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I am submitting herewith a dissertation written by Louis A. Ehrcke entitled "A Managerial Decision Model for Continuous Innovation in Family Lodging Accommodations." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Home Economics.

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A MANAGERIAL DECISION MODEL FOR CONTINUOUS INNOVATION
IN FAMILY LODGING ACCOMMODATIONS

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ABSTRACT

Agreement between families and motel operators in continuous innovations for desired lodging accommodations was examined with populations within the East South Central United States. Levels of agreement were calculated for the sample population by income levels of families. Additional characteristics of families utilizing lodging accommodations were presented.

The procedure to obtain agreement levels was the first phase of a theoretically developed decision model. The model consisted of five phases. Data for the first phase were obtained through questionnaires mailed to residential addresses obtained by interval numbers from telephone directories in one randomly determined Standard Statistical Metropolitan Area in each of the four states of Tennessee, Kentucky, Alabama, and Mississippi. Data also were obtained from motel operators selected from the Hotel and Motel Associations membership lists of the four states.

Chi square values $P \leq 0.05$ were interpreted as significant disagreement between families and motel operators on desired accommodations. Chi square values $P \geq 0.70$ were interpreted as clear evidence of the lack of disagreement and some level of agreement. Significant disagreement existed between families and motel operators on the desirability within the next five years of 11 out of 31 accommodations. The disagreement existed in features in the bathroom area, vibrating apparatus, vending and cooking appliances, recreational areas, valet service, safes for valuables, and the availability of a doctor.

Families and motel operators indicated that the accommodations of a vanity and telephone in the bathroom, a carpeted bathroom, an indoor swimming pool, and a health club were not needed within the next five years. There was additional evidence of agreement that individual room controls for heat and air conditioning and vended items near the room should and would be provided by motels within the next five years.

Comparison of family responses between income levels indicated a trend that families with higher annual income levels utilized more accommodations than families with lower annual incomes. Families with lower incomes tended to desire more accommodations within the next five years. Conversely, families with higher income levels indicated less desire for additional accommodations within the next five years.

Write-in comments from some families concerned room rates, honesty in advertising, pet care, and other special services such as security guards. Additional information from families indicated that vacations accounted for the greatest number of family trips, and approximately one-third of all families were in the annual income range of below \$13,000, one-third in the range between \$13,001 and \$23,000, and one-third in the range above \$23,001. One to three family members stayed in the same motel room as indicated by more than one-half of all family respondents. In addition, 66 percent of families stayed one to three nights in the motel. These data have implications for the design and operation of motels.

The responses from families and motel operators provided data for the first phase of the decision model. Theoretical application of the data to the decision model was sufficient to suggest potential future research in the decision processes within the lodging industry.

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CHAPTER I

INTRODUCTION

American families are traveling more today than at any other time. This leads to an anticipation of increased dollars in future travel markets (Mitchie, 1973; Olney, 1971). Parts of the disposable income of families will be used for travel, regardless of inflation and recession, according to Creighton Holden, the United States Assistant Secretary of Commerce for Tourism (Anon., 1976a).

The necessity for lodge operators to understand the desires of the customers when purchasing lodging facilities was emphasized by Powers (1971), Academic Director of Food Service and Housing Administration at Pennsylvania State University. Determination of specific desired accommodations has been undertaken by various methods but primarily by asking former guests of specific lodging facilities about such factors as cleanliness, room rates, credit payments, entertainment, comfort, window design, bed size, control factors, room size, security, and other services (Penner, 1975; Hill, 1973; Penner, 1973; Olney, 1971; Motto, 1971; Cole and Broten, 1971; Blomstrom, 1967). The adequacy of accommodations to meet the specific preferences of the family away from home was not evident in the literature.

Human tendency is to perceive change mainly in terms of self fulfillment. Therefore, opinions of families and lodging managers on accommodations for the future could provide valuable information.

Agreement among these opinions would indicate knowledge or awareness of desirable future accommodations.

Accommodations may be deemed desirable but still not available to families. Accommodations also may be provided which are not necessarily desirable to families. Availability of accommodations is accomplished only when the lodge operator is willing and has resources to provide those accommodations.

Accommodation changes in the lodging industry slowly evolve rather than abruptly change. Continually changing products and services are defined as continuous innovations (Rogers and Shoemaker, 1971). Some method is required to formulate agreement among families and lodge operators on specific changes in desirable accommodations. Once desirable accommodation innovations agreement is determined, a method for the implementation of those innovations is needed. The objectives of this research were:

1. To develop a decision model for the identification and implementation of continuous innovations in lodging accommodations desired by the family when away from home.
2. To develop a procedure to identify levels of agreement in continuous innovations in motel accommodations desired by families and considered desirable by motel operators from The Standard Statistical Metropolitan Areas (SSMA) in the East South Central States of Tennessee, Kentucky, Alabama, and Mississippi (U.S. Bureau of the Census, 1973a, b, c, d).

The discussion and presentation of the data and the application of the data to the decision model are presented as independent chapters. Chapters I, II, III, and VIII are applicable to the overall research project. Chapters IV, V, VI, and VII were written as independent chapters which, with slight modifications, may be independently published. Chapters IV, V, and VII are intended for publication in monitored professional journals, and Chapter VI is designed for a trade publication.

CHAPTER II

REVIEW OF LITERATURE

I. CONCEPTUAL FRAMEWORK

Consumer research in a managerial framework should be developed as a continuous monitoring model (Engel et al., 1968). A paradigm of the innovation decision process to formalize consumer decisions to adopt or reject changing consumer products was developed by Rogers and Shoemaker (1971). There were four functions or stages in the paradigm.

The first function, knowledge, was defined as exposure to the existence of the innovation and some understanding of how the innovation works. Persuasion, identified as the second function, was defined as the formation of favorable or unfavorable attitudes toward the innovation. The decision, the third function, consisted of activities undertaken which lead to a choice to adopt or reject the innovation. The third function included examination of not only activities involved but the actual process which, if positive, lead to the original decisions to adopt. Confirmation, which involves seeking reinforcements for the decision to adopt, was the fourth function. The Rogers and Shoemaker (1971) model was designed to examine the process involved from knowledge through a decision and subsequent confirmation.

The three stages of idea generation, adoption, and implementation in the innovative process were identified by Hampton (1969).

The phases might overlap or merge into each other. In some cases adoption was tantamount to implementation; in others, implementation might be the most difficult part of the process and might require more creative problem solving than the generation phase.

A developed model is a replica of a designated phenomena specifying the elements of the phenomena and representing relationships among these elements (Engel et al., 1968). The utility of the model lies in the extent to which the model makes possible a successful prediction of behavior or outcomes based on documented concepts.

The four functions of the Rogers and Shoemaker (1971) paradigm are the basis for the following review of literature which includes literature concerning knowledge of lodging accommodations, persuasion (the formation of attitudes toward innovations), and the decision making and implementation process.

II. KNOWLEDGE OF LODGING ACCOMMODATIONS

Lodging accommodations are any objects or services which fill a desire or convenience for the guests in the areas of housing when they are away from home. Knowledge, or awareness of an innovation, was the beginning function in the entire process of affecting any change. Awareness of desirable changes in lodging accommodations must be examined.

Lodging needs of the family are met by what Vallen (1968), Director of the School of Hotel Administration at The University of Nevada, labeled as hospitality. Hospitality includes the cordial, generous, and gracious reception of strangers and is manifested in

such areas as the comfort of a good bed, the efficiency of the lodge, and the attitudes of the lodge personnel.

