiveness[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 4.09 (1.38) | 3.74 ( .90) | 4.30 (1.14) | 2.57 (1.12) | 2.99 (1.06) |
| Montana | 5.44 (1.29) | 4.47 ( .91) | 4.51 (1.10) | 2.86 (1.11) | 3.95 ( .94) |
| Utah | 4.66 (1.43) | 4.16 ( .96) | 4.97 (1.16) | 2.87 (1.24) | 3.44 (1.13) |
| Wyoming | 5.64 (1.26) | 4.52 ( .92) | 4.64 (1.11) | 2.81 (1.15) | 4.00 ( .91) |

[a]Necessary Chi-square for significance at the .95 probability level is 28.87, at 18 degrees of freedom; this difference is significant: $X^2 = 227.15$,

[b]this difference is significant: $X^2 = 147.50$,

[c]this difference is significant: $X^2 = 73.94$,

[d]this difference is significant: $X^2 = 31.27$, and

[e]this difference is significant: $X^2 = 180.32$.

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Progressiveness. Fresno (Region V) respondents expressed significantly different opinions of the progressiveness of Colorado, Montana, Utah, and Wyoming residents (table 46). Colorado was the only state to score in the slightly to very progressive range. While Montana and Wyoming scores did not differ significantly, Wyoming's weighted score placed exactly at the mid-scale point suggesting residents were neither progressive nor backward but just up-to-date. All other states scored on the progressive side of the scale.

Number of National Parks

Region V respondents expressed opinions indicating a significantly different rank order of Colorado, Montana, Utah, and Wyoming in number of national parks (table 47). Colorado was perceived as having the most national parks, and Montana was thought to have the least. Although Wyoming's weighted score ranked it second in number of national parks, it was not significantly different from the Utah score.

The perceived rank order of the states in number of national parks does not compare with the actual number (table 48).

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TABLE 47. Rank order in number of national parks thought to exist for Colorado, Montana, Utah, and Wyoming by Region V respondents.[a]

| State | Rank in Number of National Parks | | | | | | | | Weighted Score | Weighted Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | | |
| | No. | % | No. | % | No. | % | No. | % | | |
| Colorado | 102 | 38.8 | 79 | 30.0 | 50 | 19.0 | 32 | 12.2 | 2.05 | 1 |
| Montana | 27 | 10.3 | 65 | 24.7 | 72 | 27.4 | 99 | 37.6 | 2.93 | 4 |
| Utah | 64 | 24.3 | 62 | 23.6 | 70 | 26.6 | 67 | 25.5 | 2.55 | 3 |
| Wyoming | 72 | 27.4 | 60 | 22.8 | 67 | 25.5 | 64 | 24.3 | 2.46 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 84.30$.

TABLE 48. Number of National Park Service areas[a] in Colorado, Montana, Utah, and Wyoming and comparison with rank order thought to exist by Region V respondents.

| State | National Park Service Areas[b] | | | | Total | Rank | Region V Rank |
|---|---|---|---|---|---|---|---|
| | NP[c] | NM[d] | NRA[e] | Hist[f] | | | |
| Colorado | 2 | 6 | 1 | | 9 | 2 | 1 |
| Montana | 2 | | | 1 | 3 | 4 | 4 |
| Utah | 3 | 8 | 1 | 1 | 13 | 1 | 3 |
| Wyoming | 2 | | | 2 | 4 | 3 | 2 |

[a]Source: U.S. Department of the Interior. 1968. National Parks and landmarks. National Park Service, U.S. Government Printing Office, Washington, D.C. 127 pp.

[b]States which share areas are each given one count. For example, Dinosaur National Monument is counted both in Colorado and Utah.

[c]National Park

[d]National Monument

[e]National Recreation Area

[f]National Historical Site

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Attractions

National Parks. Fresno (Region V) respondents expressed significantly different opinions of the impressiveness of the national parks in Colorado, Montana, Utah, and Wyoming (table 49). The Wyoming national parks were thought to be the most impressive; and the Utah parks, while still rated on the impressive side of the scale, were thought to be the least impressive of the four states. It is interesting to note that this was the only region in which Colorado's national parks were not rated as the most impressive.

TABLE 49. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impression of national parks, cities, and national forests as perceived by Region V respondents.

| State | National Parks[a] SDWS (SD) | Cities[b] SDWS (SD) | National Forests[c] SDWS (SD) |
|---|---|---|---|
| Colorado | 1.81 ( .77) | 2.17 ( .79) | 2.08 ( .84) |
| Montana | 1.98 ( .85) | 2.88 ( .76) | 2.31 ( .83) |
| Utah | 2.09 ( .91) | 2.29 ( .93) | 2.58 ( .85) |
| Wyoming | 1.68 ( .79) | 2.93 ( .78) | 2.31 ( .86) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 51.17$,

[b]this difference is significant: $X^2 = 196.29$, and

[c]this difference is significant: $X^2 = 57.17$.

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Cities. The impressiveness of the cities of Colorado, Montana, Utah, and Wyoming was thought to be significantly different by Region V respondents (table 49). While all states were scored on the impressive side of the scale, Colorado and Utah cities were perceived as the most impressive while Wyoming and Montana cities were least impressive.

National Forests. The impressiveness of the national forests of Colorado, Montana, Utah, and Wyoming was rated significantly different by Fresno (Region V) respondents (table 49). Although the national forests of all states were rated on the impressive side of the scale, Colorado and Utah were isolated at opposite extremes of the range. Montana and Wyoming, with identical weighted scores, rated approximately mid-way between the two extreme states.

Recreational Activities

Region V respondents expressed significantly different opinions of the impressiveness of all the recreational activities between Colorado, Montana, Utah, and Wyoming (table 50). Although all activities for all states were rated on the impressive side of the scale, Colorado was consistently rated most impressive in all activities except hunting. In the case of hunting, Colorado and Montana received identical scores and were not significantly different from Wyoming. Utah was rated the least impressive in all activities except sightseeing, which is scored slightly more impressive than Montana but less impressive than the other states. However, the scores of Montana, Utah, and Wyoming are only slightly different. Of all activities, the greatest difference in scores

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exists with skiing. In this case, Colorado is favorably and extremely isolated from the other three states.

Looks and Dress

Region V respondents perceived residents of Colorado, Montana, Utah, and Wyoming as looking and dressing significantly different (table 51). In the case of each state, a single couple was identified as most typifying residents of that state. In addition, each of the five couples was strongly identified with predominately one state.

While the "average" couple was most frequently identified as typical of both Colorado and Utah residents, it was associated most predominately with Colorado. Over 70 percent of the respondents chose the "average" couple as typical of Colorado residents. Less than 50 percent chose the "average" couple as looking and dressing like Utah residents.

The "cowboy" couple was chosen most frequently as typical of both Montana and Wyoming residents; however, it was chosen by a significantly greater number of respondents as representative of Wyoming residents.

"Pioneer" couples 1 and 2, while not the most frequently chosen couple for any state, were strongly identified with Utah. In both cases, the number of choices was significantly greater for Utah. The "pioneer" couple 1 was the second highest selection of all couples for Utah.

The "farmer" couple was most strongly identified with Montana. Nearly one-third of the respondents chose this couple as typical of Montana residents

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while Utah, with the second highest number of "farmer" couple choices, was identified with this couple by less than half as many of the respondents.

Vacation Preference

Fresno (Region V) respondents expressed significantly different preferences for vacations in Colorado, Montana, Utah, and Wyoming (table 52). Colorado was chosen as the first preference for a vacation by slightly more than one-half of the respondents. It was selected as a third and fourth preference by fewer respondents than the other states. Utah was rated as the lowest vacation preference and received the least number of first preference choices and the greatest number of fourth preference choices. Montana and Wyoming scores do not differ appreciably.

## Detailed Analysis of Regions I and III

The following section represents a detailed examination of respondents of different characteristics from selected regions for limited variables. It is presented only as an example of the relationships of opinions of respondents who have not and who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming and respondents of different occupational classes.

Region I - Rochester, New York, and Region III - Des Moines, Iowa, were selected for detailed analysis because they exhibited the lowest and highest have visited or lived--have not visited or lived ratio (table 53). Colorado and Utah were selected to examine because they represented the highest and lowest vacation destination preferences (table 54). The "overall progressiveness of the

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TABLE 50. Semantic differential weighted scores (SDWS) and standard deviations (SD) for impressions of camping, sightseeing, skiing, hunting, and fishing in Colorado, Montana, Utah, and Wyoming as perceived by Region V respondents.

| State | Camping[a] SDWS (SD) | Sightseeing[b] SDWS (SD) | Skiing[c] SDWS (SD) | Hunting[d] SDWS (SD) | Fishing[e] SDWS (SD) |
|---|---|---|---|---|---|
| Colorado | 1.96 ( .84) | 1.63 ( .71) | 1.72 ( .85) | 1.89 ( .82) | 1.89 ( .85) |
| Montana | 2.14 ( .85) | 2.05 ( .89) | 2.57 ( .80) | 1.89 ( .78) | 1.92 ( .77) |
| Utah | 2.47 ( .88) | 1.92 ( .89) | 2.68 ( .82) | 2.34 ( .87) | 2.43 ( .84) |
| Wyoming | 2.06 ( .80) | 1.83 ( .75) | 2.58 ( .84) | 1.90 ( .77) | 1.99 ( .82) |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 63.93$,

[b]this difference is significant: $X^2 = 49.62$,

[c]this difference is significant: $X^2 = 231.68$,

[d]this difference is significant: $X^2 = 68.76$, and

[e]this difference is significant: $X^2 = 95.77$.

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TABLE 51. How the residents of Colorado, Montana, Utah, and Wyoming look and dress as perceived by Region V respondents.[a]

| | Couple[b] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | |
| State | No. | % | No. | % | No. | % | No. | % | No. | % |
| Colorado | 37 | 13.8 | 4 | 1.5 | 27 | 10.0 | 195 | 72.5 | 6 | 2.2 |
| Montana | 119 | 44.1 | 8 | 3.0 | 83 | 30.7 | 50 | 18.5 | 10 | 3.7 |
| Utah | 8 | 3.0 | 67 | 24.8 | 39 | 14.4 | 125 | 46.3 | 31 | 11.5 |
| Wyoming | 193 | 71.5 | 3 | 1.1 | 18 | 6.7 | 45 | 16.7 | 11 | 4.1 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 610.92$.

[b]See Appendix E for pictures of couples.

TABLE 52. Vacation preferences for Colorado, Montana, Utah, and Wyoming expressed by Region V respondents.[a]

| | 1 | | 2 | | 3 | | 4 | | Weighted | Weighted |
|---|---|---|---|---|---|---|---|---|---|---|
| State | No. | % | No. | % | No. | % | No. | % | Score | Rank |
| Colorado | 139 | 52.1 | 67 | 25.1 | 36 | 13.5 | 25 | 9.4 | 1.79 | 1 |
| Montana | 49 | 18.6 | 60 | 22.7 | 78 | 29.5 | 77 | 29.2 | 2.70 | 3 |
| Utah | 36 | 13.6 | 68 | 25.8 | 69 | 22.7 | 100 | 37.9 | 2.85 | 4 |
| Wyoming | 43 | 16.2 | 70 | 26.4 | 90 | 34.0 | 62 | 23.4 | 2.65 | 2 |

[a]Necessary Chi-square for significance at the .95 probability level is 16.92, at nine degrees of freedom; this difference is significant: $X^2 = 180.40$.

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residents" and "sightseeing" variables were selected randomly from the seven-point and five-point semantic differential scales, respectively. The "looks and dress" variable was arbitrarily selected for detailed analysis.

TABLE 53. Respondents who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming.

| Lived and/or Visited | Region I | | Region II | | Region III | | Region IV | | Region V | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| Yes | 80 | 38.5 | 98 | 45.2 | 264 | 85.4 | 243 | 84.4 | 201 | 73.6 |
| No | 128 | 61.5 | 119 | 54.8 | 45 | 14.6 | 45 | 15.6 | 72 | 26.4 |

TABLE 54. Vacation destination preference weight scores for Colorado, Montana, Utah, and Wyoming.

| State | Weighted Score[a] | | | | |
|---|---|---|---|---|---|
| | Region I | Region II | Region III | Region IV | Region V |
| Colorado | 1.52 | 1.51 | 1.34 | 1.59 | 1.79 |
| Montana | 2.92 | 2.92 | 2.87 | 2.75 | 2.70 |
| Utah | 2.97 | 2.88 | 3.01 | 3.07 | 2.85 |
| Wyoming | 2.60 | 2.69 | 2.78 | 2.61 | 2.65 |

[a]The lower the score the higher the vacation destination preference.

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Have Not versus Have Lived and/or Visited

In seven out of eight cases, there was no significant difference in the perceived progressiveness of the residents and impression of sightseeing in Colorado and Utah between Region I and III respondents who have not and who have visited and/or lived in Colorado, Montana, Utah, and/or Wyoming (tables 55 and 56).

Region III respondents who have lived and/or visited in the four states perceived Utah residents significantly more progressive than those respondents who have not lived and/or visited in the four states (table 56). Although the semantic differential weighted scores represent one of the smallest differences, the distribution of scores over the seven-point scale was significantly different.

While the differences in scores are generally not significant, it is interesting to note that in all but one case the respondents who have visited and/or lived in the four states have slightly smaller semantic differential weighted scores. These scores suggest that those who have visited and/or lived in the four states perceived the residents as slightly more progressive and the sightseeing as slightly more impressive than those who have not lived and/or visited. Although the difference in perception of Colorado residents' progressiveness is not significantly different between those Region III respondents who have not and who have visited and/or lived in the four states, the semantic differential weighted scores suggest that the have lived and/or visited respondents perceived the Colorado residents slightly less progressive.

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TABLE 55. Semantic differential weighted scores for progressiveness of residents and impression of sightseeing in Colorado and Utah as perceived by Region I respondents who have not and who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming.

| State | Progressiveness | Sightseeing |
|---|---|---|
| Colorado | | |
| Have not | 3.07[a] | 1.56[b] |
| Have | 2.78 | 1.44 |
| Utah | | |
| Have not | 3.44[c] | 2.02[d] |
| Have not | 3.38 | 1.81 |

[a]Necessary Chi-square for significance at the .95 probability level is 12.59, at six degrees of freedom; this difference is not significant: $X^2 = 11.65$, and [b]this difference is not significant: $X^2 = 1.98$.

[c]Necessary Chi-square for significance at the .95 probability level is 9.49, at four degrees of freedom; this difference is not significant: $X^2 = 1.82$, and [d]this difference is not significant: $X^2 = 3.78$.

There was a significant difference between the Region I respondents who have not and who have lived and/or visited Colorado, Montana, Utah, and/or Wyoming in the impression of how residents of both Colorado and Utah look and dress (table 57). In both the case of Colorado and Utah, while couples 1, 2, 3, and 5 were chosen by a significantly less or nearly equal percentage of the have visited and/or lived respondents compared to the have not visited and/or lived group, the "average" couple was chosen by a significantly greater number of the have lived and/or visited respondents.

There was no significant difference between the Region III respondents who have not and who have visited and/or lived in the four states in their

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TABLE 56. Semantic differential weighted scores for progressiveness of residents and impression of sightseeing in Colorado and Utah as perceived by Region III respondents who have not and who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming.

| State | Progressiveness | Sightseeing |
|---|---|---|
| Colorado | | |
| Have not | 2.13 | 1.52 |
| Have | 2.47[a] | 1.33[b] |
| Utah | | |
| Have not | 3.65 | 2.19 |
| Have | 3.53[c] | 1.92[d] |

[a]Necessary Chi-square for significance at the .95 probability level is 12.59, at six degrees of freedom; this difference is not significant: $X^2 = 6.27$, and

[b]this difference is not significant: $X^2 = 5.40$.

[c]Necessary Chi-square for significance at the .95 probability level is 9.49, at four degrees of freedom; this difference is significant: $X^2 = 20.57$, and

[d]this difference is not significant: $X^2 = 7.28$.

impressions of how the residents of both Colorado and Utah look and dress (table 58). However, in the case of Colorado, a larger percentage of the have lived and/or visited respondents chose the "cowboy" couple than was chosen by the have not lived and/or visited respondents. In the case of Utah, a larger percentage of the have lived and/or visited respondents chose the "average" couple than was chosen by the have not lived and/or visited respondents.

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TABLE 57. How the residents of Colorado and Utah look and dress as perceived by Region I respondents who have not and who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming.

| | Couple[a] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | |
| State | No. | % | No. | % | No. | % | No. | % | No. | % |
| Colorado | | | | | | | | | | |
| Have not | 34 | 27.0 | 2 | 1.6 | 15 | 11.9 | 71 | 56.3 | 4 | 3.2 |
| Have[b] | 9 | 11.8 | 0 | 0.0 | 4 | 5.3 | 60 | 78.9 | 3 | 3.9 |
| Utah | | | | | | | | | | |
| Have not | 11 | 8.7 | 43 | 34.1 | 15 | 11.9 | 38 | 30.2 | 19 | 15.1 |
| Have[c] | 4 | 5.3 | 17 | 22.4 | 99 | 11.8 | 37 | 48.7 | 9 | 11.8 |

[a]See Appendix E for pictures of couples.

[b]Necessary Chi-square for significance at the .95 probability level is 9.49, at four degrees of freedom; this difference is significant: $X^2 = 58.93$, and

[c]this difference is significant: $X^2 = 40.54$.