The selection of a particular lodge occurs before other desires in accommodations may be filled. Cleanliness, which includes the overall appearance of a lodge, was the largest single influence of importance to an initial visit and subsequent return to a lodge according to the acclaimed national study of lodge guests conducted by Michigan State University for the American Hotel and Motel Association (Blomstrom, 1967). Cleanliness also was indicated in a 1967 national Gallop poll as the most important factor that the traveling public used in the selection of a lodge (Lundberg, 1970). Cleanliness takes on paramount importance to the lodge manager because the majority of U.S. travelers do not make reservations for their lodging facilities (Olney, 1971).

Ramada Inn, the second largest hotel room owner in the world, monitored comments of their customers to provide some evidence of guest desires. Customers desired color TV and were willing to pay for it through higher room rates. Entertainment, even for the traveler, was important. Credit, or deferred payments, as evidenced by a huge increase in credit card payment by their guests, was desired. Fast services and expanded services, such as baby-sitting service, pools, heat lamps, availability of doctors, and laundry and valet services were expected. The importance of hospitality and informality also was reinforced by the Ramada Inn surveys (Anon., 1970).

Since the image of the hotel was that of "a home away from home," the guests expected to find cleanliness at least equal to their

own home but with more luxurious conditions of comfort and decor (Kalt, 1971). To the traveler, comfort, pleasant color combinations, atmosphere, and control of the immediate environment were considered important basic needs in the lodge (Motto, 1971). The emotional need for control of the immediate environment may be met by lodges in such areas as bed panels, climate conditioning, and entertainment media in the guest room.

Room accommodations should be furnished in relation to the specific purpose for which the guest rents the room. The room design and furnishings were influenced by the guests since the length of stay and the purpose for a stay had an influence on desired room accommodations (Hill, 1973). The length of stay was previously determined as a factor to consider in the desires of the guests (Anon., 1970). The purpose of the research by Hill was to apply environmental analysis, defined as the systematic study of the physical and social arrangements within which behavior occurs, to a lodge guest room. With data obtained through the use of four different types of guest questionnaires at Statler Hall, the Cornell University Hotel, it was concluded that the major uses guests made of the room other than sleeping related to dressing, writing and reading, room services for foods and eating, viewing television, and visiting with friends and relatives. For dressing, guests used low chests near closets and the bathroom. For writing, reading, and room services, guests preferred to sit next to the windows. For viewing television, guests preferred the sofa, although many watched television from the bed just before going to sleep. This research provided

additional information on the accommodations desired by the family away from home (Hill, 1973).

The difficulty in defining a typical hotel guest room has been emphasized because most hotel-motels utilize several types of guest unit design in order to serve various classifications of guests (Cole and Broten, 1971). However, several common concepts were indicated as important features in the design of a facility. These might further assist in the determination of the accommodation desires of the family away from home. The concepts included the central inside corridor design, noise controls, individual room environmental controls, a variety of interior decors, recreational facilities, larger rooms, master bed side control panels, and external appearance and landscaping (Cole and Broten, 1971).

The "Copyright Guest Room" concept was established by The Sheraton Corporation of America to assist the further development of basic criteria and to determine the needs of the guest in the design of the room. The bed was the key factor in room size and design (Mills, 1970). The standard size bed was no longer acceptable in lodging establishments. Queen size beds were preferred by 41 percent of the guests in a national survey, 24 percent preferred the king size beds, whereas 9 percent preferred the long boy bed (Cole and Broten, 1971). Larger and longer beds for the American lodging establishment were reaffirmed by Robert Simon (1971), Director of Design for Realty Hotels in New York.

The desire of the guest to have a "mini suite," that is, room space which provides both living and recreational areas in addition

to the sleeping area, affected room design in the Sheraton guest room. In 1970 the average room size was 290 square feet and will increase to 400 square feet by 1980 (Mills, 1970). The typical guest room of 1970 accommodated a minimum of two people and at least double this number of people for living or recreational activities. Thus, a guest room which provided only a sleeping place was no longer competitive in the market place (Cole and Broten, 1971).

Control consoles, as master controls by the guest bed to control lights, heat, television, radio, and air conditioning, were in demand. Desires for cooking and warming appliances and refrigerators in the guest space, and two lavatories in each guest room were increasingly desired (Mills, 1970). Separate sinks and dressing areas were indicated as desirable in future lodges. Separate dressing table and mirrors outside the bathroom were demanded by the more discriminating guests. Security against intrusion was acknowledged as important to the guest (Brener and Gamoran, 1972). The one-way-peep-hole in the door was suggested by Sheraton as a welcomed guest provision (Mills, 1970).

Business guest preferences were determined through guest questionnaires in five commercial Eastern megalopolis city luxury hotels. A traditional bedroom atmosphere with conventional materials, furnishings, and equipment was preferred by the business guests. A single queen bed rather than a double-double or twin double bed was selected as most fitting to business travelers desires. Few frills such as an indoor pool, in-room bar, work space, and a health club were considered desirable, but with a minimum of extra services.

Over 50 percent of the business travelers desired a phone wake-up call, hard mattresses, tub plus shower, operable windows, self-service ice and vending, and an in-house bar. In addition, over 30 percent of the respondents in this study preferred a low rise building, facilities and equipment for typing, carpeted bathroom, in-house dining, and shower only in the bathroom. Over 50 percent of the business travelers did not prefer a meeting facility with secretary, an executive lounge, vibrating chair, child care facilities, vibrating mattress, whirlpool baths, heated towels, second wash basin, bathroom scales, in-room dining area, phone in bathroom, coin-op washer and dryer, heat lamp, shower heads at variable heights, health club, or music piped into the room (Penner, 1975).

Specific research on the lodging needs of the family away from home was limited. Nevertheless, by examining the reported data, some desires for lodging accommodations for the family were revealed.

III. PERSUASION

Persuasion is the formation of favorable or unfavorable attitudes toward an innovation and was the second function or stage in the conceptual paradigm (Rogers and Shoemaker, 1971). Since the developed decision model was concerned with utilization of knowledge of desirable continuous innovations in lodging accommodations by lodge managers, published research on attitudes was vital to this project. However, management attitude research was not evident in the lodging literature. Therefore, literature was reviewed for basic attitude information and for specific data on management attitudes.

The literature was later utilized as the theoretical basis for one phase of application to the developed decision model.

Attitudes develop through repeated contacts with individuals and encounters with objects. These come through direct experience, learning from others, and personality development. This occurs as a continuous process of socialization in which the attitudes of an individual are modified to conform to expectations held by members of groups to which the individual belongs (Halloran, 1967).

Expressions of attitudes involve a process of placement of issues in a framework; that is, attitudes are placed or categorized. Attitudes are revealed by positions of favor or disfavor and are placements within the performance scale of an individual. This serves as the anchor in judgment from which the individual is willing to tolerate only slight deviations.

Attitudes were categorized by Halloran (1967) into four functions. Instrumental, adjustive, or utilitarian, in which rewards are maximized and penalties minimized, was the first function label. Ego defensive described the second function. In this function, people tended to protect themselves from unacceptable truths and harsh realities in the external world. Value expression was the third function. This function contained attitudes enabling individuals to portray the type of persons they conceived themselves to be. Knowledge was the fourth function and provided understanding and meaning to what might not otherwise be a very meaningful situation.

King and Tigert (1971) classified four images of man in relation to attitude change. These images were similar to the categorizations

of Halloran (1967) and included the person as a classifying machine, the person as an ego defensive machine, the person as a problem solving, incentive individual, and the person as a conflict resolving machine. Each image merely brought attention to a different aspect of the individual.