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TABLE 58. How the residents of Colorado and Utah look and dress as perceived by Region III respondents who have not and who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming.

| State | Couples[a] 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | 5 No. | 5 % |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado | | | | | | | | | | |
| Have Not | 6 | 13.3 | 0 | 0.0 | 2 | 4.4 | 37 | 82.2 | 0 | 0.0 |
| Have[b] | 48 | 18.7 | 0 | 0.0 | 6 | 2.3 | 202 | 78.6 | 1 | 0.3 |
| Utah | | | | | | | | | | |
| Have Not | 6 | 13.3 | 10 | 22.2 | 5 | 11.1 | 16 | 35.6 | 8 | 17.8 |
| Have[c] | 22 | 8.6 | 67 | 26.1 | 16 | 6.2 | 125 | 48.6 | 27 | 10.5 |

[a]See Appendix E for picture of couples.

[b]Necessary Chi-square for significance at the .95 probability level is 9.49, at four degrees of freedom; this difference is not significant: $X^2 = 1.43$, and

[c]this difference is not significant: $X^2 = 4.81$.

Blue Collar versus White Collar versus Other Occupational Classes

Region I and III respondents of three occupational classes were compared in fifteen cases for their perception of Colorado's and Utah's progressiveness, sightseeing, and looks and dress. In the case of Region I, the have not and have visited and/or lived in Colorado, Montana, Utah, and/or Wyoming respondents were combined for examination of the progressiveness and sightseeing variables. As was noted earlier, there was no significant difference between these two groups of respondents (table 55). However, in the case of the looks and dress of both Colorado and Utah residents, the have not and have visited and/or lived groups were significantly different and consequently examined separately (table 56).

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In the case of Region III, all comparisons between the "have not and have lived and/or visited" groups were not significantly different (tables 56 and 58) except for the impression of Utah progressiveness (table 56). Therefore, with the exception of one variable, all respondents were grouped for occupational group comparison.

In the fifteen comparisons of white collar, blue collar, and "other" occupational classes, no significant difference was noted in the opinion of the three variables for both states and both regions with the exception of one example (tables 59, 60, 61, 62, and 63). In the case of Utah sightseeing, Region III respondents of the three occupational classes expressed significantly different opinions of impressiveness (table 60). While all classes rated Utah sightseeing on the impressive side of the scale, the "other" group rated it significantly more impressive and the blue collar group rated it significantly less impressive. Although the occupational classes were different in only one case, it is interesting to note that in the majority of cases, the blue collar group scored the progressiveness and sightseeing variables relatively less progressive or impressive and the "other" group the most impressive or progressive.

In all cases of the looks and dress of Colorado and Utah residents, although no significant difference in choices is noted between occupational groups, a larger percentage of the white collar group selected the "average" couple than did either of the other occupational groups.

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TABLE 59. Semantic differential weighted scores for impression of sightseeing in Colorado and Utah as perceived by Region I respondents of three occupational classes.[a]

| State | Progressiveness | Sightseeing |
|---|---|---|
| Colorado | | |
| White Collar | 3.06[b] | 1.48[d] |
| Blue Collar | 2.72 | 1.61 |
| Other | 2.94 | .94 |
| Utah | | |
| White Collar | 3.49[c] | 1.89[e] |
| Blue Collar | 3.31 | 2.17 |
| Other | 3.44 | 1.78 |

[a]See Appendix A for occupational classes.

[b]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is not significant: $X^2 = 8.73$, and

[c]this difference is not significant: $X^2 = 16.43$.

[d]Necessary Chi-square for significance at the .95 probability level is 15.51, at eight degrees of freedom; this difference is not significant: $X^2 = 5.51$, and

[e]this difference is not significant: $X^2 = 8.07$.

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TABLE 60. Semantic differential weighted scores for progressiveness of residents and impression of sightseeing in Colorado, and Utah as perceived by Region III respondents of three occupational classes.[a]

| State | Progressiveness | Sightseeing |
|---|---|---|
| Colorado | | |
| White Collar | 2.47[b] | 1.36[c] |
| Blue Collar | 2.19 | 1.40 |
| Other | 2.58 | 1.33 |
| Utah | | |
| White Collar | (see table 61) | 1.74[d] |
| Blue Collar | | 2.10 |
| Other | | 1.39 |

[a] See Appendix A for occupational classes.

[b] Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is not significant: $X^2 = 13.75$.

[c] Necessary Chi-square for significance at the .95 probability level is 15.51, at eight degrees of freedom; this difference is not significant: $X^2 = 1.37$, and

[d] this difference is significant: $X^2 = 29.15$.

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TABLE 61. Semantic differential weighted scores for progressiveness of residents in Utah as perceived by Region III respondents of three occupational classes[a] who have not and who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming.

| State | Have not lived and/or Visited[b] | Have Lived and/or Visited[c] |
|---|---|---|
| Utah | | |
| White Collar | 2.96 | 3.56 |
| Blue Collar | 3.22 | 3.60 |
| Other | 3.55 | 3.23 |

[a]See Appendix A for occupational classes.

[b]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is not significant: $X^2 = 12.63$, and

[c]this difference is not significant: $X^2 = 19.24$.

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TABLE 62. How the residents of Colorado and Utah look and dress as perceived by Region III respondents of three occupational classes.[a]

| State | Couples[b] 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | 5 No. | 5 % |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado | | | | | | | | | | |
| White Collar | 31 | 15.8 | 0 | 0.0 | 3 | 1.5 | 162 | 82.7 | 0 | 0.0 |
| Blue Collar | 12 | 19.7 | 0 | 0.0 | 2 | 3.3 | 46 | 75.4 | 1 | 1.6 |
| Other | 11 | 23.9 | 0 | 0.0 | 3 | 6.5 | 32 | 69.6 | 0 | 0.0 |
| Utah | | | | | | | | | | |
| White Collar | 17 | 8.7 | 40 | 20.4 | 10 | 5.1 | 102 | 52.0 | 27 | 13.8 |
| Blue Collar | 8 | 13.1 | 21 | 34.4 | 5 | 8.2 | 22 | 36.1 | 5 | 8.2 |
| Other | 3 | 6.5 | 15 | 32.6 | 5 | 10.9 | 20 | 43.5 | 3 | 6.5 |

[a]See Appendix A for occupational classes.

[b]See Appendix E for pictures of couples.

[c]Necessary Chi-square for significance at the .95 probability level is 15.51, at eight degrees of freedom; this difference is not significant: $X^2 = 10.06$, and

[d]this difference is not significant: $X^2 = 13.59$.

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TABLE 63. How the residents of Colorado and Utah look and dress as perceived by Region I respondents of three occupational classes[a] who have not and who have lived and/or visited in Colorado, Montana, Utah, and/or Wyoming.

| | Couples[b] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | |
| State | No. | % | No. | % | No. | % | No. | % | No. | % |
| Colorado | | | | | | | | | | |
| Have Not[c] | | | | | | | | | | |
| White Collar | 15 | 20.8 | 1 | 1.4 | 8 | 11.1 | 46 | 63.9 | 2 | 2.8 |
| Blue Collar | 11 | 30.6 | 1 | 2.8 | 5 | 13.9 | 18 | 50.0 | 1 | 2.8 |
| Other | 8 | 44.4 | 0 | 0.0 | 2 | 11.1 | 7 | 38.9 | 1 | 5.6 |
| Have[d] | | | | | | | | | | |
| White Collar | 5 | 10.6 | 0 | 0.0 | 1 | 2.1 | 39 | 83.0 | 2 | 4.3 |
| Blue Collar | 2 | 11.1 | 0 | 0.0 | 3 | 16.7 | 12 | 66.7 | 1 | 5.5 |
| Other | 2 | 14.3 | 0 | 0.0 | 0 | 0.0 | 11 | 78.6 | 1 | 7.1 |
| Utah | | | | | | | | | | |
| Have Not[e] | | | | | | | | | | |
| White Collar | 8 | 11.1 | 22 | 30.6 | 8 | 11.1 | 26 | 36.1 | 8 | 11.1 |
| Blue Collar | 3 | 8.3 | 13 | 36.1 | 4 | 11.1 | 8 | 22.2 | 8 | 22.2 |
| Other | 0 | 0.0 | 8 | 44.4 | 3 | 16.7 | 4 | 22.2 | 3 | 16.7 |
| Have[f] | | | | | | | | | | |
| White Collar | 3 | 6.4 | 8 | 17.0 | 5 | 10.6 | 25 | 53.2 | 6 | 12.8 |
| Blue Collar | 1 | 5.5 | 6 | 33.3 | 3 | 16.7 | 7 | 38.9 | 1 | 5.5 |
| Other | 1 | 7.1 | 3 | 21.4 | 1 | 7.1 | 6 | 42.9 | 3 | 21.4 |

[a]See Appendix A for occupational classes.

[b]See Appendix E for pictures of couples.

[c]Necessary Chi-square for significance at the .95 probability level is 15.51, at eight degrees of freedom; this difference is not significant: $X^2 = 6.34$,

[d]this difference is not significant: $X^2 = 7.05$,

[e]this difference is not significant: $X^2 = 7.29$, and

[f]this difference is not significant: $X^2 = 4.55$.

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## Region Comparison by State

### Five-Region Comparisons

In an effort to establish general state images, the five regions were compared to determine if their respondents' choices agreed. It was definitionally determined that only those variables for which four or more regions agreed would be utilized to describe a general state image. And in cases where regional agreement did not exist, it would be necessary to offer only a regional image.

In the five-regional analysis, there was significant difference between the regional respondents' choices in 39 out of 72 variable comparisons. When a selected region was deleted from these 39 cases, all but 15 were determined not to be significantly different at the .95 probability level.

In the case of land types, the five-regional comparisons were significantly different for all states (table 64). Similarly the five regions did not agree on the quantity of snow and level of summer temperature in the majority of cases for all states. Only in the case of the quantity of snow in Utah did all five regions agree (tables 65 and 66).

In the case of the population variables, there was considerably more agreement between regions for all states (tables 67 and 68). In seven out of 16 comparisons no significant difference was noted at the .95 probability level. While there were no cases of agreement for Colorado, in only one of the four variables was there a significant difference between regions for Utah.

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TABLE 64. Land type most characteristic of Colorado, Montana, Utah, and Wyoming as perceived by Regions I, II, III, IV, and V respondents.

| State Region | Land Type: Cities and Towns No. | % | Mountains No. | % | Deserts No. | % | Grass and Range Land No. | % | Farm Crop Land No. | % |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado[a] | | | | | | | | | | |
| I | 29 | 16.1 | 102 | 56.7 | 11 | 6.1 | 27 | 15.0 | 11 | 6.1 |
| II | 25 | 13.0 | 130 | 67.7 | 10 | 5.2 | 18 | 9.4 | 8 | 4.2 |
| III | 46 | 16.5 | 189 | 67.7 | 1 | 0.4 | 32 | 11.5 | 10 | 3.6 |
| IV | 31 | 12.4 | 180 | 71.4 | 1 | 0.4 | 29 | 11.6 | 8 | 3.2 |
| V | 38 | 15.0 | 162 | 63.8 | 8 | 3.1 | 28 | 11.0 | 17 | 6.7 |
| Montana[b] | | | | | | | | | | |
| I | 7 | 3.8 | 35 | 17.0 | 8 | 3.9 | 105 | 56.8 | 29 | 15.7 |
| II | 5 | 2.6 | 57 | 29.4 | 10 | 5.2 | 84 | 43.3 | 36 | 18.6 |
| III | 6 | 2.2 | 41 | 15.0 | 9 | 3.3 | 180 | 65.7 | 38 | 13.9 |
| IV | 2 | 0.8 | 56 | 20.1 | 7 | 2.7 | 153 | 59.3 | 39 | 15.1 |
| V | 5 | 1.9 | 66 | 25.5 | 4 | 1.5 | 144 | 55.6 | 37 | 14.3 |
| Utah[c] | | | | | | | | | | |
| I | 18 | 9.6 | 36 | 19.1 | 82 | 43.6 | 24 | 12.8 | 27 | 14.4 |
| II | 15 | 7.4 | 27 | 13.4 | 89 | 44.1 | 30 | 18.9 | 41 | 20.3 |
| III | 15 | 5.4 | 49 | 17.6 | 128 | 45.9 | 59 | 21.1 | 24 | 8.6 |
| IV | 15 | 5.7 | 45 | 17.0 | 103 | 39.0 | 41 | 15.5 | 60 | 22.7 |
| V | 19 | 7.5 | 52 | 20.6 | 109 | 43.3 | 43 | 17.1 | 28 | 11.1 |
| Wyoming[d] | | | | | | | | | | |
| I | 4 | 2.1 | 39 | 20.6 | 16 | 8.5 | 107 | 56.6 | 22 | 11.6 |
| II | 3 | 1.5 | 25 | 12.5 | 13 | 6.5 | 147 | 73.5 | 12 | 6.0 |
| III | 3 | 1.1 | 42 | 14.9 | 20 | 6.5 | 186 | 66.2 | 24 | 8.5 |
| IV | 2 | 0.8 | 42 | 16.2 | 13 | 5.0 | 191 | 73.5 | 9 | 3.5 |
| V | 2 | 0.7 | 62 | 23.9 | 20 | 7.7 | 163 | 62.9 | 10 | 3.9 |

[a]Necessary Chi-square for significance at the .95 probability level is 26.30, at 16 degrees of freedom; this difference is significant: $X^2 = 34.78$,

[b]this difference is significant: $X^2 = 34.68$,

[c]this difference is significant: $X^2 = 38.41$, and

[d]this difference is significant: $X^2 = 38.26$.

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TABLE 65. Semantic differential weighted scores for quantity of snow and level of summer temperature for Colorado and Montana as perceived by Region I, II, III, IV, and V respondents.

| State Region | Snow | Temperature |
|---|---|---|
| Colorado | | |
| I | 2.74[a] | 3.28[c] |
| II | 2.69 | 3.45 |
| III | 2.70 | 3.78 |
| IV | 2.34 | 4.18 |
| V | 2.45 | 3.73 |
| Montana | | |
| I | 2.43[b] | 3.49[d] |
| II | 2.13 | 3.62 |
| III | 2.21 | 3.75 |
| IV | 2.16 | 4.26 |
| V | 2.19 | 3.81 |

[a]Necessary Chi-square for significance at the .95 probability level is 36.42, at 24 degrees of freedom; this difference is significant: $X^2 = 62.49$,

[b]this difference is significant: $X^2 = 38.57$,

[c]this difference is significant: $X^2 = 149.54$, and

[d]this difference is significant: $X^2 = 112.24$.

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TABLE 66. Semantic differential weighted scores for quantity of snow and level of summer temperature for Utah and Wyoming as perceived by Region I, II, III, IV, and V respondents.

| State Region | Snow | Temperature |
|---|---|---|
| Utah | | |
| I | 3.36[a] | 2.91[c] |
| II | 3.32 | 3.01 |
| III | 3.46 | 3.03 |
| IV | 3.19 | 3.48 |
| V | 3.29 | 3.15 |
| Wyoming | | |
| I | 2.86[b] | 3.36[d] |
| II | 2.66 | 3.46 |
| III | 2.61 | 3.39 |
| IV | 2.42 | 4.16 |
| V | 2.57 | 3.67 |

[a]Necessary Chi-square for significance at the .95 probability level is 36.42, at 24 degrees of freedom; this difference is significant: $X^2 = 28.65$,

[b]this difference is significant: $X^2 = 48.91$,

[c]this difference is significant: $X^2 = 77.75$, and

[d]this difference is significant: $X^2 = 115.89$.

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TABLE 67. Semantic differential weighted scores for income level, political tendencies, receptiveness and progressiveness of Colorado and Montana as perceived by Region I, II, III, IV, and V respondents.

| State Region | Income | Politics | Receptiveness | Progressiveness |
|---|---|---|---|---|
| Colorado | | | | |
| I | 3.88[a] | 4.19[c] | 2.51[e] | 2.96[g] |
| II | 3.71 | 4.37 | 2.51 | 2.96 |
| III | 3.35 | 3.70 | 2.13 | 2.42 |
| IV | 3.67 | 4.10 | 2.45 | 2.87 |
| V | 3.74 | 4.30 | 2.57 | 2.99 |
| Montana | | | | |
| I | 4.67[b] | 4.67[d] | 3.01[f] | 3.71[h] |
| II | 4.42 | 4.60 | 2.87 | 3.80 |
| III | 4.41 | 4.36 | 2.72 | 3.71 |
| IV | 4.38 | 4.32 | 2.92 | 3.79 |
| V | 4.47 | 4.51 | 2.86 | 3.95 |

[a]Necessary Chi-square for significance at the .95 probability level is 36.42, at 24 degrees of freedom; this difference is significant: $X^2 = 44.78$,

[b]this difference is not significant: $X^2 = 34.53$,

[c]this difference is significant: $X^2 = 88.96$,

[d]this difference is significant: $X^2 = 47.42$,

[e]this difference is significant: $X^2 = 40.49$,

[f]this difference is significant: $X^2 = 36.70$,

[g]this difference is significant: $X^2 = 73.48$, and

[h]this difference is not significant: $X^2 = 28.31$.

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TABLE 68. Semantic differential weighted scores for income level, political tendencies, receptiveness, and progressiveness of Utah and Wyoming as perceived by Region I, II, III, IV, and V respondents.

| State Region | Income | Politics | Receptiveness | Progressiveness |
|---|---|---|---|---|
| Utah | | | | |
| I | 4.27[a] | 4.70[c] | 2.93[e] | 3.42[g] |
| II | 4.36 | 4.68 | 2.87 | 3.65 |
| III | 4.20 | 4.67 | 2.75 | 3.55 |
| IV | 4.02 | 4.80 | 3.07 | 3.44 |
| V | 4.16 | 4.97 | 2.87 | 3.44 |
| Wyoming | | | | |
| I | 4.57[b] | 4.66[d] | 2.96[f] | 3.75[h] |
| II | 4.49 | 4.51 | 2.82 | 3.85 |
| III | 4.52 | 4.44 | 2.61 | 3.71 |
| IV | 4.36 | 4.43 | 2.75 | 3.84 |
| V | 4.52 | 4.64 | 2.81 | 4.00 |

[a]Necessary Chi-square for significance at the .95 probability level is 36.42, at 24 degrees of freedom; this difference is significant: $X^2 = 34.53$,

[b]this difference is not significant: $X^2 = 23.06$,

[c]this difference is not significant: $X^2 = 33.74$,

[d]this difference is significant: $X^2 = 41.29$,

[e]this difference is not significant: $X^2 = 31.44$,

[f]this difference is significant: $X^2 = 37.90$,

[g]this difference is not significant: $X^2 = 25.91$, and

[h]this difference is not significant: $X^2 = 30.21$.