Attitude change was the problem of discrepancy between an individual and the position advocated by the values and special concerns of the peer and social group of the individual. Initially, a suggestion for change must be received and accepted before any attitude change could occur. Changes more often occurred when a suggestion met the existing needs of the individual and if the change was in harmony with the norms or values of the group. Acceptance of an attitude change was positively affected if the source of the message was perceived as trustworthy or expert, and if the suggestion followed certain rules of rhetoric. Attitudes more frequently changed when the change had guaranteed group support and reinforcement. There also were indications that a change in group relationships could produce confusion and uncertainty and, consequently, make individuals more open to change (Halloran, 1967).

Persuasion refers to both individuals and groups of individuals. Individual attitudes were important toward innovations; however, the attitude an individual reflects may differ or change when the individual is in a group. Management attitudes on the participative system of management were examined by Ruh et al. (1973). Management attitudes were found to play a vital part in the management process. Attitudes and reaction of the management of an organization were both

a function of the variables of the individual managers and of management group level variables.

Attitudes of individuals about themselves were correlated with their attitudes toward a training program. Significant correlations existed between a positive attitude on the training and the positive self image of individuals, satisfaction with their pay, and the amount of seniority held. Reactions of individuals also were a function of group variables in that reactions to the training program were related to the employment group to which the individual belonged (Alderfer, 1971).

Changes of attitudes and values observed during and after a management education program were examined with a group of middle level managers to measure the impact of the education program. Attitudinal statements were measured with a Public Opinion Questionnaire. The results suggested that managers have positive attitudes toward group effectiveness and team effort (Leidecker and Hall, 1974).

The examination and description of attitudinal and behavioral changes in groups of managers has been undertaken by Golembiewski (1970). Discrepancies existing between a stimulus and the attitude of a manager were explored through the use of three models of causality. Attitudes in managers changed if the differences between the newly advocated stimuli and the original attitudes of the managers were small, but attitudes were not changed when these differences were large.

Specific management attitude research has not been undertaken in the lodging industry. Although generalities on attitudes can be developed, the role of attitudes must be examined in each specific

situation. Since attitudes provide significant guidelines in the decision making process, management attitude research should be undertaken in the lodging industry.

IV. DECISION MAKING PROCESS

Attitudes provide the guidelines for the decision making process. Decision making was the third function in the conceptual model. The process is complex and is affected by both individual characteristics of the decision maker and by the interactions of individuals in group decision processes. Basic indications which have been researched can be of value in application for specific decision making situations. Research in various areas of the decision process, including characteristics of the decision maker, has been previously reviewed. Some of this information may be utilized in the development of a decision model.

The functions of the managers often are described as the activities of planning, organizing, leading, and controlling. The concept of making a decision on the course of action to be pursued is a common element which integrates these functions. The manager becomes the pivot point in the evaluation of inputs, the determination of a course of action, and the monitoring of the actions designed to reach a goal (McDonnell, 1974).

Decision making begins with the recognition of problems which require decisions. Recognition leads to investigation and analysis of data, formulation of alternative solutions, and, finally, the selection and implementation of one of the alternatives. Intelligent

compromise is often an essential element in decision making since the decision maker is biased by his own standards, his subjective appraisal of environmental influences, the perceived pressures from superiors, and a sense of obligation to others (McDonnell, 1974).

Utilizing disparate pieces of information in choosing among alternatives within the decision making process is a pervasive task. The decision maker must balance the desire to accurately choose maximal options and the equally urgent need to reduce the cognitive strains of the decision task. The decision maker must simplify the decision task when under conditions of heavy information load. In simplifying, the decision maker injects some distortion into judgment and ignores some dimensions of evidence. This provides greater impact to the accepted evidence. Whether to ignore positive or negative evidence may depend upon the payoff. A negative bias has been found when the reward system for the decision maker heavily penalized false positives while ignoring success. There was a tendency to accentuate negative evidence under pressure of deadlines (Wright, 1974). A negative bias emerged when personal investments, such as personal losses, were involved and when the judgmental context implied final comment to the selected option (Slovic, 1969).

Decision performances also were affected by the personal attributes of the individual decision makers. As managers aged in years, they tended to take longer to reach a decision, although they gathered greater amounts of information. Older managers were accurately diagnosed the value of the information than younger managers. As managers grew older, they had more difficulty in integrating information

into accurate decisions, they were less confident of their decisions, and they were more flexible in altering decisions in the face of adverse consequences than were younger managers. There was a tendency for managers who supervised more subordinates to make more rapid decisions than managers who supervised fewer subordinates (Taylor, 1975). Prior decision making experiences had little effect on performance in subsequent decisions (Slovic, 1972).

The cognitive attributes of intelligence and intellectual efficiency contributed heavily to the judgmental aspects of decision making. These attributes appeared to be important in the judgment of the diagnosticity of information, retention of information in short-term memory, and integration of the information into accurate decisions. Personality, interests, and motivational attributes such as dogmatism, risk taking propensity, and vocational interests appeared to have impact on the more stylistic or idiosyncratic decision making behaviors. The propensity for taking high risks was typical of individuals who made rapid decisions based on relatively little information. However, high risk takers were not careless in considering the items of information selected. Attributes of the decision maker enter into the decision process and affect any decision (Taylor and Dunnette, 1974). Any differential performance of individuals in decision making was related to both personality variables and to information acquisition and usage patterns (McKenney and Keen, 1974). Wynne and Dickson (1975) also supported this premise.

Although decisions may be made by either individuals or groups of individuals, usually individuals enter into decision discussion

with predetermined positions based on evidence. Open group discussion did not elicit new arguments which were not previously considered in private by discussion participants. In addition, most open group discussions toward making a decision were based upon the evaluation of outcomes rather than focused on the probabilities of success or failure of achieving the outcome (Vinokur et al., 1975).

Although group discussion did not elicit new arguments, the judgment of individuals could still be manipulated by group pressures and by the influence of one person. The end decision was adversely affected when minority views were suppressed by a leader who maintained a contrary position. Additionally, group members who considered themselves to be experts had greater confidence in group decisions and were more persistent in group decision making (Frederickson and Kizziar, 1973).

Better decisions may be provided by group manipulation than by any particular individual of the group alone since group decisions surpassed even the best individual decisions. This supported the supposition that group discussion can lead to more accurate judgments by those involved than individual decisions without group input. However, if inaccurate information was inserted through an authoritative figure, the rate of improvement in decision making was impeded (Frederickson and Kizziar, 1973).

The quantity of information to be gathered for the decision process has been studied by Cecil and Lundgren (1975). The amount of information gathered increased as the difficulty of the problem increased and as the level of reward increased. A more favorable

evaluation of an alternative may follow the expenditure of great effort to determine the best alternative in the decision process.

Once a decision has been made, the manager seeks reinforcement for the decision. This process is a duplication of the decision process, but, perhaps, with additional information. The confirmation function is labeled as the fourth function in the Rogers and Shoemaker paradigm, but the literature provided little information on confirmation except to indicate that the reinforcement is a part of the decision process and that it usually cannot be extracted as a separate process.

Decision making is a complex process. The literature did not provide any evidence of research on the process applied or extracted from the lodging industry. The review did provide evidence on the process which may be applied to the lodging industry in future research.

CHAPTER III

PROCEDURE

Accommodation innovations desired by families who are away from their homes is of major importance in providing appropriate accommodations in motels and hotels (Powers, 1971). A procedure was developed to obtain data on desired continuous innovations in lodging accommodations from sample families and motel operators in the East South Central United States. The analyzed data were utilized in a theoretical managerial decision model.

I. DEVELOPMENT AND DISTRIBUTION OF QUESTIONNAIRES

Questionnaires were designed to provide comparisons of data between families and motel operators on desirable continuous innovations in motel lodging accommodations. A list of 31 accommodations was prepared after a review of lodging research and literature. The list included accommodations that were frequently available, plus accommodations that were not frequently available but were offered in some lodging facilities. The questionnaire was originally pretested with ten senior students in Food and Lodging Administration and with ten graduate students in Food Systems Administration or Food Science at The University of Tennessee, Knoxville. The questionnaire was revised and tested with 40 families and ten motel operators from Knoxville, Tennessee. Families were determined by the selection of one randomly determined name from 40 different random pages from the Knoxville, Tennessee telephone directory (South Central Bell, 1976e).

Motel operators were selected from the Greater Knoxville Hotel and Motel Association membership list through the use of a table of random numbers (Anon., 1976f). To uncover reasons for lack of response, telephone calls were placed to all nonrespondents. There was not a need to revise the questionnaire after the pretest with the Knoxville families and motel operators.

Each questionnaire contained a list of 31 accommodations and four columns. The respondents placed a check mark in the column which best fitted their position or opinion. Family respondents checked a column or columns which indicated that they had used the accommodation, would use the accommodation if it was offered, had not seen the accommodation offered but thought that it should be offered within the next five years, or would not use the accommodation currently or within the next five years (Appendix A).

Identically listed accommodations were checked by motel operators. The operator was asked to indicate if the accommodation was currently offered, the accommodation would be offered if customers desired it, the accommodation was not currently offered but the operator thought that the accommodation would have to be offered within five years, or that the accommodation should not be offered within five years.

Mailings were utilized to collect data. Postal cards informing each selected family and motel operator of the importance of the forthcoming questionnaire were mailed. A second mailing was made five days after the mailing of the postal cards. The second mailing consisted of a cover letter explaining the research and asking for the

cooperation of the head of the family or the manager of the motel, the questionnaire, and a preaddressed and postage paid business reply envelope. The mailing was enclosed in a third class envelope bearing The University of Tennessee, Knoxville mail permit. Both the questionnaires and the business reply envelopes were coded (Appendix A).

Fourteen days after the mailing of the questionnaires a third mailing was undertaken with families and motel operators who had not responded to the original questionnaires. This mailing consisted of another cover letter that was similar to the first cover letter, a copy of the original questionnaire, and another preaddressed and postage paid business reply envelope. All questionnaires were again coded; however, the business reply envelopes were not coded in this mailing (Appendix A).

Any family or motel operator who had not responded by the end of the seventh week was considered as a nonrespondent. Before inferences could be made on the entire sample, similarities between the original respondents and the nonrespondents had to be examined. To obtain replies from nonrespondents, a certified mailing to 20 family and 20 motel operator nonrespondents was undertaken. The mailing contained a cover letter, a copy of the original questionnaire, a postal reply card, and a preaddressed and postage paid business reply envelope.

II. SAMPLING METHODS AND STATISTICAL ANALYSIS

The population of families consisted of families in the Standard Statistical Metropolitan Areas (SSMA) within the East South Central

States of Tennessee, Kentucky, Alabama, and Mississippi (U.S. Bureau of the Census, 1973a, b, c, d). The total sample size was established at 500 to permit receipt of 100 replies. This represented an anticipated return of 20 percent. The number of families from each state was in proportion to the total population of the East South Central States (U.S. Bureau of the Census, 1972). This included 154 from Tennessee, or 31 percent of the total, 126 from Kentucky, or 25 percent of the total, 135 from Alabama, or 27 percent of the total, and 87 from Mississippi, or 17 percent of the total.

Families were selected from one SSMA in each state as determined by a table of random numbers. The SSMA's selected were Memphis, Tennessee, Owensboro, Kentucky, Montgomery, Alabama, and Gulfport-Biloxi, Mississippi. Families within each SSMA were drawn by interval number from telephone directories (South Central Bell, 1976 a, b, c, d). Since telephone directories contain both residential and business addresses, six pages from each SSMA telephone directory were selected by the use of a table of random numbers to determine the mean number of residential addresses per page in the directory. This was done by actual count of the total addresses and the number of residential addresses on the six pages. Percentages of residents to total addresses were calculated. Allowances in the interval number were made to accommodate the change of the interval occurring on a business address. The formula for this process included:

1. Number of pages in directory x mean number of residential addresses per page = total number of residential addresses in directory.

$$2. \frac{\text{Total number of residential addresses}}{\text{Sample number needed}} = \text{Interval number}$$

$$3. \text{Interval number} \times \text{percent of residential addresses} = \text{Adjusted interval number.}$$

If a business address fell at the adjusted interval number, the address was ignored and the adjusted interval number applied again from that address.

The sample of motel operators consisted of all motel operator members of the Motel and Hotel Associations of each of the sample states. The number of motel operators included 107 from Tennessee, 88 from Kentucky, 77 from Alabama, and 89 from Mississippi (Anon., 1976b, c, d, e). There was no attempt to select a proportionate number of motel operators from each of these states.

As a follow-up, comparisons were made between respondents and nonrespondents. The sample of nonrespondent families and motel operators was selected by the use of a table of random numbers and the list of addresses from which a reply had not been received within the first seven weeks of the project.

In analyzing all responses from families, motel operators, and nonrespondents, tallies of check marks in each column on the questionnaires for each listed accommodation were made. A check mark in a column was considered a positive response, a blank in the column was considered a negative response. If all four columns were blank, the data were considered as negative response in all four columns. In analyzing the data, only the columns concerned with accommodations for the next five years were utilized in the decision model. The columns

concerned with the present accommodations were lead-in items and did not fit into the decision model. Chi square was utilized to determine evidence of levels of disagreement between responses of families and responses of motel operators. Chi square also was used to determine levels of disagreement between family respondents and nonrespondents. Differences at the 0.05 level were considered significant. Chi square probabilities of 0.70 or greater were interpreted as a clear indication of no evidence of lack of agreement.

III. DECISION MODEL

Chi square probabilities ≥ 0.70 were considered as indicative of some form of agreement on lodging accommodations between families and motel operators. Identified agreement in motel accommodation innovations was subsequently applied to a conceptual paradigm. The paradigm was designed to examine decision processes that motel decision makers use in making decisions to adopt or reject innovations. The paradigm was based on research data reported in the literature with theoretical application to the model.

The first phase of the paradigm was the identification of knowledge in continuous innovations in family lodging accommodation preferences. This was achieved through the comparisons of responses from mailed questionnaires to families and motel operators. The identified agreement in lodging accommodations was applied to the theoretical paradigm to examine the decision process by which a management decision is undertaken for eventual implementation. The paradigm, as applied to the lodging industry, provided extensive areas for potential continued research.

CHAPTER IV

KNOWLEDGE OF MOTEL ACCOMMODATIONS

I. INTRODUCTION

Hospitality and informality were identified as desirable characteristics sought by the traveling public (Powers, 1971; Vallen, 1968). The specific characteristics of hospitality are difficult to define, but, in essence, hospitality is simply providing the guests with their desires. Numerous studies presented data on desires of customers in accommodations (Penner, 1973; Hill, 1973; Olney, 1971; Motto, 1971; Cole and Broten, 1971; Lundberg, 1970; Blomstrom, 1967). Additional studies have approached the desires of guests from the viewpoint of the lodge operator (Penner, 1975; Olney, 1971; Anon., 1970).

However, the literature did not provide evidence of agreement between the public and motel operators on what accommodations should or would be provided in lodging facilities. This research project identified some level of agreement between families and motel operators in continuous innovations in desirable lodging accommodations. Continuous innovations were defined as changes in products or services (Rogers and Shoemaker, 1971). An objective of this research was to develop a procedure to identify levels of agreement in continuous innovations in motel accommodations desired by families and considered desirable by motel operators.