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Regions agreed in only one-half of the cases in the perceived rank order of Colorado, Montana, Utah, and Wyoming by number of national parks (table 69). While the regions could not agree on the rank order of Colorado and Utah in number of national parks, there was no significant difference between regions for Montana and Wyoming.

In the case of the impression of national parks, cities, and national forests, one-half of the five-region comparisons were significantly different (tables 70 and 71). While there was no agreement between regions in the impression of national parks, cities, and national forests in Colorado, the regions were able to agree in two of three cases for both Montana and Wyoming. Of the three attractional types, national forests accounted for the majority of regionally agreed impressions.

Of all the variables, the regions agreed upon the impressions of the recreation activity variables for the majority of the states (tables 72 and 73). However, once again the regional scores were significantly different for more variables for Colorado than the other states. In the case of Wyoming, there was no significant difference between the regions in the impressions of all five recreation activity variables.

The regions agreed in only one-half of the cases in the perception of how Colorado, Montana, Utah, and Wyoming residents look and dress (table 74). While there was no significant difference between regions for Montana and Wyoming, the regions did not agree on how residents of Colorado and Utah look and dress.

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TABLE 69. Comparison of Region I, II, III, IV, and V respondents' rank of Colorado, Montana, Utah, and Wyoming by number of national parks.

| State Region | Rank in number of National Parks 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | Weighted Score |
|---|---|---|---|---|---|---|---|---|---|
| Colorado[a] | | | | | | | | | |
| I | 109 | 55.6 | 37 | 18.9 | 33 | 16.8 | 17 | 8.7 | 1.78 |
| II | 115 | 54.8 | 47 | 22.4 | 28 | 13.3 | 20 | 9.2 | 1.77 |
| III | 188 | 61.6 | [illegible] | 24.6 | 21 | 6.9 | 21 | 6.9 | 1.58 |
| IV | 138 | 49.1 | 74 | 26.3 | 43 | 15.3 | 26 | 9.3 | 1.87 |
| V | 102 | 38.8 | 79 | 30.0 | 50 | 19.0 | 32 | 12.2 | 2.05 |
| Montana[b] | | | | | | | | | |
| I | 19 | 9.7 | 47 | 24.1 | 59 | 30.3 | 70 | 35.9 | 2.92 |
| II | 27 | 13.0 | 39 | 18.8 | 59 | 28.4 | 83 | 39.9 | 2.95 |
| III | 33 | 10.2 | 76 | 25.0 | 92 | 30.3 | 105 | 34.0 | 3.90 |
| IV | 24 | 8.6 | 49 | 17.5 | 87 | 31.1 | 120 | 41.7 | 3.07 |
| V | 27 | 10.3 | 65 | 24.7 | 72 | 27.4 | 99 | 37.6 | 2.93 |
| Utah[c] | | | | | | | | | |
| I | 22 | 11.2 | 50 | 25.5 | 53 | 27.0 | 71 | 36.2 | 2.87 |
| II | 29 | 13.9 | 54 | 25.8 | 59 | 28.2 | 67 | 32.1 | 2.78 |
| III | 31 | 10.2 | 76 | 25.0 | 92 | 30.3 | 105 | 34.0 | 2.90 |
| IV | 63 | 22.5 | 77 | 27.5 | 64 | 22.9 | 76 | 27.1 | 2.55 |
| V | 64 | 24.3 | 62 | 23.6 | 70 | 26.6 | 67 | 25.5 | 2.55 |
| Wyoming[d] | | | | | | | | | |
| I | 46 | 23.6 | 62 | 31.8 | 50 | 25.6 | 37 | 19.0 | 2.40 |
| II | 41 | 19.6 | 70 | 33.5 | 62 | 29.7 | 36 | 17.2 | 2.45 |
| III | 52 | 17.1 | 90 | 29.6 | 94 | 30.9 | 68 | 22.4 | 2.58 |
| IV | 56 | 20.0 | 82 | 29.3 | 84 | 30.0 | 58 | 20.7 | 2.51 |
| V | 72 | 27.4 | 69 | 22.8 | 67 | 25.5 | 64 | 24.3 | 2.46 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 44.11$,

[b]this difference is not significant: $X^2 = 9.61$,

[c]this difference is significant: $X^2 = 39.00$, and

[d]this difference is not significant: $X^2 = 18.69$.

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TABLE 70. Semantic differential weighted scores for impression of national parks, cities, and national forests in Colorado and Montana as perceived by Region I, II, III, IV, and V respondents.

| State Region | National Parks | Cities | National Forests |
|---|---|---|---|
| Colorado | | | |
| I | 1.55[a] | 2.26[c] | 2.03[e] |
| II | 1.71 | 2.20 | 2.05 |
| III | 1.49 | 1.77 | 1.79 |
| IV | 1.67 | 2.16 | 1.80 |
| V | 1.81 | 2.17 | 2.08 |
| Montana | | | |
| I | 2.08[b] | 3.05[d] | 2.22[f] |
| II | 2.16 | 3.01 | 2.23 |
| III | 2.00 | 2.83 | 2.17 |
| IV | 2.01 | 2.89 | 2.22 |
| V | 1.98 | 2.88 | 2.31 |

[a]Necessary Chi-square for significance at the .95 probability level is 26.30, at 16 degrees of freedom; this difference is significant: $X^2 = 43.72$,

[b]this difference is not significant: $X^2 = 24.08$,

[c]this difference is significant: $X^2 = 75.63$,

[d]this difference is significant: $X^2 = 32.69$,

[e]this difference is significant: $X^2 = 41.48$, and

[f]this difference is not significant: $X^2 = 11.44$.

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TABLE 71. Semantic differential weighted scores for impression of national parks, cities, and national forests in Utah and Wyoming as perceived by Region I, II, III, IV, and V respondents.

| State Region | National Parks | Cities | National Forests |
|---|---|---|---|
| Utah | | | |
| I | 2.22[a] | 2.36[c] | 2.62[e] |
| II | 2.15 | 2.45 | 2.54 |
| III | 2.14 | 2.23 | 2.45 |
| IV | 1.96 | 2.30 | 2.47 |
| V | 2.09 | 2.29 | 2.58 |
| Wyoming | | | |
| I | 1.81[b] | 3.08[d] | 2.21[f] |
| II | 2.00 | 2.94 | 2.14 |
| III | 1.80 | 2.85 | 2.16 |
| IV | 1.74 | 2.93 | 2.18 |
| V | 1.68 | 2.93 | 2.31 |

[a]Necessary Chi-square for significance at the .95 probability level is 26.30, at 16 degrees of freedom; this difference is not significant: $X^2 = 24.36$,

[b]this difference is significant: $X^2 = 39.10$,

[c]this difference is significant: $X^2 = 30.56$,

[d]this difference is not significant: $X^2 = 22.20$,

[e]this difference is not significant: $X^2 = 21.16$, and

[f]this difference is not significant: $X^2 = 25.04$.

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TABLE 72. Semantic differential weighted scores for impressions of camping, sightseeing, skiing, hunting, and fishing in Colorado and Montana as perceived by Region I, II, III, IV, and V respondents.

| State Region | Camping | Sightseeing | Skiing | Hunting | Fishing |
|---|---|---|---|---|---|
| Colorado | | | | | |
| I | 1.75[a] | 1.52[c] | 1.79[e] | 2.13[g] | 2.02[i] |
| II | 1.89 | 1.58 | 1.80 | 2.15 | 2.03 |
| III | 1.76 | 1.36 | 1.65 | 2.05 | 1.90 |
| IV | 1.79 | 1.50 | 1.68 | 1.84 | 1.72 |
| V | 1.96 | 1.63 | 1.72 | 1.89 | 1.89 |
| Montana | | | | | |
| I | 2.09[b] | 2.10[d] | 2.57[f] | 2.15[h] | 2.19[j] |
| II | 2.11 | 2.10 | 2.59 | 2.07 | 2.17 |
| III | 2.17 | 2.06 | 2.64 | 1.96 | 2.11 |
| IV | 2.15 | 2.08 | 2.53 | 1.99 | 2.04 |
| V | 2.14 | 2.05 | 2.57 | 1.89 | 1.92 |

[a]Necessary Chi-square for significance at the .95 probability level is 26.30, at 16 degrees of freedom; this difference is significant: $X^2 = 26.45$,

[b]this difference is not significant: $X^2 = 10.53$,

[c]this difference is significant: $X^2 = 39.79$,

[d]this difference is not significant: $X^2 = 20.70$,

[e]this difference is not significant: $X^2 = 24.21$,

[f]this difference is not significant: $X^2 = 23.38$,

[g]this difference is significant: $X^2 = 32.02$,

[h]this difference is significant: $X^2 = 27.41$,

[i]this difference is significant: $X^2 = 32.09$, and

[j]this difference is not significant: $X^2 = 26.10$.

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TABLE 73. Semantic differential weighted scores for impressions of camping, sightseeing, skiing, hunting, and fishing in Utah and Wyoming as perceived by Region I, II, III, IV, and V respondents.

| State Region | Camping | Sightseeing | Skiing | Hunting | Fishing |
|---|---|---|---|---|---|
| Utah | | | | | |
| I | 2.43[a] | 1.94[c] | 2.80[e] | 2.60[g] | 2.62[i] |
| II | 2.46 | 1.99 | 2.77 | 2.56 | 2.59 |
| III | 2.53 | 1.96 | 2.75 | 2.62 | 2.64 |
| IV | 2.43 | 1.89 | 2.56 | 2.38 | 2.41 |
| V | 2.47 | 1.92 | 2.68 | 2.34 | 2.43 |
| Wyoming | | | | | |
| I | 1.90[b] | 1.91[d] | 2.61[f] | 2.10[h] | 2.20[j] |
| II | 2.00 | 2.00 | 2.57 | 2.07 | 2.16 |
| III | 2.13 | 1.95 | 2.51 | 1.92 | 2.21 |
| IV | 2.10 | 1.94 | 2.49 | 1.97 | 2.02 |
| V | 2.06 | 1.83 | 2.58 | 1.90 | 1.99 |

[a]Necessary Chi-square for significance at the .95 probability level is 26.30, at 16 degrees of freedom; this difference is not significant: $X^2 = 14.81$,

[b]this difference is not significant: $X^2 = 24.82$,

[c]this difference is not significant: $X^2 = 14.46$,

[d]this difference is not significant: $X^2 = 22.17$,

[e]this difference is not significant: $X^2 = 22.63$,

[f]this difference is not significant: $X^2 = 22.91$,

[g]this difference is significant: $X^2 = 37.56$,

[h]this difference is not significant: $X^2 = 24.93$,

[i]this difference is significant: $X^2 = 30.18$, and

[j]this difference is not significant: $X^2 = 23.52$.

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TABLE 74. How the residents of Colorado, Montana, Utah, and Wyoming look and dress as perceived by Region I, II, III, IV, and V respondents.

| State / Region | Couple[a] 1 No. | 1 % | 2 No. | 2 % | 3 No. | 3 % | 4 No. | 4 % | 5 No. | 5 % |
|---|---|---|---|---|---|---|---|---|---|---|
| Colorado[b] | | | | | | | | | | |
| I | 43 | 21.3 | 2 | 1.0 | 19 | 9.4 | 131 | 64.9 | 7 | 3.5 |
| II | 47 | 22.4 | 2 | 1.0 | 10 | 4.8 | 146 | 69.5 | 5 | 2.4 |
| III | 54 | 17.9 | 0 | 0.0 | 8 | 2.6 | 239 | 79.1 | 1 | 0.3 |
| IV | 51 | 18.0 | 1 | 0.4 | 14 | 4.9 | 215 | 76.0 | 2 | 0.7 |
| V | 37 | 13.8 | 4 | 1.5 | 27 | 10.0 | 195 | 72.5 | 6 | 2.2 |
| Montana[c] | | | | | | | | | | |
| I | 86 | 42.8 | 8 | 4.0 | 61 | 30.3 | 43 | 21.9 | 3 | 1.5 |
| II | 89 | 42.2 | 7 | 3.3 | 66 | 31.3 | 42 | 19.9 | 7 | 3.3 |
| III | 132 | 43.7 | 3 | 1.0 | 91 | 30.1 | 68 | 22.5 | 8 | 2.6 |
| IV | 132 | 46.8 | 5 | 1.8 | 68 | 24.1 | 68 | 24.1 | 9 | 3.2 |
| V | 119 | 44.1 | 8 | 3.0 | 83 | 30.7 | 50 | 18.5 | 10 | 3.7 |
| Utah[d] | | | | | | | | | | |
| I | 15 | 7.4 | 60 | 29.7 | 24 | 11.9 | 75 | 37.1 | 28 | 13.9 |
| II | 20 | 9.5 | 60 | 28.6 | 25 | 11.9 | 69 | 32.9 | 36 | 17.1 |
| III | 28 | 9.3 | 77 | 25.5 | 21 | 7.0 | 141 | 46.7 | 35 | 11.6 |
| IV | 17 | 6.0 | 69 | 24.4 | 31 | 11.0 | 127 | 44.9 | 39 | 13.8 |
| V | 8 | 3.0 | 67 | 24.8 | 39 | 14.4 | 125 | 46.3 | 31 | 11.5 |
| Wyoming[e] | | | | | | | | | | |
| I | 123 | 61.2 | 3 | 1.5 | 27 | 13.4 | 41 | 20.4 | 7 | 3.5 |
| II | 147 | 70.0 | 4 | 1.9 | 17 | 7.8 | 36 | 17.1 | 6 | 2.9 |
| III | 208 | 68.9 | 0 | 0.0 | 25 | 8.3 | 65 | 21.5 | 4 | 1.3 |
| IV | 199 | 70.3 | 4 | 1.4 | 22 | 7.8 | 54 | 19.1 | 4 | 1.4 |
| V | 193 | 71.5 | 3 | 1.1 | 18 | 6.7 | 45 | 16.7 | 11 | 4.1 |

[a] See Appendix E for pictures of couples.

[b] Necessary Chi-square for significance at the .95 probability level is 26.30, at 16 degrees of freedom; this difference is significant: $X^2 = 41.13$,

[c] this difference is not significant: $X^2 = 15.34$,

[d] this difference is significant: $X^2 = 35.28$, and

[e] this difference is not significant: $X^2 = 25.36$.

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Finally, the five regions did not agree in their preference for a vacation in Colorado and Montana (table 75). However, the regions did not differ significantly in their stated vacation preferences for Utah and Wyoming.

Four Region Comparisons

Table 76 lists the various variables for each state for which the five regions did not agree. Also listed is the region which contributed the largest percentage to the Chi-square value and was consequently eliminated for the final four region comparison. It is interesting to note that in 14, or 36 percent, of the 39 cases, Region III - Des Moines, Iowa, contributed the majority to the Chi-square.

In the four regional comparisons, 15 remained significantly different. Eight of these cases were in Colorado while only one remained for Wyoming. In the final analysis, general state images can be provided for all states with some variables requiring regional examination.

All variables except land class, snow quantity, temperature level, impression of national parks, impression of national forests, and impression of fishing can be utilized for describing a general state image for Colorado. All variables except political tendencies and temperature level can be applied to Montana's general state image. Utah's general image can be described with all variables except temperature level, average family income, and impression of hunting. Wyoming's general image can be described with the most variables; only land class must be described on a regional basis.

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TABLE 75. Comparison of Region I, II, III, IV, and V respondents' vacation preference for Colorado, Montana, Utah, and Wyoming.

| State Region | 1 | | 2 | | 3 | | 4 | | Weighted Score |
|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | |
| Colorado[a] | | | | | | | | | |
| I | 131 | 66.2 | 40 | 20.2 | 16 | 8.1 | 11 | 5.6 | 1.52 |
| II | 148 | 69.5 | 35 | 16.4 | 16 | 7.4 | 14 | 6.5 | 1.51 |
| III | 233 | 77.7 | 36 | 12.0 | 21 | 7.0 | 10 | 3.3 | 1.34 |
| IV | 183 | 64.7 | 56 | 19.8 | 23 | 8.1 | 21 | 7.4 | 1.59 |
| V | 139 | 52.1 | 67 | 25.1 | 36 | 13.5 | 25 | 9.4 | 1.79 |
| Montana[b] | | | | | | | | | |
| I | 22 | 11.2 | 43 | 21.8 | 66 | 33.5 | 66 | 33.5 | 2.92 |
| II | 23 | 10.8 | 40 | 18.9 | 81 | 38.2 | 68 | 32.1 | 2.92 |
| III | 25 | 8.4 | 77 | 24.9 | 112 | 37.2 | 85 | 28.4 | 2.81 |
| IV | 40 | 14.3 | 66 | 23.6 | 102 | 36.4 | 72 | 25.7 | 2.75 |
| V | 49 | 18.6 | 60 | 22.7 | 78 | 29.5 | 77 | 29.2 | 2.70 |
| Utah[c] | | | | | | | | | |
| I | 20 | 10.1 | 47 | 23.7 | 48 | 24.2 | 83 | 41.9 | 2.97 |
| II | 16 | 7.5 | 69 | 32.4 | 52 | 24.4 | 76 | 35.7 | 2.88 |
| III | 17 | 5.7 | 80 | 26.8 | 82 | 27.5 | 119 | 39.9 | 3.01 |
| IV | 22 | 7.9 | 70 | 25.0 | 60 | 21.4 | 128 | 45.7 | 3.07 |
| V | 36 | 13.6 | 68 | 25.8 | 60 | 22.7 | 100 | 37.9 | 2.85 |
| Wyoming[d] | | | | | | | | | |
| I | 25 | 12.7 | 68 | 34.5 | 67 | 34.0 | 37 | 18.8 | 2.60 |
| II | 26 | 12.3 | 69 | 32.5 | 63 | 29.0 | 54 | 25.5 | 2.69 |
| III | 25 | 8.4 | 105 | 35.2 | 83 | 27.9 | 85 | 28.5 | 2.78 |
| IV | 39 | 13.9 | 87 | 31.0 | 95 | 33.8 | 60 | 21.4 | 2.61 |
| V | 43 | 16.2 | 70 | 26.4 | 90 | 34.0 | 62 | 23.4 | 2.65 |

[a]Necessary Chi-square for significance at the .95 probability level is 21.03, at 12 degrees of freedom; this difference is significant: $X^2 = 47.00$,

[b]this difference is significant: $X^2 = 23.34$,

[c]this difference is not significant: $X^2 = 21.02$, and

[d]this difference is not significant: $X^2 = 19.91$.