II. PROCEDURE

Data were obtained from questionnaires mailed to 505 families and 355 motel operators in one Standard Statistical Metropolitan Area within each of the East South Central States of Tennessee, Kentucky, Alabama, and Mississippi. Questionnaires contained a list of 31 lodging accommodations. Respondents placed a check mark to indicate their position about the accommodation as to the current desirability or use, lack of availability or use, the desirability or need within five years, or the lack of need within five years. Tallies were made of check marks in each column to indicate a positive position on each accommodation; whereas, a lack of a check mark was taken as a negative position on the accommodation.

To obtain the data, four mailings were undertaken. Postal cards informing the addressees of the forthcoming questionnaires was the first mailing. The second mailing consisted of a cover letter, the questionnaire, and a preaddressed and postage paid business reply envelope enclosed in a third class envelope bearing The University of Tennessee mail permit. Questionnaires and envelopes were coded.

The first follow-up mailing was similar to the second mailing. To obtain data from nonrespondents, a second follow-up mailing was undertaken. This consisted of a cover letter, questionnaire, postal reply card, and a preaddressed and postage paid business reply envelope. The second follow-up was by certified mail to 20 nonrespondent families and 20 nonrespondent motel operators.

The number of families in the sample were in proportion to the population in the individual states and the total population of the combined East South Central states. Interval numbers were used to obtain family addresses from telephone directories. The motel operator sample consisted of all motel operators on the membership lists of the Hotel and Motel Associations of the four states.

Chi square probabilities ≤ 0.05 were considered as significant disagreement between families and motel operators. Probabilities > 0.70 were taken as evidence of a lack of disagreement and considered as some form of agreement.

III. RESULTS AND DISCUSSION

The procedure used to collect the data on continuous innovations in desirable lodging accommodations provided adequate data for discussion. Of the 505 family mailings, 137, or 27 percent of the sample were returned when the collection of data was ended on the forty-ninth day after the mailing of the initial questionnaires (Appendix B, Table 11). Responses were received from 207 motel operators for a return rate of 58 percent of the sample (Appendix B, Table 12).

Percent of mailing to families in each state in relation to the total number of mailings and the rates of return are shown in Table 1. Although the largest discrepancy of 7 percent difference in mailing and returns occurred with families from Kentucky, the total response could be biased due to the lack of a proportionate number of responses from all states.

TABLE 1
PERCENTAGE OF FAMILY QUESTIONNAIRES MAILED
AND RETURNED BY STATES

State	Mailings	Returns
Tennessee	31	28
Kentucky	25	32
Alabama	27	29
Mississippi	17	11
Total	100	100

The follow-up certified mailings yielded three returns from families and ten from motel operators. Due to the small number of replies from all nonrespondent families and motel operators, these responses were not compared to the original respondents.

The collected data provided evidence of disagreement between families and motel operators on continuous innovations in desirable lodging accommodations. Significant disagreement existed between families and motel operators on the desirability within the next five years in 11 of 31 accommodations (Table 2). Disagreement existed at the 0.05 level with desirability of features in the toilet and bathroom area, vibrating apparatus, vending and cooking appliances in rooms, recreational areas, valet services, safes for valuables, and the availability of a doctor.

In 10 of the 11 accommodations the percentage of families desiring the accommodation was greater than the percentage of motel operators

TABLE 2

CHI SQUARE PROBABILITIES OF DISAGREEMENT ON MOTEL ACCOMMODATIONS
BETWEEN FAMILIES AND MOTEL OPERATORS*

Accommodations	Desirable Within Five Years	Not Desirable Within Five Years
Separate dressing room	.104	.000**
Toilet separated area	.000**	.000**
Individual temp. controls	.095	.703+
Queen or king sized bed	.054	.034**
Vibrating mattress	.012**	.000**
Vibrating chair	.003**	.000**
Second toilet	.000**	.000**
Second wash sink	.314	.000**
Heat lamp in bathroom	.149	.008**
Vanity in bathroom	.733+	.327
Telephone in bathroom	.729+	.412
Whirlpool in bathroom	.001**	.000**
Movies in room	.246	.914+
Stereo music in room	.148	.004**
Indoor swimming pool	.919+	.000**
Recreational areas	.002**	.016**
Vended food dispensers in room	.000**	.000**
Vended items outside room	.119	.760+
Baby-sitting in room	.258**	.000**
Valet services	.010**	.000**
Child care center	.633	.760+
Doctor on call	.000**	.003**
Sauna bath	.078	.626
Health club	.978+	.119
Playground	.572	.345
Carpeted bathroom	.749+	.000**
Decorator sheets	.598	.000**
Cooking appliances in room	.000**	.000**
Room service	.673	.006**
Door chain for security	.674	.356
Safe for valuables	.010**	.000**

*N = 137 families, 207 motel operators.

**Chi square probability $P \leq 0.05$.

+Chi square probability $P \leq 0.70$.

who indicated they would provide the accommodations (Appendix B, Table 13). However, the desirability by both families and motel operators was indicated by less than 30 percent of all respondents. This low percentage would indicate little desirability of accommodations for both families and operators. The accommodation of a recreational area was the only accommodation in which the family responses indicated less desirability than motel operator responses.

In five of the 31 accommodations the chi square probability was ≥ 0.70 . Although not establishing agreement, this chi square probability would indicate that there was no evidence contrary to agreement. The accommodations included three features in the bathroom, a health club, and an indoor swimming pool. On closer examination of these data most respondents indicated that these five accommodations were not desirable within the next five years (Appendix B, Table 14). This indicated that motels probably should not provide these accommodations within the next five years.

The Ramada Inn Survey found a desire for the pool, but their report did not indicate whether the desired pool was inside or outside (Anon., 1970). Penner (1975) reported that with business travelers 50 percent desired the indoor pool, 49 percent desired a vanity, 32 percent desired a health club, and 24 percent desired a telephone in the bathroom. Agreement with Penner was not concluded by this current research because only 19 percent of the families desired an indoor pool, 10 percent desired a vanity, 13 percent desired a health club, and only 12 percent wanted the telephone in the bathroom. The differences in percent of respondents in each study were

undoubtedly due to differences in the types of populations. However, in both studies, the majority of respondents did not desire the health club or telephone in the bathroom.

Disagreement between responses of families and motel operators existed in 21 of the 31 accommodations when comparing the number of families who agreed or disagreed with the statement that an accommodation would not be desired by their family today or within the next five years and motel operators who felt the accommodation should or should not be offered within five years (Table 2). Accommodations included the areas of toilet and bathroom facilities, recreational facilities, bed size and linens, plus a variety of other services.

With 16 of the 21 accommodations, the percentage of motel operators that responded favorably to indicate accommodations should not be offered within the next five years was greater than positive responses from families (Appendix B, Table 15). In five accommodations percentages of families indicating the accommodation should not be offered were greater than the percentages of positive responses by motel operators. Results indicated that 72 percent of families, but only 23 percent of operators, responded that the accommodation of baby-sitting service should not be provided within the next five years. The accommodation of valet service was indicated as not desirable by 58 percent of the families and only 19 percent of the motel operators.

No evidence of disagreement between families and motel operators was indicated in four accommodations. Of these four accommodations, it appeared that individual room controls should be provided within the next five years. Vended items were considered desirable

within the next five years (Appendix B, Table 16). Mills (1970) and Cole and Broten (1971) reported that guests desired individual room controls and that vending equipment should be provided in each room in the future. A preference for movies in the room was indicated by 41 percent of family respondents and 40 percent of the motel operator respondents, while disagreement with the desirability of movies in the room was indicated by 59 percent of family respondents and 60 percent of motel operator respondents. There was not a clear preference concerning the desirability of movies in the room.