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TABLE 76. Chi-square values of four regional comparisons with a selected region deleted for five-region comparisons exhibiting significant differences.

| State | Variable | Region Deleted | Degree of Freedom | Chi-square |
|---|---|---|---|---|
| Colorado | Land Class | I | 12 | 23.50* |
| | Snow Quantity | I | 18 | 40.63* |
| | Temperature | IV | 18 | 64.18* |
| | Average Income | III | 18 | 16.45 |
| | Political Tendencies | III | 18 | 21.60 |
| | Receptiveness | III | 18 | 9.40 |
| | Progressiveness | III | 18 | 11.84 |
| | Vacation Preference | V | 9 | 17.94* |
| | Number of National Parks | V | 9 | 21.84* |
| | Impression of Nat'l Parks | III | 12 | 22.29* |
| | Impression of Cities | III | 12 | 8.05 |
| | Impression of Nat'l Forests | V | 12 | 24.60* |
| | Impression of Camping | V | 12 | 10.15 |
| | Impression of Sightseeing | III | 12 | 16.60 |
| | Impression of Hunting | IV | 12 | 17.91 |
| | Impression of Fishing | IV | 12 | 13.18 |
| | Look and Dress | III | 12 | 21.75* |
| Montana | Land Class | II | 12 | 17.68 |
| | Snow Quantity | I | 18 | 14.07 |
| | Temperature | IV | 18 | 43.96* |
| | Political Tendencies | II | 18 | 30.69* |
| | Receptiveness | II | 18 | 21.55 |
| | Vacation Preference | V | 9 | 12.84 |
| | Impression of Cities | I | 12 | 20.14 |
| | Impression of Hunting | I | 12 | 15.22 |
| Utah | Land Class | III | 12 | 19.14 |
| | Temperature | IV | 18 | 32.80* |
| | Average Income | I | 18 | 32.56* |
| | Number of National Parks | III | 9 | 22.55* |
| | Impression of Cities | IV | 12 | 17.25 |
| | Impression of Hunting | III | 12 | 24.78* |
| | Impression of Fishing | III | 12 | 19.16 |
| | Look and Dress | III | 12 | 20.65 |
| Wyoming | Land Class | I | 12 | 22.92* |
| | Snow Quantity | I | 18 | 25.36 |
| | Temperature | IV | 18 | 26.79 |
| | Political Tendencies | IV | 18 | 25.61 |
| | Receptiveness | III | 18 | 23.10 |
| | Impression of Nat'l Parks | II | 12 | 17.62 |

*Chi-square value indicates significant differences between the four regions in rating of this variable.

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## State Images

In reading the following descriptions of the general and regional images of Colorado, Montana, Utah, and Wyoming, several concepts must be kept in mind.

The image descriptions are an attempt to verbalize a weighted average score derived from the subjective opinions of many people which are quantified numerically on a scale. While it is conceivable that an average score could be the reflection of near equal distribution of respondent selections at opposite extremes of the scale, the restriction of an acceptable distribution by requiring a relatively small standard deviation has assured that most selections are grouped near the average score. Consequently, the average score should represent the score most nearly representing the weighted opinion of the majority of respondents.

Although the isolated image or score of any state is of importance, it must be kept in mind that its image relative to other states may be more important. Given that a state's image is defined as positive or good and that its differences from another are small and subtle, it becomes important to determine whether or not it is relatively better or worse. Since states are competitive in the tourist market they must be concerned not only with their image but its relation to their competitors. Two products may be perceived as good, but given equal opportunity the customer will most likely choose the one which is perceived as best. The following descriptions attempt to verbalize the images of Colorado, Montana, Utah, and Wyoming as perceived by respondents from

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five regions of the United States. In addition, appropriate comparisons are made between states to suggest the relative nature of some image variables.

General state images are described where regional agreement was achieved for a variable. Tables 77, 78, and 79 indicate the semantic differential weighted score and percentage ranges for those variables for which regional agreement was achieved and provide the basis for the image verbalization. In cases where regional agreement was not achieved for a particular variable, a brief comparative description is given of the regional image perceptions. However, for detailed examination of these cases, reference should be made to pages 59 through 115 where comparisons by region are examined.

TABLE 77. Regional percentage range for land class for Montana and Utah.[a]

| | Montana % | Utah % |
|---|---|---|
| Cities and Towns | 0.8 - 3.8 | 5.7 - 9.6 |
| Mountains | 15.0 - 25.5 | 13.4 - 20.6 |
| Deserts | 1.5 - 3.9 | 39.0 - 44.1 |
| Grass and Range Land | 55.6 - 65.7 | 12.8 - 18.9 |
| Farm Crop Land | 13.9 - 15.7 | 11.1 - 22.7 |

[a]Range not given for Colorado and Wyoming because four-region comparison indicated significant difference.

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TABLE 78. Regional semantic differential weighted score range for image variables for Colorado, Montana, Utah, and Wyoming.

| Variable | State | | | |
|---|---|---|---|---|
| | Colorado | Montana | Utah | Wyoming |
| Snow Quantity | a | 2.16-2.21 | 3.19-2.46 | 2.42-2.66 |
| Temperature | a | a | a | 3.36-3.67 |
| Average Income | 3.67-3.88 | 4.38-4.67 | a | 4.36-4.57 |
| Political Tendencies | 4.10-4.37 | a | 4.67-4.97 | 4.44-4.66 |
| Receptiveness | 2.45-2.57 | 2.72-3.01 | 2.75-3.07 | 2.75-2.96 |
| Progressiveness | 2.87-2.99 | 3.71-3.95 | 3.42-3.65 | 3.71-4.00 |
| Impression of Nat'l Parks | a | 1.98-2.16 | 1.96-2.22 | 1.68-1.80 |
| Impression of Cities | 2.16-2.26 | 2.83-3.01 | 2.23-2.45 | 2.85-3.09 |
| Impression of Nat'l Forests | a | 2.17-2.31 | 2.45-2.62 | 2.14-2.31 |
| Impression of Camping | 1.75-1.89 | 2.09-2.17 | 2.43-2.53 | 1.90-2.13 |
| Impression of Sightseeing | 1.50-1.63 | 2.05-2.10 | 1.89-1.99 | 1.83-2.00 |
| Impression of Skiing | 1.65-1.80 | 2.53-2.64 | 2.56-2.80 | 2.49-2.61 |
| Impression of Hunting | 1.89-2.15 | 1.89-2.07 | a | 1.90-2.10 |
| Impression of Fishing | 1.89-2.03 | 1.92-2.19 | 2.41-2.64 | 1.99-2.21 |

[a]Range not given because four-region comparison indicated significant difference.

TABLE 79. Regional percentage range for looks and dress for Montana, Utah, and Wyoming residents.[a]

| Picture | Montana % | Utah % | Wyoming % |
|---|---|---|---|
| 1 | 42.2-46.8 | 3.0- 9.5 | 61.2-71.5 |
| 2 | 1.0- 4.0 | 24.4-29.7 | 0.0- 1.9 |
| 3 | 24.1-31.3 | 11.0-14.4 | 6.7-13.4 |
| 4 | 18.5-24.1 | 32.9-46.3 | 16.7-21.5 |
| 5 | 1.5- 3.7 | 11.5-17.1 | 1.3- 3.5 |

[a]Range not given for Colorado because four-region comparison indicated significant difference.

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To assist in relating the numerical data found in the tables to the verbalization of image variables, which have been quantified with the semantic differential scale, the scale verbal descriptions and assigned weights are given below:

Average Annual Family Income

Extremely far above national average (1)

Far above national average (2)

Slightly above national average (3)

About national average (4)

Slightly below national average (5)

Far below national average (6)

Extremely far below national average (7)

Political Tendencies

Extremely liberal (1)

Very liberal (2)

Slightly liberal (3)

Middle-of-the-road (4)

Slightly conservative (5)

Very conservative (6)

Extremely conservative (7)

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Receptiveness of Local Residents to Vacation Visitors from Other States

Extremely receptive (1)

Very receptive (2)

Slightly receptive (3)

Some receptive some not receptive (4)

Slightly unreceptive (5)

Very unreceptive (6)

Extremely unreceptive (7)

Overall Progressiveness of the Residents

Extremely progressive (1)

Very progressive (2)

Slightly progressive (3)

Just-up-to-date (4)

Slightly backward (5)

Very backward (6)

Extremely backward (7)

Amount of Winter Snow

Extremely much (1)

Very much (2)

Much (3)

Moderate (4)

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Little (5)

Very little (6)

None (7)

Summer Temperature

Extremely hot (1)

Very hot (2)

Slightly hot (3)

Moderate (4)

Slightly cool (5)

Very cool (6)

Extremely cool (7)

Impression of National Parks, Cities, National Forests, Camping, Sightseeing, Skiing, Hunting, and Fishing.

Very impressive (1)

Impressive (2)

No impression (3)

Unimpressive (4)

Very unimpressive (5)

For purposes of visualizing general images and relative comparisons, figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 have been provided in Appendix F.

Finally, in interpreting image from the semantic differential, a score very near the middle can either imply an image which is moderate and,

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consequently, is good or bad, or it can imply that no image exists at all. Generally speaking, to have either a negative image or no image is undesirable since it suggests an unfavorable characteristic or a lack of knowledge. In tourism development, a state or area with a negative image or no image may find it difficult to attract and hold tourists. In the first case, the image may be repulsive; in the second case, an area which is unknown can hardly be included in the tourist itinerary and become a destination.

Colorado

Colorado's general state image can only be described by 11 of the 16 variables. The remaining variables must be examined on a regional basis.

Although regional agreement was not achieved on the land class thought to most represent Colorado, the majority of respondents for all regions perceived Colorado as a mountainous state (table 64). Although well over 50 percent of Region I respondents chose mountains as the predominate land class, they represented the smallest percentage of all regions. A larger percentage of Region I respondents typified Colorado as range and grass land than did any other regional group. Region IV respondents favored mountains as typical in a greater percentage than did those of any other region. While nearly similar percentages of respondents from Region I, III, and V chose cities and towns as most representative of Colorado, a somewhat smaller and similar percentage of respondents from Region II and IV chose this class.

Regional agreement did not exist on winter snow quantity or temperature level for Colorado (table 65). While Regions I, II, and III, all east of Colorado,

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perceived it as having much snow, the somewhat warmer and western Regions IV and V perceived Colorado as having very much snow. Regions I and II imagined Colorado to have a slightly hot temperature while Regions III and V perceived temperatures of a more moderate nature. Region IV perceived Colorado's summer temperature as moderate to slightly cool.

Regional agreement was achieved on all population variables for Colorado. In general, Colorado residents are perceived as having average annual family incomes of near to slightly above the national average (table 78). They are perceived as having political tendencies near middle-of-the-road with slight tendencies toward conservatism (table 78). However, Colorado residents are believed to be somewhat more liberal or less conservative than those of the other three states.

Colorado residents are thought to be very to slightly receptive to vacation visitors from other states (table 78). They are thought to be more receptive than the residents of the other three states. Colorado residents are perceived as slightly progressive. They are believed to be significantly more progressive than the residents of the other states.

Regional agreement was achieved in only one of three cases of the impression of recreational attractions in Colorado. While all regions rated Colorado's national parks in the impressive to very impressive range, Regions I and III scored a higher impression than the other regions (table 70). Region V perceived the national parks less impressive than the other regions. However, all regions except Regions III and V scored more impressive than the general

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range of the other states. Regional agreement was achieved on the impression of Colorado cities. Colorado cities were perceived as impressive with the general image range more impressive than the other states (table 78).

Regions I, II and V scored similarly in the impression of Colorado national forests maintaining an impressive to no impression rating (table 70). Regions III and IV were slightly more positive with scores in the impressive to very impressive range.

Regional agreement was achieved on all recreational activities for Colorado. In all cases except hunting and fishing, the activities were perceived to be impressive to very impressive (table 78). Hunting and fishing were rated impressive. In all cases except hunting, Colorado's recreation activities were perceived as more impressive than similar activities in other states.

Regional agreement was not achieved on the looks and dress of Colorado residents (table 74). However, the majority of respondents from each region chose the "average" couple as most typical of Colorado residents. Regions III and IV favored the "average" couple considerably more than the other regions. Regions I and II respondents chose the "cowboy" couple in a larger percentage than the other regions while the "farmer" couple was the choice of only a small percentage of each region's respondents. Region I and V respondents for this couple constituted a percentage level nearly twice as large as for the other regions.

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Colorado is the first vacation destination preference of the majority of respondents from all regions. In addition, it was selected as a third and fourth vacation preference by the least percentage of respondents in all regions.

Montana

Regional agreement was achieved on all but two variables for Montana.

Montana is perceived as predominantly grass and range lands (table 77). While mountains are thought to best typify Montana by some, the grass and range lands class is an overwhelming choice. Montana is thought to receive very much winter snow. Relative to the other states, it is thought to receive the largest quantity of winter snow.

Regional agreement was not achieved on the level of summer temperature for Montana. Region II, III, and V respondents perceived Montana temperature as moderate, while Region I respondents rated it in the slightly hot to moderate range (table 65). Region IV respondents perceived Montana's summer temperature to be moderate to slightly cool. Relatively speaking, Montana's summer temperature was rated cooler than that of the other states.

Regional agreement was achieved for three of the four population variables for Montana. Montana residents are thought to have average annual family incomes slightly below the national average (table 78). While the incomes are thought to be lower than those of Colorado and Utah residents, they are thought to be nearly equal to those of Wyoming residents.

Regional agreement was not achieved for the perceived political tendencies of Montana residents. While all regions perceived Montana residents

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as having conservative political tendencies, Regions I, II, and V favored the slightly conservative rating while Regions III and IV rated them more nearly middle-of-the-road (table 67).

Montana residents are thought to be slightly receptive to vacation visitors from other states (table 78). Montana residents are believed to be generally up-to-date in their overall progressiveness, however, less progressive than Colorado and Utah residents and about equal to Wyoming residents (table 78).

Regional agreement was achieved on all recreational attractions for Montana (table 78). While Montana's national parks and forests are thought to be generally impressive, its cities were thought to be less impressive. Montana's cities receive an impression range spreading from impressive to unimpressive.

Regional agreement was achieved on all recreational activities in Montana (table 78). While camping, sightseeing, and skiing were perceived as generally impressive, both hunting and fishing scored in the very impressive range. Montana hunting is thought to be the most impressive of the four states. Generally speaking, Montana's recreational activities are thought to be less impressive than Colorado's, more impressive than Utah's, and about equal to Wyoming.

Regional agreement was achieved on the looks and dress of Montana residents (table 79). While Montana residents are thought to look and dress like the "cowboy" couple, a rather strong identification exists with the "farmer"

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couple and "average" couple, respectively. The looks and dress of Montana residents is the least identifiable to any single stereotype of the four states.

Montana is generally rated as a third preference for a vacation destination.

Utah

Regional agreement was achieved on all but three variables for Utah.

Utah is perceived as predominately desert land (table 77). However, a sizeable number of respondents perceive Utah as being predominantly farm crop land, mountains, or grass and range lands. Generally speaking, there seems to be less agreement on a single land class for Utah than for the other three states.

Utah is thought to receive much to moderate amounts of winter snow; however, this quantity is perceived to be significantly less than the other states (table 78).

Regional agreement was not achieved for the summer temperature level thought to exist in Utah. Region I perceived the temperature to be in the slightly hot to very hot range while Regions II and III rated temperature slightly hot (table 66). Both Regions IV and V perceived Utah's summer temperature to be in the slightly hot to moderate range; however, Region IV rated it considerably cooler than the others. Generally speaking, Utah is perceived as having summer temperatures considerably hotter than the other states

Regional agreement was not achieved on the average annual family income of Utah residents. All regions perceived Utah's family income to be near to slightly below the national average (table 68). While Region IV rated

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income levels near national average, the other regions perceived them to be considerably farther below the average. Generally speaking, Utah residents are thought to have incomes lower than Colorado residents and higher than Montana and Wyoming residents.

Utah residents are thought to have slightly conservative political tendencies (table 78). Comparatively speaking, Utah residents are thought to be the most conservative of the four states. Utah residents are thought to be slightly receptive to vacation visitors from other states (table 78). Generally speaking, they are perceived as the least receptive of the four states; however, there is probably no significant difference between the perceived receptiveness of Utah, Montana, and Wyoming.

Utah residents are thought to be just-up-to-date to slightly progressive (table 78). While they are perceived as considerably less progressive than Colorado residents, they are thought to be more progressive than Montana and Wyoming residents.

Utah's recreational attractions are thought to be generally impressive. However, the national parks are thought to be the least impressive of the four states although little difference is seen with those of Montana (table 78). Utah's cities were perceived as generally impressive and more so than those of Montana and Wyoming and less than those of Colorado (table 78). Utah's national forests are perceived to rate in the impressive to no impression range (table 78). Comparatively speaking, they are thought to be the least impressive of the four states.

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Regional agreement was achieved on the impression of all recreational activities for Utah with the exception of hunting. While the activities are generally all thought to be impressive, every activity except sightseeing is rated considerably less impressive than comparable activities in the other three states (table 78). Camping, skiing, and fishing all rate in the no impression to impressive range with skiing perceived as the least impressive recreation activity in Utah. Sightseeing is rated in the impressive to very impressive range and is thought to be less than Colorado but equal to or slightly more impressive than Montana and Wyoming sightseeing.

Utah hunting is ranked in the no impression to impressive range by Regions I, II, and III (table 73). Region IV and V thought Utah hunting to be more impressive.

Regional agreement was achieved on the looks and dress of Utah residents (table 79). While Utah residents are generally thought to look and dress like the "average" couple, a very large group sees Utah residents like the "pioneer" couple 1. The "pioneer" couple 2 was the third most popular choice. Combined, "pioneer" couples 1 and 2 would represent the strongest stereotype of how Utah residents look and dress.

Utah is generally rated a fourth preference as a vacation destination.

Wyoming

Regional agreement was achieved on more variables for Wyoming than for any other state. Only one variable lacked agreement between four or more regions.

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The land class which most typifies Wyoming was the only variable for which the regions were unable to agree. Grass and range lands was the land class chosen by the majority from each region (table 64). The overwhelming majority of Regions II, III, and IV respondents perceived Wyoming to be grass and range lands. Region I and V respondents, while choosing grass and range lands as a majority choice, perceived Wyoming as mountainous in greater percentages than the other regions. While grass and range lands were selected by the Region I respondents in the comparatively smallest percentage, they represented the largest group to select farm crop lands as typical of Wyoming.

Wyoming is thought to receive much to very much winter snow. However, it is perceived as receiving significantly less than Montana and more than Utah. Wyoming is the only state for which regional agreement was achieved on the level of summer temperature. The temperature is perceived as being slightly hot to moderate (table 78).

Wyoming residents are thought to have average annual family incomes near to slightly below the national average (table 78). They are thought to be considerably lower than those of Colorado residents and about equal to residents of Montana. Wyoming residents are seen as being slightly conservative to middle-of-the-road in political tendencies (table 78). Comparatively speaking, they are perceived to be more conservative than Colorado residents and more liberal or less conservative than Utah residents.

Wyoming residents are believed to be very to slightly receptive to vacation visitors from other states (table 78). Relatively, Wyoming residents

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are thought to be less receptive than Colorado residents and slightly more or nearly equal in receptiveness to the residents of the other states. Wyoming residents are perceived as being just-up-to-date to slightly progressive (table 78). Relatively, they are perceived to be the least progressive of the four states' residents.

Regional agreement was achieved on all recreational activities for Wyoming (table 78). Wyoming national parks are perceived as impressive. Relatively, they are thought to be more impressive than those in Montana and Utah. Wyoming cities are thought to be somewhat unimpressive. The general impression range scores in the no impression area. Wyoming cities are thought to be the least impressive of the four states. National forests are perceived as impressive equal to those in Montana and superior to those in Utah.

Regional agreement was achieved on all recreational activities in Wyoming (table 78). All activities are perceived to be impressive with the exception of skiing, which rates considerably less than other activities but still in the impressive or positive range. Generally speaking, Wyoming activities are thought to be similar in impressiveness to those in Montana and more impressive than Utah.

Regional agreement was achieved on the perceived looks and dress of Wyoming residents. Wyoming residents are overwhelmingly thought to look and dress like the "cowboy" couple (table 79). The only other couple which some believe best typifies Wyoming residents is the "average". However, in the final

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analysis, it must be concluded that the cowboy image is solidly associated with Wyoming.

Wyoming is generally rated as a second preference as a vacation destination.

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# CHAPTER V

## CONCLUSIONS AND RECOMMENDATIONS

The data collected in this study suggest that, within established definitional limitations, states have images. Essentially, given groups of people express similar opinions of verbal and visual descriptions which may be used to characterize a state's land type, climatic conditions, and resident population. These groups perceive comparable levels of impressiveness of recreational attractions and activities in a state.

Different groups of people from different regions of the United States generally agree upon a state's image. However, such agreement is not unanimous. This lack of unanimity supports the concept that tourism promotion and advertising must be regionalized. However, this philosophy has generally been followed because different regions maintain markets of different magnitude. Consequently, different proportions, not necessarily different contents, of advertising have been directed to these markets. The fact that image perception of a single state may be different in different regions suggests that content, as well as proportion of advertising, should be different.

The data from this study suggest that resident population characteristics are perceived similarly by regions more often than not, while less regional agreement is achieved for land and climatic characteristics. This may imply that regionalization is particularly necessary for changing or reinforcing land

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and climatic images. And population variables may be adjusted or reinforced with similar or nation-wide promotional efforts.

Fact and perceived image of some state characteristics may not necessarily be the same. Two portions of this study tend to support this conclusion. In the first case, the perceived rank order of states in number of national parks did not conform with the actual rank order. Although this may represent a subject matter for which few people would have exacting knowledge, it is interesting to note that, without exception, the preferred vacation destination state was consistently thought to have the most national parks; and the least preferred states were perceived as having the least number of national parks. In the second case, the perceived looks and dress of a state's residents was not necessarily factual. While it is difficult to depict exactly how a group of people may actually look and dress, it is less difficult to show how they do not look and dress. Through a very limited acquaintance with the people of Utah, it is easy to conclude that they do not look and dress like the pioneer of the 1800's or the modern Amish Mennonite people. Yet the data in this study would suggest that many people perceive Utahns to look and dress as pioneers or Amish Mennonites and nothing like they actually do.

In reviewing the outcome of this study, it is believed that more effort to check fact against image would have been desirable. It is recommended that future studies of state or area image would be improved by utilizing more questions whereby fact and perceived image could be compared. Such information would give a better picture of how much a state's image deviates from its

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actual characteristics; and, consequently, a more definitive status or base from which promotional efforts must procede to improve or change the image.

Although only a limited number of comparisons were made in this study, it is suggested that people who have visited or lived in a state or neighboring states do not perceive the characteristics of the people or recreational attractions of that state or states significantly different than those people who have not visited or lived there. There are, however, some notable exceptions to this conclusion.

It may be that groups of people who live greater distances from a state than other groups have a greater tendency to exhibit perceived image differences as a function of whether or not they have visited the state. This may be particularly true in the case of resident or land characteristics which can be objectively, rather than subjectively, described. Generally speaking, the group which has visited a state is more likely to be correct in its description of the State.

Although the majority of evidence gathered in this study suggests that people who have not visited a state do not perceive its image significantly different from those who have visited; it's interesting to note that in nearly all cases compared, the people who have visited rate a state's recreational activities more impressive and its people more progressive and more "average" in looks and dress.

From the data of this study, it is suggested that people of different occupational classes do not perceive a state's image differently. In the fifteen

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comparisons between white collar, blue collar, and other workers made in this study, only one (Utah sightseeing) exhibited significant difference in the perception of a state's image. Although it is believed that occupational class is the best variable for examining differences between people of different socio-economic classes, it is recommended that in future studies examination by age and education may prove valuable. However, the findings of this study support those of Brink and Kelly (1963) and Munn (1960) who determined that images do not differ between social classes.

Given that the four states studied represent a valid group for comparison, states have different images. While these differences may be subtle and small when verbally described, they are significant when measured by the semantic differential scale. Because of these slight differences, one state's image may not look much different than another. However, assuming that one state can be rated as having the "best" image of several, it becomes important to make relative comparisons in semantic differential weighted scores. The "best" state sets the standard for which the other states may desire to strive. For example, assuming two states' images are verbally described similarly; but the "best" state rates semantic differential scores which are different from the other states. In such circumstances, it is suggested that the second state would improve its image by attempting to close the gap in scores with the best state.

It is suggested that when using the semantic differential scale the differences between states could be accentuated by expanding the scale to

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nine-points. Although it may be improper to compare the seven and five-point scales used in this study since they dealt with different things, it is interesting to note that the seven-point scale consistently provided differences between state images which were greater than the differences calculated with the five-point scale.

In this study, the mid-western (Des Moines, Iowa) sample consistently exhibited the most extreme differences between states for the majority of image variables.

In the case of climate and resident population variables, the eastern (Rochester, New York and Cleveland, Ohio) samples were generally the least able to discern differences between the states. In the case of the recreation variables, the far western samples generally exhibited the least difference in impressiveness between the states. Although further examination of this phenomenon is strongly recommended, these examples of a region's ability or inability to recognize differences in states may be interpreted as indicating that states may engage in cooperative promotion and advertising in some markets while maintaining individual efforts in others. If markets located considerable distances from a group of states are unable to distinguish between states, cooperative advertising to sell the cluster of states or general area may prove as profitable in tourist business as individual state promotion efforts. For example, Montana may find it more advantageous to cooperate with Colorado, Utah, and Wyoming to promote the Rocky Mountain West region to far eastern and western U.S. markets as opposed to engaging in an individual effort.

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Essentially, some states which may constitute a geographic area which is visualized rather homogeneously may have more competition with other geographic regions or states than with themselves. In addition, it could be argued that potential tourists located considerable distances away are most likely to take the "grand tour" of a general area once the decision is made to spend the necessary time and money for an extended trip. Tourists located closer to an area may be more selective in their destination, reserving their "grand tour" for other vacations located in more distant and less familiar areas. However, in markets which are able to discern major differences between states, individual state promotion efforts may be highly critical and competitive.

It may be possible that the phenomenon of intervening opportunity may be the cause for the fact that the western and, generally closer markets, exhibit less differences between the impressiveness of the recreational activities and attractions of the four states, than do the more distant markets. It may be that the western markets have a greater opportunity for national park and forest visitation and associated recreation activities in their immediate area and, consequently, are less interested or able to discern major differences in similar attractions and activities in other western states. Another possibility is that western markets may know more about the recreational attractions and activities of other western states and, consequently, perceive them as more equal. Distant markets may know of only famous attractions in selected states and thus find them comparatively different.

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Given that intervening opportunities or regional familiarity may have an influence on creating homogeneity in image of nearby states, individual state promotion efforts would be necessary to create and capitalize on unique recreational opportunities which may exist in a state. In a situation where this condition may exist, state promotion and advertising efforts will be intense and highly competitive.

In future studies of state image, it is recommended that more emphasis be given to variables dealing with land, climate, and resident population characteristics. Less attention should be devoted to determining the level of impressiveness of recreational attractions or activities. This recommendation is founded on the basis that land, climate, and resident population image characteristics provided more tangible ingredients for which comparative analysis can be made and consequent promotional programs can be devoted for change or reinforcement. In the final analysis, the portions of this study which dealt with the impressiveness of attractions and activities seemed to offer very little for suggesting promotional strategy. Essentially, groups of people thought nearly everything about every state was somewhat impressive with some attractions and activities more or less impressive for some states. It may be, however, that this portion of the study identified those attractions and activities for which certain states were most famous or had devoted greater promotional effort in past years. Given that some states did not rate relatively well on some activities for which they have a high level of quantity and quality, it may be that concentrated efforts to promote these aspects may be warranted. For example,

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Utah might devote a greater portion of its promotion effort to skiing in light of the fact that it has an outstanding ski opportunity but is perceived unimpressive relative to other states.

Based upon the definitional limitations established at the outset of this study, some generalizations can be made about those land, climate, and resident population characteristics which seem to suggest a good state image. Since Colorado was the overwhelming first vacation destination preference among the four states studied, it is suggested that Colorado maintains the best image. The fact that Colorado is a popular destination is supported by the Gallup Vacation Index which is reported by Bickert, Oldham, and Ryan (1969). They note that, "overall, Colorado ranked sixth as an ideal vacation spot" in the United States. Hawaii, California, and Florida, the warm weather beach states, were the only areas considered to be significantly more desirable. They noted that "the mountains and beautiful scenery were the most prominent features of Colorado's 'image' and that skiing and the mountains were considered the top attractions."

It is suggested that it is advantageous for a state to make an extra effort to create a state image which has:

1. a predominately mountainous land type,
2. moderate summer temperatures,
3. moderate amounts of winter snow,
4. residents with income above national average,
5. residents with middle-of-the-road political tendencies,
6. residents receptive to vacation visitors from other states,

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7. residents exhibiting a progressive attitude,

8. and residents who generally look and dress "average".

Admittedly, it is difficult to generalize these characteristics as best for every state since states with other characteristics such as oceans, lakes, swamps, and so forth were not studied. However, because of Colorado's relative appeal as a vacation destination in both the Gallup Vacation Index and this study, it is suggested that non-coastal states would heed the advice that emulation of the above characteristics might prove profitable in creating a favorable tourist destination image.

Finally, it is recommended that Colorado, Montana, Utah, and Wyoming conduct image studies in future years. Similar studies to that contained in this report should afford the opportunity to detect changes in image as a possible function of promotion efforts.

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# APPENDIXES

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# Appendix A

## Socio-Economic Breakdowns

### Census Regions

New England (Me., N.H., Vt., Mass., R. I., Conn.)
Middle Atlantic (N.Y., N.J., Pa.)
East North Central (Ohio, Ind., Ill., Mich., Wis.)
West North Central (Minn., Iowa, Mo., N. D., S.D., Neb., Kan.)
South Atlantic (Del., Md., D.C., Va., W.Va., N.C., S.C., Ga., Fla.)
East South Atlantic (Ky., Tenn., Ala., Miss.)
West South Atlantic (Ark., La., Okla., Texas)
Mountain (Mont., Idaho, Wyo., Colo., N.M., Ariz., Utah, Nev.)
Pacific (Wash., Ore., Calif., Alaska, Haw.)

### Occupations

| | |
|---|---|
| Proprietors, managers and officials<br>Clerical, Sales and kindred workers<br>Professional workers<br>Teachers<br>Semiprofessional workers | White Collar |
| Craftsman, foreman and kindred workers<br>Operatives and non-farm laborers<br>Service workers | Blue Collar |
| Farmers<br>Farm laborers and foremen<br>Unemployed<br>Housewives<br>Students<br>Retired<br>Others not in labor force | Other |

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Appendix B

Coverletter - First Mailing

Dear Friend:

I NEED YOUR HELP!

I am a student attempting to finish a degree. Part of the requirement is that I write a research paper.

If you would please complete the enclosed questionnaire, it will provide me with the information to write my paper. It is extremely important to me that you complete the questionnaire and return it in the enclosed post-paid envelope. No stamp is necessary.

Although I am unable to offer you anything for your help, please accept my sincere THANKS. If you desire, I would be most happy to send you any information about Colorado, Montana, Utah, or Wyoming. I would also be happy to send you a summary of my paper when it is finished.

Enclosed is a card with my name and address which you may save as a reference if you should ever need information about the four states or my paper.

The enclosed questionnaire should take about 10 or 15 minutes of your time. You will note that I am interested in your opinion about Colorado, Montana, Utah, and Wyoming.

You are ONE of only 4,000 American families that has been picked for this study (There are approximately 75,000,000 families in the United States). So you can understand how important your questionnaire is to me. Please fill it out and return it in the post-paid envelope at your earliest convenience.

Sincerely yours,

John D. Hunt

JDH:rm

Enclosures

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Appendix C

Coverletter - Second Mailing

Dear Friend:

I am sorry to bother you again, but I still need your help! Several weeks ago I sent you a questionnaire about Colorado, Montana, Utah, and Wyoming which I had hoped you would complete and return to me. The information is something I must have to complete my requirements to graduate from the University.

Possibly your first questionnaire was lost in the mail or you overlooked it. I have enclosed another questionnaire in the hope that you will take the time to complete and return it in the postpaid envelope. No stamp is necessary.

Please complete the questionnaire whether or not you have ever visited any of the four states.

THANK YOU!

Sincerely yours,

John D. Hunt

JDH:rm

Enclosure

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## Appendix D

## Pretest Questionnaire

THE ANSWERS YOU GIVE WILL BE TREATED CONFIDENTIAL--you are not asked to identify yourself. IN NO WAY CAN I DETERMINE WHO ANSWERS THE QUESTIONNAIRE. Please do not ponder over the answers. Complete the questionnaire as FAST as you can. Except for the personal questions about you and your family, there are no right or wrong answers. I AM INTERESTED ONLY IN YOUR OPINION. Please answer the following questions and return them in the post-paid envelope as soon as pcssible.

1. Have you ever lived (resided) in any of the following states?

| | | | |
|---|---|---|---|
| Colorado | Yes ( ) No ( ) | Montana | Yes ( ) No ( ) |
| Utah | Yes ( ) No ( ) | Wyoming | Yes ( ) No ( ) |

2. Have you ever traveled (vacation, business, visit friends or relatives, etc.) in any of the following states?

| | | | |
|---|---|---|---|
| Colorado | Yes ( ) No ( ) | Montana | Yes ( ) No ( ) |
| Utah | Yes ( ) No ( ) | Wyoming | Yes ( ) No ( ) |

3. Within a year, do you usually have one or more vacation periods of one week or more? Yes ( ) No ( )

   If YES, what do you most frequently do during your vacation periods? Please check only one.