Desirability of a child care center within five years was indicated by 36 percent of family respondents and 34 percent of motel operator respondents. Disagreement with the desirability of a child care center was indicated by 64 percent of family respondents and 66 percent of motel operator respondents. This evidence indicated that it is likely that there will not be child care centers provided within the next five years. The Ramada Inn survey reported guests desired a baby-sitting service (Anon., 1970).

Write-in Comments

Space was provided on the questionnaires mailed to families for their responses to the question "what additional accommodations would you like to see offered to the public within the next five years." Although motel operators were not provided the opportunity to respond to the question, comments received from families revealed additional data (Appendix B, Table 17).

Comments provided indications on desired accommodations and likes and dislikes of the families. Cleanliness was the single most

often written comment. Concern was expressed for a clean room and clean linen, in addition to properly maintained facilities. Blomstrom (1967) indicated cleanliness as the prime concern of the traveling public.

Design of the lodging facility was indicated by several write-in comments. The desire for a quiet room with adequate sound proofing from exterior noises was indicated. The size and combination of adjoining rooms was of concern. Comments on facilities for laundry, sauna, adequate parking, and trailer or motor home hook-ups were received. A desire for more space was expressed by one respondent. The Sheraton Corporation detailed the need for larger rooms with space for activities other than sleeping (Mills, 1970).

Comments on furnishings and linens provided indications of family desires in sleeping accommodations. Firmness of the mattresses, extra towels, sizes of towels, pillow conditions, and a desire for waterbeds were of concern to some families. Additional furnishings deemed desirable included an automatic alarm system, electric alarm clock, better reading lamps, hair dryers, and small refrigerators. These are additional furnishings which motel operators might consider in future services. The concern for entertainment and recreation was evident by comments received. More reliable TV and color TV, covered tennis courts, stereo music in each room, and games were accommodations suggested by the families. The Ramada Inn survey specified the desires of the guests for color TV in rooms (Anon., 1970).

Reasonable and lowered room rates were of concern to many families. Special rates for children and honesty between advertised

rates and the actual rates of the motel also were noted. Care for pets, newspapers and magazines in rooms, and larger ice machines were considered desirable by some families. These extra services could be provided by motel operators as special attractions to their facilities. Additional suggestions from families included security guards on duty at the motel, a need for more facilities, plus some general comments which expressed favor on specific lodging facilities. Although restaurants were not considered in this study, some families submitted comments on restaurant facilities. Although not statistically analyzed, the comments provide additional information about the kind of accommodations desired by families that might be included in future research.

IV. IMPLICATIONS

The procedure to collect data from families and motel operators should be modified. Returns of 57 percent from motel operators was satisfactory; however, the 27 percent return from families could be improved. Utilizing a single first class postage mailing could provide the same returns as the third class mailings utilized in this study. The third class procedure cost approximately 45 percent more than a single first class mailing procedure.

Responses to the mailed questionnaires provided data for considerable disagreement between families and motel operators in desirable accommodations. More disagreement than agreement existed. There was more evidence on accommodations that should not be offered than evidence on accommodations that should be offered. There was

indication that some accommodations probably should not be offered within five years. These accommodations included a health club, an indoor pool, a carpeted bathroom, a vanity in the bathroom, and a telephone in the bathroom. In addition, there was some agreement that if a baby-sitting service and a child care center were offered, they would not be used by families.

In only two accommodations was there evidence that the accommodation should be offered within five years. The accommodation of individual room controls for heat and air conditioning and vended items near the room were considered desirable by families within the next five years. Motel operators also indicated they believed these must be offered within the next five years.

The write-in comments by families provided information on additional desires in motel accommodations. Since families took the time to write additional suggestions on the questionnaires, the comments deserve attention by the operators. The desires for cleanliness emphasize the need for operators to maintain clean motels. The operator could benefit by being concerned with family comments on linens plus suggestions pertaining to other room furnishings. Attention to special room rates and honesty in advertised rates may promote positive public relations with traveling families. In addition, family concerns for room size and noise control within the room may affect future motel design.

The number of suggestions received concerning room rates and the design of rooms would suggest that accommodations in these areas should be included in future research. Both families and motel

operators may benefit if these areas of concern were clarified. Families would receive the satisfaction of utilizing additional desired accommodations, and operators should receive the satisfaction of additional business when providing for the desires of families.

CHAPTER V

KNOWLEDGE OF MOTEL ACCOMMODATIONS BY FAMILY INCOME LEVELS

I. INTRODUCTION

Family income levels seemingly would influence the type of lodging accommodations desired. The growth of various types of lodging facilities designed to serve different economic levels of consumers is evident through casual observation along the United States Interstate Highway system. Recognized lodging corporations plan their facilities to appeal to definite income groups. Blomstrom (1967) categorized the lodging market by income groups when presenting marketing implications in a nationally recognized research project.

Research on lodging accommodations desired by guests has been reported in several projects (Penner, 1975; Olney, 1971; Motto, 1971; Cole and Broten, 1971; Mills, 1970; Lundberg, 1970; Blomstrom, 1967). These projects identified either the desires of the guests or the type of accommodations being offered by the lodge facility. This research project was designed to determine what agreement existed between the desires of the family for accommodations and what facilities the motel operators currently offer or are expecting to offer in the future. Current published research does not provide these types of data. Since family income levels might be a significant basis for family lodging decisions, these data were analyzed by income levels.

II. PROCEDURE

The procedure for the collection and analyzation of the data from families and motel operators was described in Chapter IV. Families indicated their annual income by checking one of nine income categories. Families were divided into three income levels: those with annual incomes below \$13,000, annual incomes between \$13,001 and \$23,000, and annual incomes above \$23,001. Responses by families in each income group were analyzed in relation to the responses of the motel operators. Percentages of agreements between families in the three income levels also were examined.

III. RESULTS AND DISCUSSION

Annual Family Income Below \$13,000

The responses of the 45 families with annual incomes of less than \$13,000 were compared to the responses of 207 motel operators. Chi square probabilities ≤ 0.05 were evident in 13 of 31 listed accommodations when analyzing family and motel operator agreement or disagreement that a particular accommodation would be desired or offered within five years (Table 3). In all 13 accommodations families had greater positive responses to the desirability of the accommodations than motel operators (Appendix B, Table 18). Not more than 35 percent of all families and 12 percent of motel operators gave a positive response to all accommodations. This was not strong evidence of desirability. Disagreement between families and motel operators appeared in a variety of accommodations including the

TABLE 3

CHI SQUARE PROBABILITIES OF DISAGREEMENT ON MOTEL ACCOMMODATIONS DESIRABLE WITHIN
THE NEXT FIVE YEARS BETWEEN MOTEL OPERATORS AND FAMILIES BY INCOME LEVELS

Accommodations	Family Annual Income Levels					
	Below \$13,000 ^a		\$13,001 to \$23,000 ^b		Above \$23,000 ^c	
	Desirable	Not Desirable	Desirable	Not Desirable	Desirable	Not Desirable
Separate dressing room	.033*	.002*	.719+	.001*	.815+	.180
Toilet separated area	.000*	.000*	.126	.000*	.081	.000*
Individual temp. controls	.036*	.893+	.169	.521	.828+	.741+
Queen or king sized bed	.976+	.172	.071	.402	.074	.209
Vibrating mattress	.001*	.002*	.442	.144	.369	.004*
Vibrating chair	.001*	.000*	.148	.001*	.300	.376
Second toilet	.000*	.000*	.000*	.000*	.079	.000*
Second wash sink	.064	.000*	.588	.000*	.567	.141
Heat lamp in bathroom	.363	.130	.058	.003*	.030*	.482
Vanity in bathroom	.131	.608	.586	.274	.972+	.252
Telephone in bathroom	.278	.012*	.807+	.577	.347	.949+
Whirlpool in bathroom	.004*	.000*	.011*	.028*	.295	.001*
Movies in room	.180	.329	.077	.616	.063	.566
Stereo music in room	.958+	.018*	.311	.093	.110	.184
Indoor swimming pool	.217	.000*	.381	.000*	.756+	.000*
Recreational areas	.623	.057	.003*	.164	.013*	.392
Vended food dispensers in room	.000*	.000*	.000*	.000*	.936+	.042*
Vended items outside room	.260	.310	.329	.600	.906+	.937+
Baby-sitting in room	.000*	.000*	.820+	.000*	.284	.000*
Valet services	.000*	.000*	.871+	.000*	.478	.000*
Child care center	.148	.005*	.851+	.670	.579	.080
Doctor on call	.000*	.052	.000*	.050*	.000*	.093
Sauna bath	.992+	.760+	.135	.521	.104	.833+

TABLE 3 (CONTINUED)

Accommodations	Family Annual Income Levels					
	Below \$13,000 ^a		\$13,001 to \$23,000 ^b		Above \$23,001 ^c	
	Not Desirable		Not Desirable		Not Desirable	
	Desirable	Desirable	Desirable	Desirable	Desirable	Desirable
Health club	.151	.168	.880+	.559	.362	.615
Playground	.443	.514	.252	.436	.141	.093
Carpeted bathroom	.360	.000*	.910+	.000*	.847+	.000*
Decorator sheets	.448	.001*	.182	.003*	.537	.003*
Cooking appliances in room	.000*	.000*	.328	.000*	.309	.000*
Room service	.123	.274	.724+	.030*	.986+	.016*
Door chain for security	.235	.564	.796+	.530	.539	.614
Safe for valuables	.000*	.057	.861+	.000	.101	.000*

*Chi square probabilities $P < 0.05$.

+Chi square probabilities $P \geq 0.70$.

^aN = 45 families, 207 motel operators.

^bN = 47 families, 207 motel operators.

^cN = 36 families, 207 motel operators.

dressings and toilet areas, room controls, vibrating equipment, valet and baby-sitting, and extra services such as a safe for valuables and cooking appliances in each room.

In the three accommodations of the bed size, stereo music, and sauna bath, there was no evidence of disagreement between families and motel operators. Of the family respondents, 79 percent indicated that queen or king size beds would not be needed within five years, whereas 80 percent of the motel operator respondents indicated that queen or king size beds would not be offered within five years (Appendix B, Table 19). Cole and Broten (1971) reported that 41 percent of guests in a national survey preferred the queen size beds, whereas 24 percent preferred the king size beds, and 9 percent preferred the long boy bed. Simon (1971), Director of Design for Realty Hotels in New York, reaffirmed the proposition of larger and longer beds.

The Cole and Broten (1971) report was on a national survey, while this study was on the East South Central section of the United States. It would appear that the families in this region do not desire the same features in beds as the general public across the nation. The differences also might be attributed to differences in income levels of respondents.

The desire for stereo music in the room was indicated by 21 percent of the families and 22 percent of the motel operators. This provided evidence that stereo music in each room will probably not be provided within the next five years.

The desirability of a sauna bath near the room was negated by 74 percent of families and 73 percent of motel operators. This

provided evidence that the sauna bath was not desired or needed in motel facilities within the next five years. In all three accommodations of bed size, stereo music, and sauna bath, the chi square value was ≥ 0.70 which indicated no evidence of lack of disagreement.

Disagreement existed between families and motel operators in 17 of 31 accommodations when comparing agreement or disagreement with the statement that the accommodation would not be used by the family and that the accommodation should not be offered within five years (Table 3). Disagreements existed with regard to the dressing, toilet, and bath areas, vibrating equipment, and other unrelated accommodations. With 15 of these 17 accommodations families indicated significantly less positive responses to the nondesirability of the accommodations (Appendix B, Table 20). In addition, families indicated greater preference for the nondesirability for the two accommodations of baby-sitting service in the room and valet services than did motel operators.

No evidence of disagreement between responses of families and motel operators was indicated with two accommodations. A negative response that individual room controls for heat, air flow, and air conditioning would not be used today or within five years was indicated by 95 percent of the families. A negative response to the statement that the accommodation should not be offered within the next five years was indicated by 97 percent of the motel operators (Appendix B, Table 21).

This negative response to a negative statement indicated there was a desire for individual room controls for heat, air flow, and air

conditioning within the next five years. Mills (1970), reporting the Sheraton Corporation data on their guests, and Cole and Broten (1971), reporting on a 1969 analysis of the American Hotel Industry, verified the desirability of individual room controls.

The desirability of a sauna bath near the room was indicated by 44 percent of the families and 48 percent of the motel operators, while disagreement with the desirability of the sauna bath was indicated by 56 percent of the families and 52 percent of the motel operators. Based on these data, a clear expression of agreement or disagreement with the sauna was not indicated.

In summary, any form of agreement between families with annual incomes less than \$13,000 and motel operators was more evident in negative positions than in positive positions. Larger beds, stereo music in rooms, a vibrating mattress, and a health club were not considered desirable; whereas, individual room controls for heat and air conditioning was considered desirable. Although not providing many indications of future continuous innovations in lodging accommodations, the data did provide evidence on accommodations that probably should not be offered.

Annual Family Income Between \$13,001 and \$23,000

Chi square probabilities were examined when comparing the responses of 47 families and 207 motel operators. Chi square probabilities of ≤ 0.05 were evident with five of 31 listed accommodations when analyzing data of families with annual incomes between \$13,001 and \$23,000 and motel operators agreement or disagreement with the

statement that an accommodation would be desired or offered within the next five years (Table 3). These accommodations involved the toilet and bathroom areas, recreational desires, vended food, and a doctor on call. Families provided greater favorable responses than motel operators to the desirability with four of the five accommodations (Appendix B, Table 22). Motel operators were more favorable to recreational areas than were families. However, in all the five accommodations the favorable responses were 30 percent or less.

There was no evidence of disagreement between responses of families and motel operators on ten of 31 accommodations (Appendix B, Table 23). In all ten accommodations the lack of disagreement was of a negative nature. This indicated that none of the ten accommodations would be desired or offered within the next five years.

In this study, 88 percent of the families and 90 percent of the motel operators did not feel the telephone in the bathroom would be desired within five years. No need for baby-sitting services within the next five years was indicated by 96 percent of families and 94 percent of motel operators. The Ramada Inn survey reported that their guests did desire some form of baby-sitting service (Anon., 1970). The reason for the differences in the two studies might lie in the differences in the sample populations. A carpeted bathroom was considered favorably by 13 percent of the families in this study, while Penner (1975) reported that 33 percent of business travelers desired a carpeted bathroom. The difference would be explained by both the population differences and the fact that the data by Penner (1975) were obtained from guests in Eastern luxury hotels, whereas the

data of this study were obtained from a cross section of families and only on motel accommodations.

Disagreement between families and motel operators existed with over one-half of the 31 accommodations when comparing the number of families who agreed or disagreed with the statement that an accommodation would not be desired today or within the next five years and motel operators who feel the accommodation should or should not be offered within five years. These accommodations were from all areas of the motel (Table 3, page 39). Families responded less strongly than motel operators in 12 of 17 accommodations, which indicated motel operators were more definite in response of what should not be offered within the next five years (Appendix B, Table 24). With the accommodations of baby-sitting and valet services families had responses of 75 percent and 67 percent respectively. These responses indicated these accommodations should probably not be offered. Motel operators responded with 23 percent for the baby-sitting service and 19 percent for the valet service. There were no chi square probabilities greater than 0.70 in this category, indicating that in all listed accommodations, although not always significant, there was some evidence of disagreement between families and motel operators.