   Stay at Home ( )
   Visit in one vacation area ( )
   Visit relatives or friends ( )
   Travel to numerous areas and attractions ( )
   Other (please specify)_____

4. In general, in what outdoor recreation activities do you more frequently participate? Please check as many as necessary.

   Sightseeing ( ) Driving for pleasure ( ) Hunting ( )
   Fishing ( ) Snow skiing ( ) Camping ( )
   Hiking ( ) Swimming ( )
   Other (please specify)_____

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QUESTIONS NUMBER 5 THROUGH 12 ASK FOR YOUR OPINION ABOUT FOUR STATES--COLORADO, MONTANA, UTAH, AND WYOMING. THERE ARE NO WRONG ANSWERS.

5. In which one of the following classes do you think most of the land in each of the states fits. Please check only one for each state.

| | Colorado | Montana | Utah | Wyoming |
|---|---|---|---|---|
| Cities and towns | ( ) | ( ) | ( ) | ( ) |
| Mountains | ( ) | ( ) | ( ) | ( ) |
| Deserts | ( ) | ( ) | ( ) | ( ) |
| Grass and range land | ( ) | ( ) | ( ) | ( ) |
| Farm crop land | ( ) | ( ) | ( ) | ( ) |
| Other (please specify) | _____ | _____ | ____ | _____ |

6. Please rank the following states according to the number of national parks you think they might have. Number them 1 through 4. Number 1 would mean the state has the most number of national parks and number 4 would mean the state has the least number of national parks.

Colorado ( ) Montana ( ) Utah ( ) Wyoming ( )

7. Below is a list of population and climate characteristics. Please indicate what you think the population or climate of each state are most like. There are no right or wrong answers. Just check the space which expresses your opinion.

POPULATION DISTRIBUTION

| | Very Urban | Urban | 1/2 Urban and 1/2 Rural | Rural | Very Rural |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

AVERAGE ANNUAL FAMILY INCOME (the national average is about $8,000)

| | Far above national average | Above national average | About national average | Below national average | Far below national average |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

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POLITICAL TENDENCIES

| | Very Liberal | Liberal | Middle-of-the road | Conservative | Very Conservative |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

RECEPTIVENESS OF LOCAL RESIDENTS TO VACATION VISITORS

| | Very Receptive | Receptive | Some receptive, some not receptive | Unreceptive | Very Unreceptive |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

OVERALL PROGRESSIVENESS OF THE RESIDENTS

| | Very Progressive | Progressive | Just up-to-date | Backward | Very backward |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

WINTER TEMPERATURE

| | Very cold | Cold | Moderate | Warm | Very warm |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

LENGTH OF WINTER

| | Very long | Long | Not too long not too short | Short | Very short |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

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AMOUNT OF WINTER SNOW

| | Very much | Much | Moderate | Little | Very little |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

SUMMER TEMPERATURE

| | Very hot | Hot | Moderate | Cool | Very cool |
|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) |

8. Please number the four states 1 through 4 in the order of preference you would have if you had the opportunity to visit them for a vacation. Place a number 1 opposite the state you would most like to visit, a number 2 opposite your second preference, a number 3 opposite your third preference, and a number 4 opposite the state you would least like to visit.

   Colorado ( ) Montana ( ) Utah ( ) Wyoming ( )

9. Supposing that individuals within the following list of occupations could each choose only one of the four states to visit for a vacation, which state do you think each one would choose. Please check only one state for each occupation.

| | Colorado | Montana | Utah | Wyoming |
|---|---|---|---|---|
| Electrician | ( ) | ( ) | ( ) | ( ) |
| Mail Carrier | ( ) | ( ) | ( ) | ( ) |
| Restaurant Waiter | ( ) | ( ) | ( ) | ( ) |
| Priest | ( ) | ( ) | ( ) | ( ) |
| Clerk in a store | ( ) | ( ) | ( ) | ( ) |
| Barber | ( ) | ( ) | ( ) | ( ) |
| Insurance Agent | ( ) | ( ) | ( ) | ( ) |
| Policeman | ( ) | ( ) | ( ) | ( ) |
| Public School Teacher | ( ) | ( ) | ( ) | ( ) |
| Minister | ( ) | ( ) | ( ) | ( ) |
| College Professor | ( ) | ( ) | ( ) | ( ) |
| Banker | ( ) | ( ) | ( ) | ( ) |
| U.S. Congressman | ( ) | ( ) | ( ) | ( ) |
| Coal Miner | ( ) | ( ) | ( ) | ( ) |
| Janitor | ( ) | ( ) | ( ) | ( ) |

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| | Colorado | Montana | Utah | Wyoming |
|---|---|---|---|---|
| Gas Station Attendant | ( ) | ( ) | ( ) | ( ) |
| Automobile Repairman | ( ) | ( ) | ( ) | ( ) |
| Garbage Collector | ( ) | ( ) | ( ) | ( ) |
| Carpenter | ( ) | ( ) | ( ) | ( ) |
| Civil Engineer | ( ) | ( ) | ( ) | ( ) |
| Physician | ( ) | ( ) | ( ) | ( ) |
| Truck Driver | ( ) | ( ) | ( ) | ( ) |
| Lawyer | ( ) | ( ) | ( ) | ( ) |
| Trained Machinist | ( ) | ( ) | ( ) | ( ) |
| Airline Pilot | ( ) | ( ) | ( ) | ( ) |

10. Whether or not you have ever visited any of the four states, please indicate your impression of the following attractions in each of the states.

COLORADO

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| National Parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| State parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |
| Historical areas | ( ) | ( ) | ( ) | ( ) | ( ) |

MONTANA

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| National Parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| State parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |
| Historical areas | ( ) | ( ) | ( ) | ( ) | ( ) |

UTAH

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| National Parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| State Parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |
| Historical areas | ( ) | ( ) | ( ) | ( ) | ( ) |

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WYOMING

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| National Parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| State parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |
| Historical areas | ( ) | ( ) | ( ) | ( ) | ( ) |

11. Whether or not you have ever visited any of the four states, please indicate your impression of the following recreational activities in each of the states.

COLORADO

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cultural entertainment | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (winter) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Nightlife | ( ) | ( ) | ( ) | ( ) | ( ) |
| Boating | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

MONTANA

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cultural entertainment | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (winter | ( ) | ( ) | ( ) | ( ) | ( ) |
| Nightlife | ( ) | ( ) | ( ) | ( ) | ( ) |
| Boating | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

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UTAH

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cultural entertainment | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (winter) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Nightlife | ( ) | ( ) | ( ) | ( ) | ( ) |
| Boating | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

WYOMING

| | Very Impressive | Im-pressive | No Im-pression | Unim-pressive | Very unim-pressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cultural entertainment | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (winter) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Nightlife | ( ) | ( ) | ( ) | ( ) | ( ) |
| Boating | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

12. Below and on the following page, is a list of descriptive words. Please check those words which, in your mind, best describe the type of family you think would prefer to vacation in each of the states. Please check under only one state for each word. In column 5 please check the descriptive words which you think best describe your closest friends.

| | COLORADO (1) | MONTANA (2) | UTAH (3) | WYOMING (4) | YOUR FRIENDS (5) | | COLORADO (1) | MONTANA (2) | UTAH (3) | WYOMING (4) | YOUR FRIENDS (5) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Friendly | ( ) | ( ) | ( ) | ( ) | ( ) | Popular | ( ) | ( ) | ( ) | ( ) | ( ) |
| Good | ( ) | ( ) | ( ) | ( ) | ( ) | Patient | ( ) | ( ) | ( ) | ( ) | ( ) |
| Secure | ( ) | ( ) | ( ) | ( ) | ( ) | Vain | ( ) | ( ) | ( ) | ( ) | ( ) |
| Comfortable | ( ) | ( ) | ( ) | ( ) | ( ) | Merry | ( ) | ( ) | ( ) | ( ) | ( ) |
| Honest | ( ) | ( ) | ( ) | ( ) | ( ) | Small | ( ) | ( ) | ( ) | ( ) | ( ) |

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| | COLORADO (1) | MONTANA (2) | UTAH (3) | WYOMING (4) | YOUR FRIENDS (5) | | COLORADO (1) | MONTANA (2) | UTAH (3) | WYOMING (4) | YOUR FRIENDS (5) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Poor | ( ) | ( ) | ( ) | ( ) | ( ) | Natural | ( ) | ( ) | ( ) | ( ) | ( ) |
| Serious | ( ) | ( ) | ( ) | ( ) | ( ) | Gay | ( ) | ( ) | ( ) | ( ) | ( ) |
| Silent | ( ) | ( ) | ( ) | ( ) | ( ) | Young | ( ) | ( ) | ( ) | ( ) | ( ) |
| Liberal | ( ) | ( ) | ( ) | ( ) | ( ) | Superior | ( ) | ( ) | ( ) | ( ) | ( ) |
| Average | ( ) | ( ) | ( ) | ( ) | ( ) | Rough | ( ) | ( ) | ( ) | ( ) | ( ) |
| Traveled | ( ) | ( ) | ( ) | ( ) | ( ) | Wise | ( ) | ( ) | ( ) | ( ) | ( ) |
| Progressive | ( ) | ( ) | ( ) | ( ) | ( ) | Understanding | ( ) | ( ) | ( ) | ( ) | ( ) |
| Old-fashioned | ( ) | ( ) | ( ) | ( ) | ( ) | Cheap | ( ) | ( ) | ( ) | ( ) | ( ) |
| Middle-class | ( ) | ( ) | ( ) | ( ) | ( ) | Warm | ( ) | ( ) | ( ) | ( ) | ( ) |
| Democratic | ( ) | ( ) | ( ) | ( ) | ( ) | Common | ( ) | ( ) | ( ) | ( ) | ( ) |
| Quiet | ( ) | ( ) | ( ) | ( ) | ( ) | Old | ( ) | ( ) | ( ) | ( ) | ( ) |
| Moral | ( ) | ( ) | ( ) | ( ) | ( ) | Difficult | ( ) | ( ) | ( ) | ( ) | ( ) |
| Powerful | ( ) | ( ) | ( ) | ( ) | ( ) | Low-class | ( ) | ( ) | ( ) | ( ) | ( ) |
| Important | ( ) | ( ) | ( ) | ( ) | ( ) | Interesting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Little | ( ) | ( ) | ( ) | ( ) | ( ) | Rich | ( ) | ( ) | ( ) | ( ) | ( ) |
| Plain | ( ) | ( ) | ( ) | ( ) | ( ) | Backward | ( ) | ( ) | ( ) | ( ) | ( ) |
| Busy | ( ) | ( ) | ( ) | ( ) | ( ) | Original | ( ) | ( ) | ( ) | ( ) | ( ) |
| Smart | ( ) | ( ) | ( ) | ( ) | ( ) | Active | ( ) | ( ) | ( ) | ( ) | ( ) |
| Correct | ( ) | ( ) | ( ) | ( ) | ( ) | Curious | ( ) | ( ) | ( ) | ( ) | ( ) |
| Bitter | ( ) | ( ) | ( ) | ( ) | ( ) | Bad | ( ) | ( ) | ( ) | ( ) | ( ) |
| Religious | ( ) | ( ) | ( ) | ( ) | ( ) | Wondersul | ( ) | ( ) | ( ) | ( ) | ( ) |
| Independent | ( ) | ( ) | ( ) | ( ) | ( ) | Ordinary | ( ) | ( ) | ( ) | ( ) | ( ) |
| High-class | ( ) | ( ) | ( ) | ( ) | ( ) | Conservative | ( ) | ( ) | ( ) | ( ) | ( ) |

13. In what state do you live? _____
(state)

14. What is the approximate age of the head of your household? Please check only one.

20-24 ( ) 35-44 ( ) 55-64 ( )

25-34 ( ) 45-54 ( ) 65 and over ( )

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15. What is the highest year of formal education that was completed by the head of your household? Please check only one.

| | | | |
|---|---|---|---|
| 0-7 years | ( ) | Business or technical school | ( ) |
| 8 years | ( ) | 1-3+ years of college | ( ) |
| 9-11 years | ( ) | College completed | ( ) |
| 12 years | ( ) | Graduate School | ( ) |

16. What is the occupation of the head of your household?_____

17. Does more than one person in your household have a job that contributes to your family income? Yes ( ) No ( )

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## FOUR STATE QUESTIONNAIRE

Please do not write in this column.

THE ANSWERS YOU GIVE WILL BE TREATED CONFIDENTIALLY. Please do not ponder over the answers. Complete the questionnaire as fast as you can. Except for the questions about you and your family, there are no right or wrong answers. I AM INTERESTED ONLY IN YOUR OPINION. Please answer the following questions and return them in the post-paid envelope as soon as possible.

(1) Please check those of the following states you have ever lived in (if any).

Colorado ( ) Montana ( ) Utah ( ) Wyoming ( )

(2) Please check those of the following states you have ever traveled in (if any).

Colorado ( ) Montana ( ) Utah ( ) Wyoming ( )

(3) Within a year, do you usually have one or more vacation periods of one week or more?

Yes ( ) No ( )

If Yes, what do you most frequently do during your vacation periods? Please check only one.

Stay at home ( ) Visit relatives or friends ( )
Visit in one vacation area ( ) Travel to several areas and attractions ( )
Other (please specify)_____

QUESTIONS NUMBER 4 THROUGH 10 ASK FOR YOUR OPINION ABOUT FOUR STATES WYOMING, UTAH, MONTANA AND COLORADO. THERE ARE NO RIGHT OR WRONG ANSWERS. PLEASE ANSWER THE QUESTIONS WHETHER OR NOT YOU HAVE EVER VISITED ANY OF THE FOUR STATES.

(4) In which ONE of the following classes do you think most of the land in each of the States fits. Please check only one class for Wyoming, one class for Utah, one class for Montana, and one class for Colorado.

| | Colorado | Montana | Utah | Wyoming |
|---|---|---|---|---|
| Cities and towns | ( ) | ( ) | ( ) | ( ) |
| Mountains | ( ) | ( ) | ( ) | ( ) |
| Deserts | ( ) | ( ) | ( ) | ( ) |
| Grass and range land | ( ) | ( ) | ( ) | ( ) |
| Farm crop land | ( ) | ( ) | ( ) | ( ) |
| Other (please specify) | ( ) | ( ) | ( ) | ( ) |

(5) Below is a list of population and climate characteristics. Whether or not you have ever visited any of the four states please indicate what you think the population or climate of each state is most like. There are no right or wrong answers. Just check the space which expresses your opinion.

POPULATION DISTRIBUTION

| | Extremely Urban | Very Urban | Slightly Urban | ½ Urban and ½ Rural | Slightly Rural | Very Rural | Extremely Rural |
|---|---|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

AVERAGE ANNUAL FAMILY INCOME (the national average is about $8,000).

| | Extremely far above national average | Far above national average | Slightly above national average | About national average | Slightly below national average | Far below national average | Extremely far below national average |
|---|---|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

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POLITICAL TENDENCIES

| | Extremely liberal | Very liberal | Slightly liberal | Middle-of-the-road | Slightly conservative | Very conservative | Extremely conservative |
|---|---|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

RECEPTIVENESS OF LOCAL RESIDENTS TO VACATION VISITORS FROM OTHER STATES

| | Extremely receptive | Very receptive | Slightly receptive | Some receptive, some not receptive | Slightly unreceptive | Very unreceptive | Extremely unreceptive |
|---|---|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

OVERALL PROGRESSIVENESS OF THE RESIDENTS

| | Extremely progressive | Very progressive | Slightly progressive | Just up-to-date | Slightly backward | Very backward | Extremely backward |
|---|---|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

AMOUNT OF WINTER SNOW

| | Extremely much | Very much | Much | Moderate | Little | Very little | None |
|---|---|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

SUMMER TEMPERATURE

| | Extremely Hot | Very Hot | Slightly Hot | Moderate | Slightly Cool | Very Cool | Extremely Cool |
|---|---|---|---|---|---|---|---|
| Colorado | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Montana | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Utah | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Wyoming | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

(6) Please number the four states 1 through 4 in the order of preference you would have if you had the opportunity to visit them for a vacation. Place a number 1 opposite the state you would most like to visit, a number 2 opposite your second preference, a number 3 opposite your third preference, and a number 4 opposite the state you would least like to visit.

Colorado ( ) Montana ( ) Utah ( ) Wyoming ( )

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(7) Please rank the following states according to the number of national parks you think they might have. Number them 1 through 4. Number 1 would mean the state has the most number of national parks and number 4 would mean the state has the least number of national parks.

Colorado ( ) Montana ( ) Utah ( ) Wyoming ( )

(8) Whether or not you have ever visited any of the four states, please indicate your impression of the following attractions in each of the states.

COLORADO

| | Very impressive | Impressive | No impression | Un-impressive | Very un-impressive |
|---|---|---|---|---|---|
| National parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |

MONTANA

| | Very impressive | Impressive | No impression | Un-impressive | Very Un-impressive |
|---|---|---|---|---|---|
| National parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |

UTAH

| | Very impressive | Impressive | No impression | Un-impressive | Very Un-impressive |
|---|---|---|---|---|---|
| National parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |

WYOMING

| | Very impressive | Impressive | No impression | Un-impressive | Very Un-impressive |
|---|---|---|---|---|---|
| National parks | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cities | ( ) | ( ) | ( ) | ( ) | ( ) |
| National forests | ( ) | ( ) | ( ) | ( ) | ( ) |

(9) Whether or not you have ever visited any of the four states, please indicate your impression of the following recreational activities in each of the states.

COLORADO

| | Very impressive | Impressive | No impression | Un-impressive | Very Un-impressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (Winter) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

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MONTANA

| | Very impressive | Impressive | No impression | Un-impressive | Very Un-impressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (Winter) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

UTAH

| | Very impressive | Impressive | No impression | Un-impressive | Very Un-impressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (Winter) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

WYOMING

| | Very impressive | Impressive | No impression | Un-impressive | Very Un-impressive |
|---|---|---|---|---|---|
| Camping | ( ) | ( ) | ( ) | ( ) | ( ) |
| Sightseeing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Skiing (Winter) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Hunting | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fishing | ( ) | ( ) | ( ) | ( ) | ( ) |

(10) How do you think most of the people in each of the four states look and dress? Below you see pictures of five different couples numbered 1 through 5. Please place the number of the picture in the space opposite each state which you think most looks like the people who live in each state. Just choose one couple for each state. You may use any couple as many times as you want.

COLORADO ( ) MONTANA ( ) UTAH ( ) WYOMING ( )

(11) In what state do you live? _____
(State)

(12) What is the approximate age of the head of your household? Please check only one.

20-24 ( ) 25-34 ( ) 35-44 ( ) 45-54 ( ) 55-64 ( ) 65 and over ( )

(13) What is the highest year of formal education that was completed by the head of your household? Please check only one.

| | | | |
|---|---|---|---|
| 0-7 years | ( ) | Business or technical school | ( ) |
| 8 years | ( ) | 1-3+ years of college | ( ) |
| 9-11 years | ( ) | College completed | ( ) |
| 12 years | ( ) | Graduate school | ( ) |

(14) What is the occupation of the head of your household? _____

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Appendix F

Figures

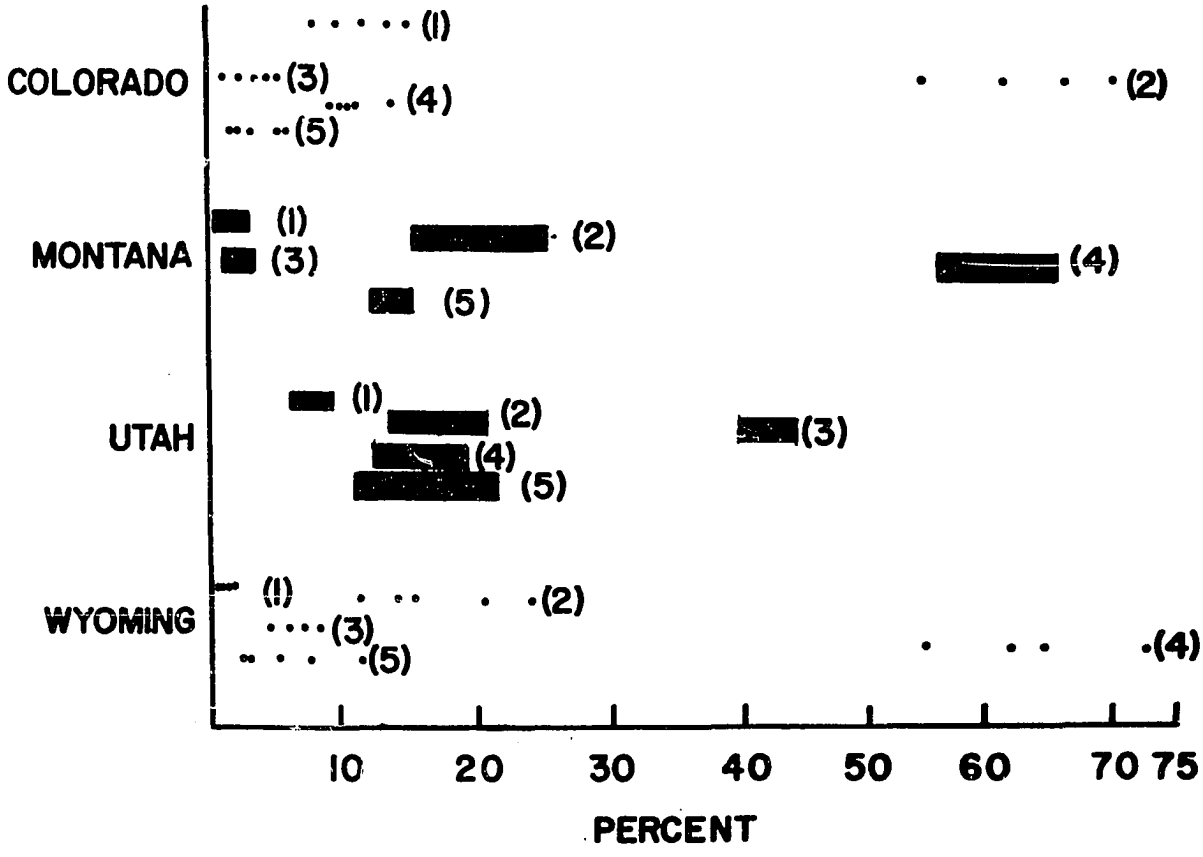


FIGURE 1. Region percents (dots), where regional agreement was not achieved, and percentage ranges ( ■ ), where regional agreement was achieved, of respondents choosing (1) cities and towns, (2) mountains, (3) deserts, (4) grass and range land, (5) farm crop land as the land-type most predominate in Colorado, Montana, Utah, and Wyoming.

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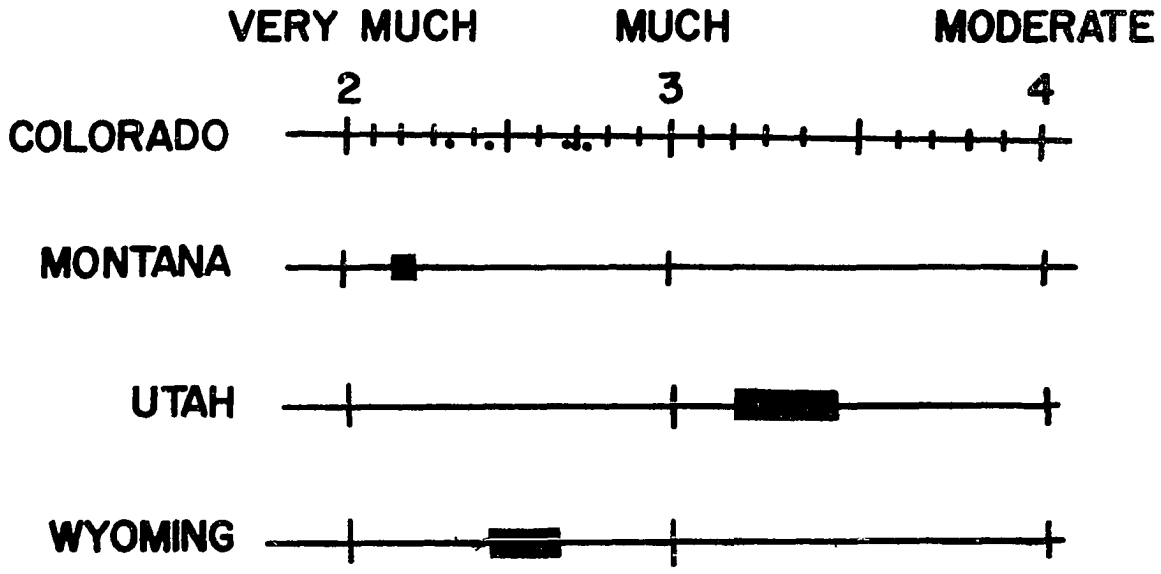


FIGURE 2. Region semantic differential weighted scores (dots), where regional agreement was not achieved and semantic differential weighted score ranges (■), where regional agreement was achieved for snow quantity perceived to exist in Colorado, Montana, Utah, and Wyoming.

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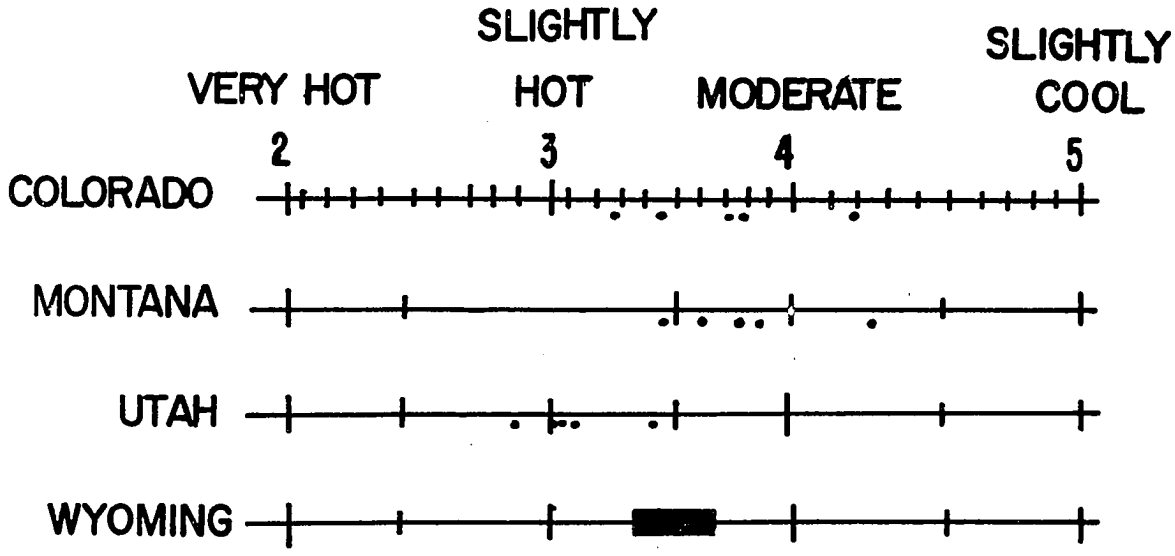


FIGURE 3. Region semantic differential weighted score (dots), where regional agreement was not achieved, and semantic differential weighted score ranges (■), where regional agreement was achieved for summer temperature level perceived to exist in Colorado, Montana, Utah, and Wyoming.

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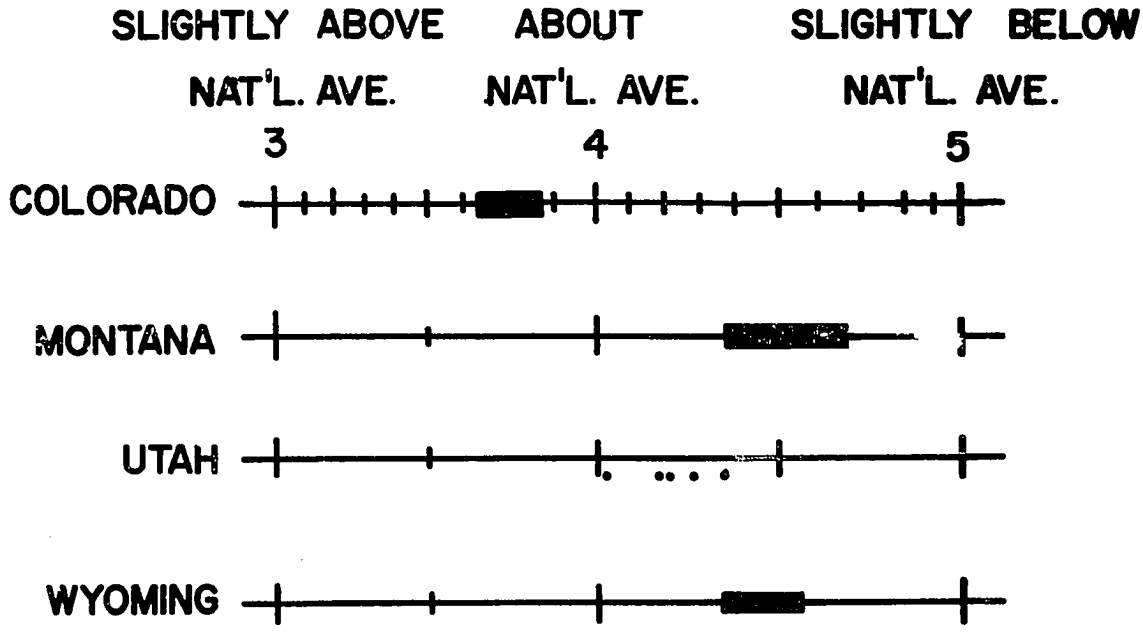


FIGURE 4. Region semantic differential weighted scores (dots), where agreement was not achieved, and semantic differential weighted score ranges (■), where regional agreement was achieved for average annual family income level perceived to exist for residents of Colorado, Montana, Utah, and Wyoming.

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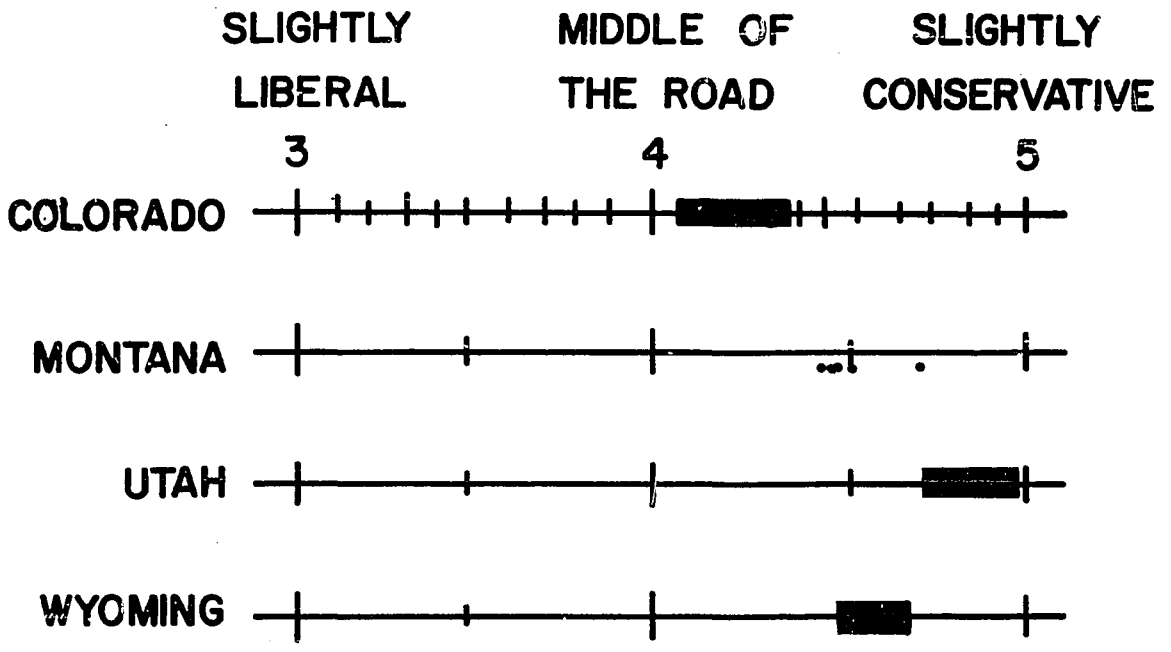


FIGURE 5. Region semantic differential weighted scores (dots), where agreement was not achieved, and semantic differential weighted score ranges (■), where regional agreement was achieved for political tendencies perceived to characterize residents of Colorado, Montana, Utah, and Wyoming.

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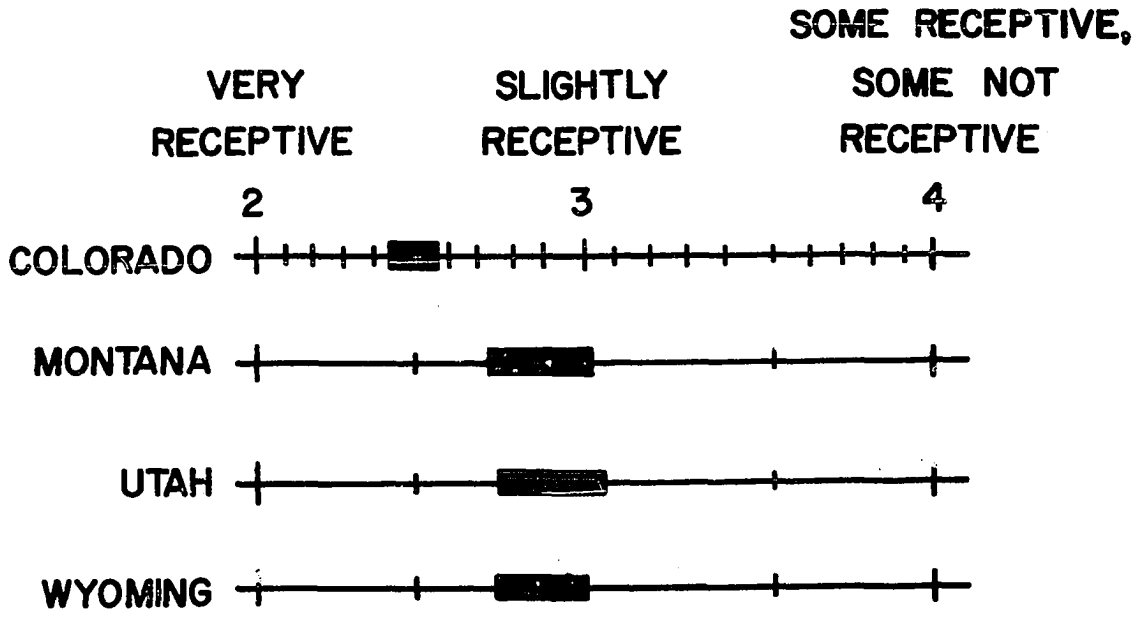


FIGURE 6. Region semantic differential weighted score ranges for receptiveness to vacation visitors perceived to characterize residents of Colorado, Montana, Utah, and Wyoming.

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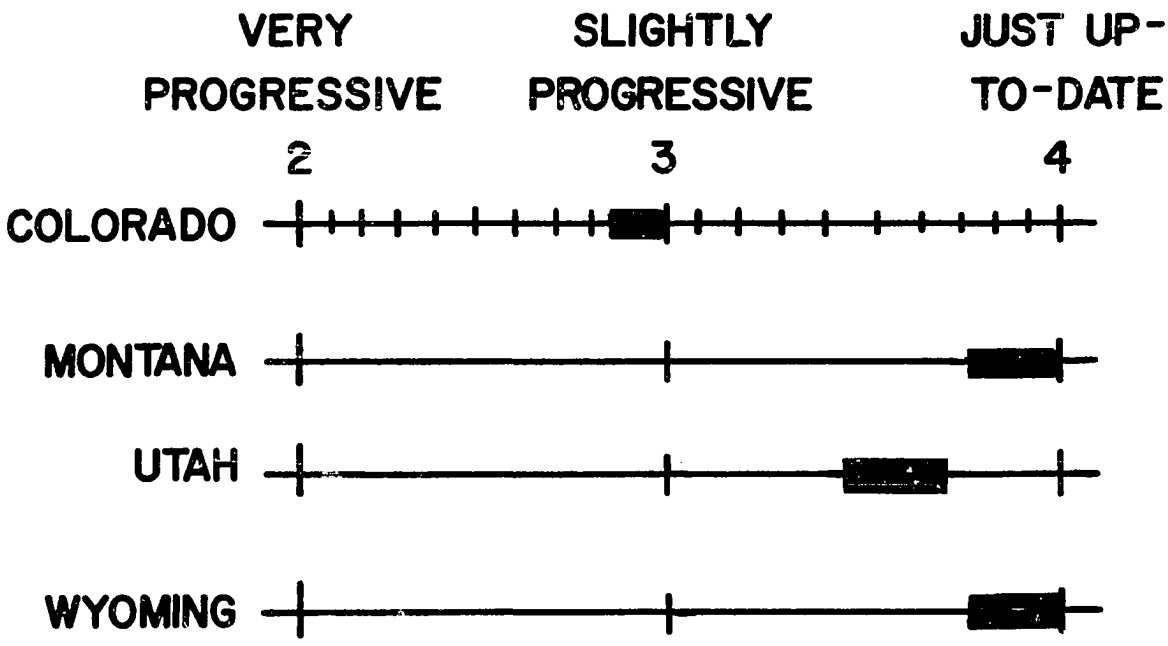


FIGURE 7. Region semantic differential weighted score ranges for overall progressiveness perceived to characterize residents of Colorado, Montana, Utah, and Wyoming.

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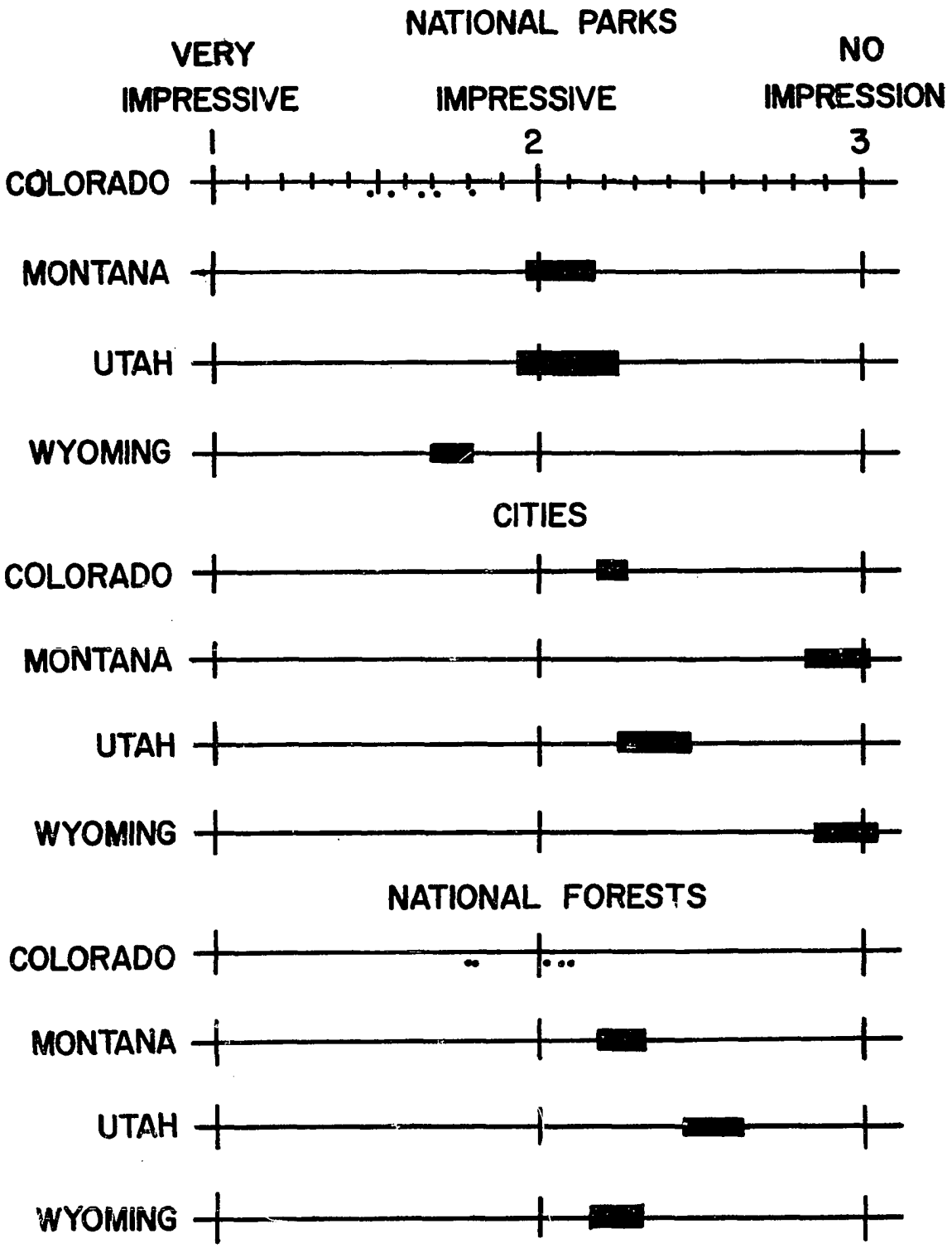


FIGURE 8. Region semantic differential weighted scores (dots), where regional agreement was not achieved, and semantic differential weighted score ranges (■), where regional agreement was achieved for perceived impressiveness of national parks, cities, and national forests in Colorado, Montana, Utah, and Wyoming.

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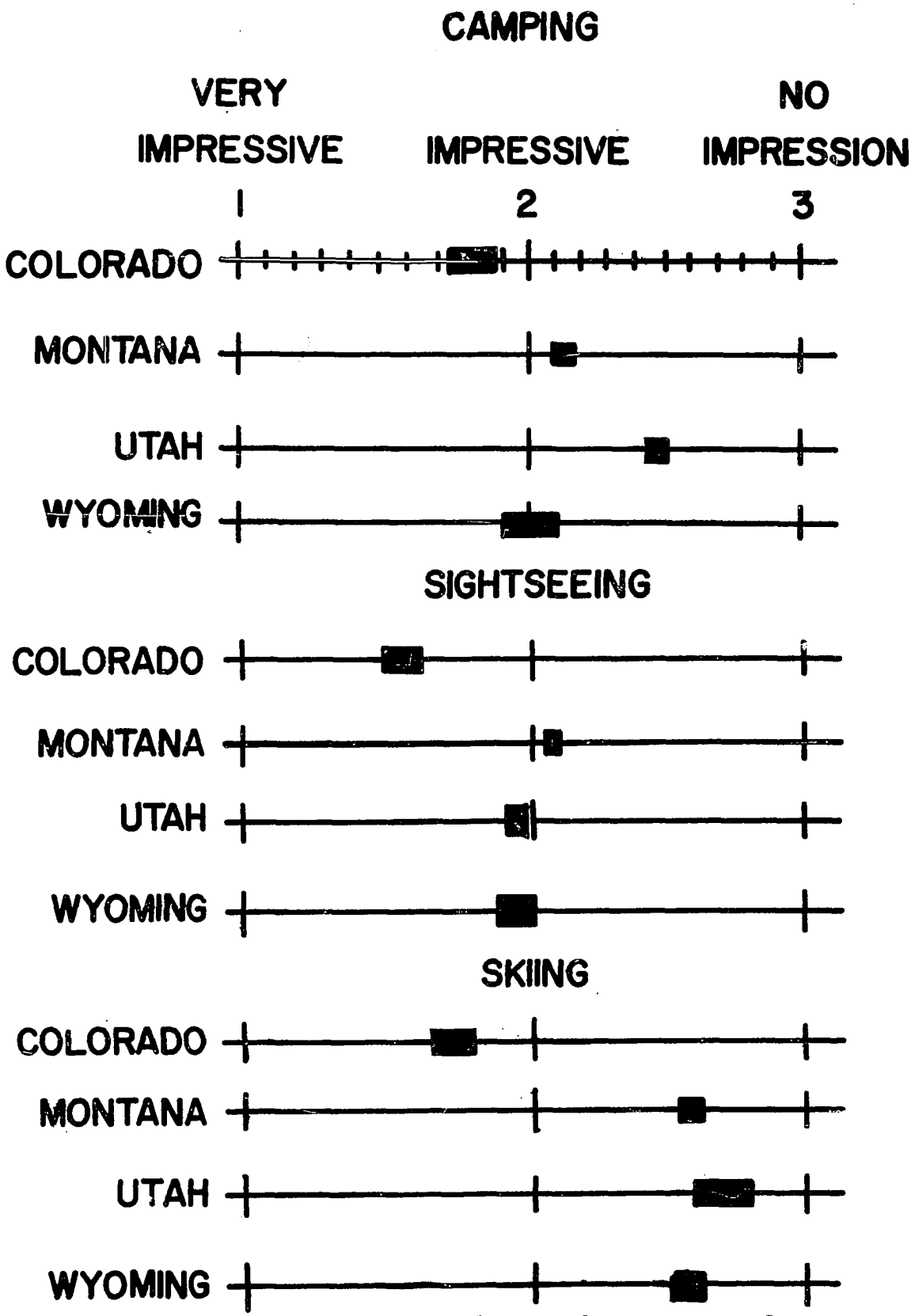


FIGURE 9. Region semantic differential weighted scores ranges for perceived impressiveness of camping, sightseeing, and skiing in Colorado, Montana, Utah, and Wyoming.

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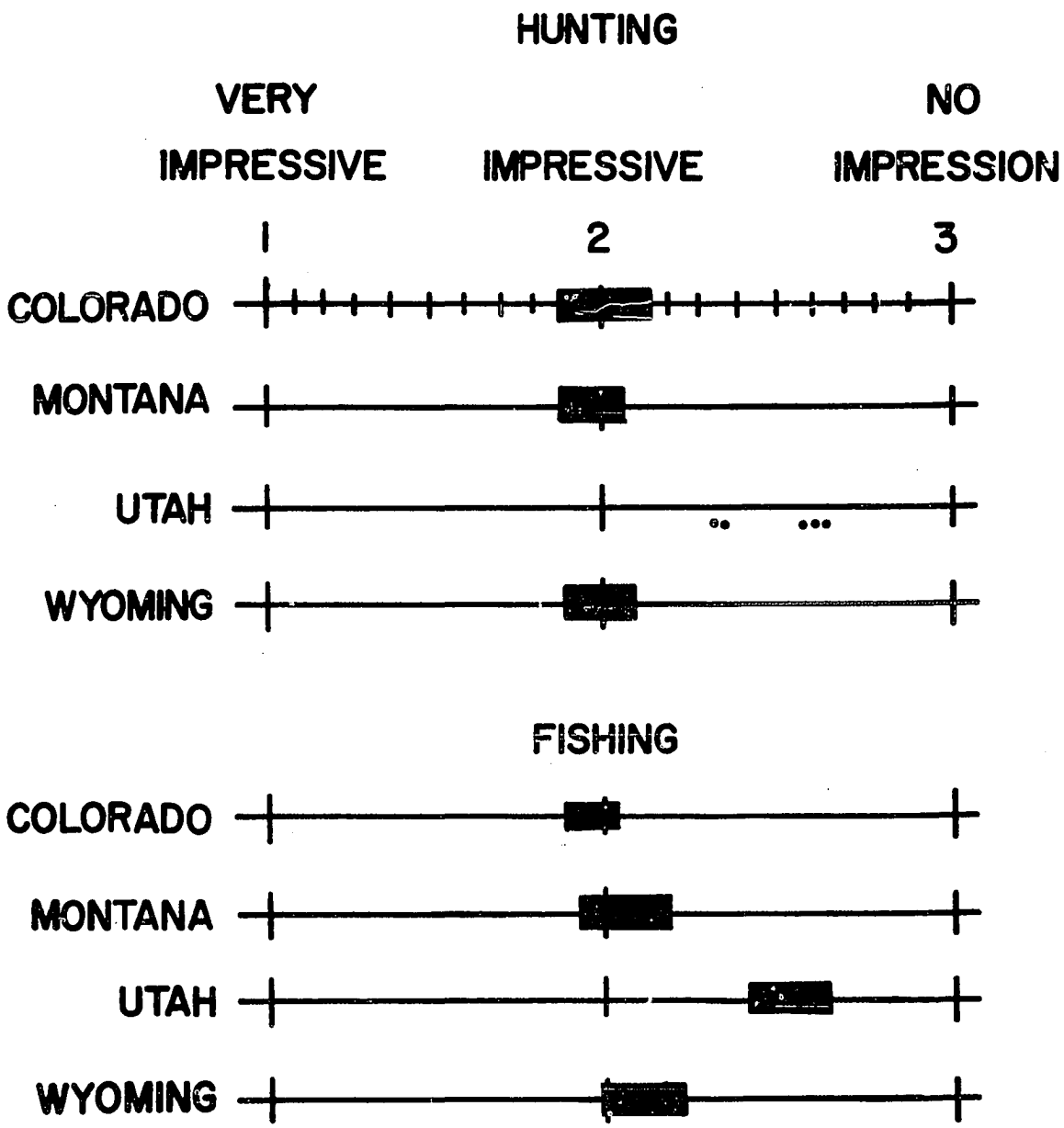


FIGURE 10. Region semantic differential weighted scores (dots), where regional agreement was not achieved, and semantic differential weighted score ranges (■), where regional agreement was achieved for perceived impressiveness of hunting and fishing in Colorado, Montana, Utah, and Wyoming.

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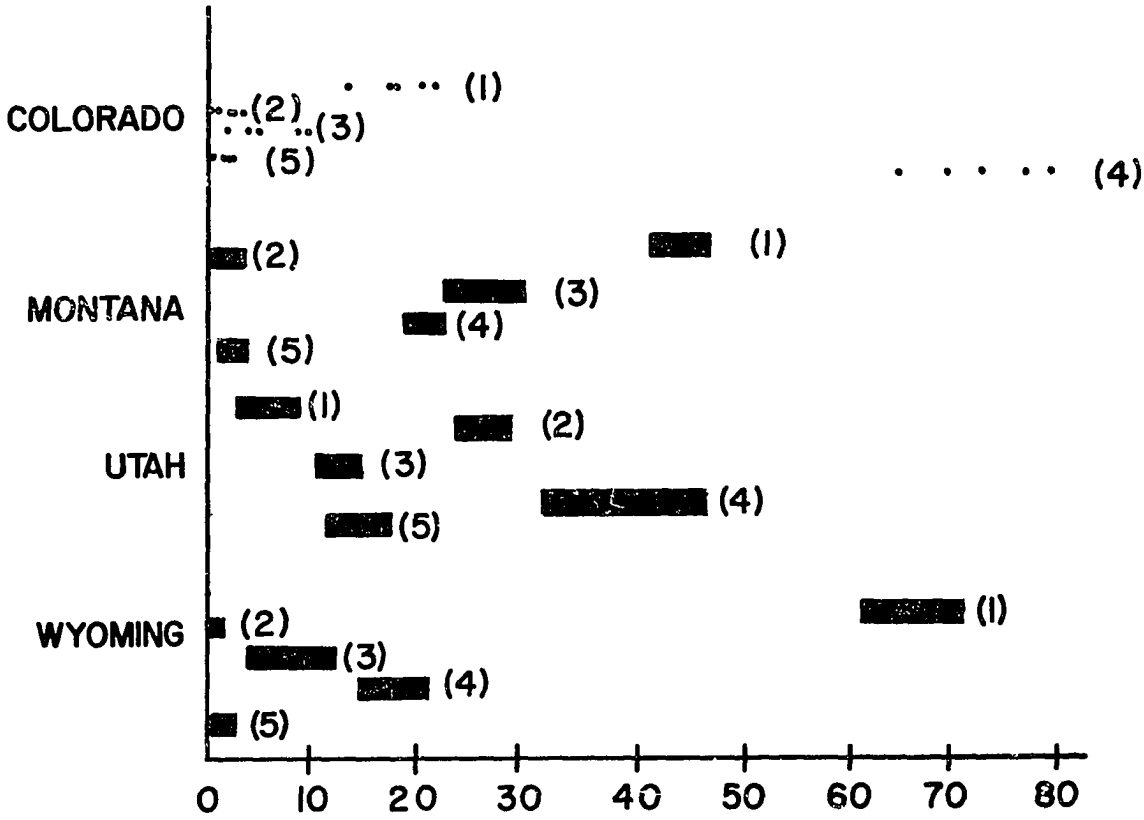


FIGURE 11. Region percents (dots), where regional agreement was not achieved, and percentage ranges (■), where regional agreement was achieved, of respondents choosing the (1) cowboy couple, (2) pioneer couple 1, (3) farmer couple, (4) average couple, and (5) pioneer couple 2, (see Appendix E for pictures of couples) as the couple perceived to look and dress like residents of Colorado, Montana, Utah, and Wyoming.

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