In summary, forms of agreement between families with incomes between \$13,001 and \$23,000 and motel operators mainly were of a negative nature. In ten accommodations the agreement between families and motel operators consisted of the nondesirability of the accommodation within the next five years. In three other accommodations the agreement indicated the accommodation would not be utilized by

families and would not be offered by motel operators. In the comparison of these middle income families and motel operators, no agreement on potential continuous innovations for desirable lodging accommodations was evident. However, the agreement on accommodations not desired or not to be provided within five years could provide helpful information in the attempt by operators to better satisfy the family by not wasting resources on undesired accommodations.

Annual Family Income Above \$23,001

Responses from 36 families with annual incomes greater than \$23,001 were compared to the responses of 207 motel operators. Chi square probabilities ≤ 0.05 were evident in three of 31 listed accommodations when analyzing families and motel operators agreement or disagreement that a particular accommodation would be desired within the next five years or would be offered within five years (Table 3, page 39). Disagreement between families and motel operators appeared with the accommodations of a heat lamp, recreational areas, and a doctor on call.

No families indicated a desire for the heat lamp, whereas 16 percent of the motel operators indicated the lamp should be offered (Appendix B, Table 25). The desirability of a recreational area was indicated by 6 percent of the families and 28 percent of the motel operators, whereas, 25 percent of the families and 6 percent of the motel operators responded favorably to the desire of a doctor on call. With all accommodations, the preferences were very small.

In eight of 31 accommodations chi square probabilities ≥ 0.70 indicated no evidence of disagreement in these accommodations (Appendix

B, Table 26). With all eight accommodations, a negative view was presented by both families and motel operators. This indicated these accommodations will probably not be desirable or offered within the next five years.

Disagreement between responses of families and motel operators existed in 13 of 31 listed accommodations when comparing families and motel operators who agreed or disagreed that an accommodation would not be used by the family today or within the next five years or would not be offered within five years (Table 3, page 39). Disagreement between families and motel operators were on accommodations in the bathroom area, bed and linens, food service for the room, recreational services, and personal valet and safety accommodations (Appendix B, Table 27).

Only four accommodations had greater positive responses by families than motel operators when respondents indicated the non-desirability of the accommodation. These accommodations were baby-sitting service, valet service, room service, and a safe for valuables. The disparity was large, however, only in the accommodation of baby-sitting service and valet service. Families indicated greater response as to the nondesirability of these two accommodations.

No evidence of disagreement between responses of families and motel operators was indicated with the four accommodations of individual room controls for heat and air conditioning, telephone in bathroom, vended items, and sauna bath. Of the families, 100 percent indicated a negative response that individual room controls for heat and air conditioning would not be used today or within

five years, while 97 percent of the motel operators indicated a negative response to the statement that the accommodation should not be offered within the next five years (Appendix B, Table 28). This negative response to a negative statement indicated there was a need for individual room controls for heat and air conditioning within the next five years.

Negative responses were indicated by 91 percent of the families concerning the use of vended items outside the room, while negative responses were indicated by 92 percent of the motel operators. These negative responses to a negative statement indicated there was evidence of lack of agreement that vended items should be offered within the next five years.

There was no evidence of disagreement concerning the desirability of a telephone in the bathroom within the next five years. Of the family respondents, 76 percent indicated they would not use the telephone in the bathroom, while 75 percent of the motel operator responses indicated they would not offer the telephone in the bathroom within the next five years. The desirability of a sauna bath within the motel within the next five years was indicated by 52 percent of family respondents and 48 percent of motel operator respondents. The nondesirability of the sauna within the next five years was indicated by 48 percent of the family respondents and 52 percent of motel operator respondents. A clear expression of agreement or disagreement with the desirability of the sauna within the next five years was not indicated.

In summary, agreement between families with annual incomes above \$23,001 and motel operators was evident in several accommodations. However, only with the desirability of individual room controls for heat and air conditioning and vending areas near the room was agreement clearly evident. These two accommodations provide some level of agreement in continuous innovations in desirable lodging accommodations.

Comparison of Family Responses Between Income Levels

Comparison of the percentage of positive responses to the 31 accommodations listed on the questionnaire was undertaken between three family annual income levels for the purpose of examining differences in desires in lodging accommodations. As income level increased, the percent of positive responses increased with 18 of the 31 accommodations when families indicated that a particular accommodation was utilized (Table 4). Five of these accommodations were on bathroom facilities, three concerned the bed facilities, three concerned recreational and entertainment facilities, and two were on food services. The percentage of positive responses to two accommodations decreased as the income level increased. The data indicated that, in general, families with higher annual income levels utilized more services than did families in the lower income levels.

Percentage of positive responses increased in three accommodations as income level increased when families responded to the statement that they would use the accommodation if it were offered (Table 4). Percentage of positive responses decreased in nine accommodations as income level increased. These accommodations tended to be unusual accommodations and included the vibrating chair, second toilet,

TABLE 4

PERCENTAGE OF POSITIVE FAMILY RESPONSES TO MOTEL ACCOMMODATIONS BY INCOME LEVEL

Accommodations	Family Annual Income Levels					
	Currently Used			Would Use If Available		
	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c
Separate dressing room	34	41	50	34	35	17
Toilet separated area	23	26	38	21	44	24
Individual temp. controls	62	65	67	24	26	30
Queen or king sized bed	33	31	48	35	42	36
Vibrating mattress	20	22	29	13	8	12
Vibrating chair	3	4	0	28	21	12
Second toilet	7	2	3	42	27	21
Second wash sink	18	23	18	44	34	32
Heat lamp in bathroom	26	37	52	21	16	18
Vanity in bathroom	39	52	52	20	28	26
Telephone in bathroom	12	2	6	20	8	18
Whirlpool in bathroom	8	2	0	26	19	47
Movies in room	10	14	13	28	27	28
Stereo music in room	33	29	41	38	33	27
Indoor swimming pool	17	27	33	44	28	27
Recreational areas	18	21	21	43	47	42
Vended food dispensers in room	17	6	6	17	20	29
Vended items outside room	54	53	55	26	34	33
Baby-sitting in room	5	6	6	15	17	6
Valet services	5	10	18	28	17	15
Child care center	5	2	3	28	13	3
Doctor on call	5	9	14	55	52	50
Sauna bath	8	11	9	31	22	27

TABLE 4 (CONTINUED)

Accommodations	Family Income Levels					
	Currently Used			Would Use If Available		
	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c
Health club	8	4	6	13	21	23
Playground	30	28	24	30	30	27
Carpeted bathroom	21	20	32	33	37	29
Decorator sheets	15	16	19	36	43	41
Cooking appliances in room	10	23	29	41	26	35
Room service	44	46	52	21	23	12
Door chain for security	64	69	84	29	27	13
Safe for valuables	17	21	38	46	50	19

^aN = 45.^bN = 47.^cN = 36.

second wash sink, stereo music, indoor pool, valet service, child care center, playground, and door chain for security of the room. No relationship between annual income and positive response could be determined in the other 23 accommodations. The data indicated a tendency toward a decrease rather than an increase in the potential use of additional accommodations as the family income level increased.

Families responded to the statement that an accommodation is desirable and should be offered within the next five years (Table 5). In 22 of the 31 listed accommodations the positive responses decreased as the income levels increased. There were no indications on accommodations with an increase in positive responses as family income levels increased. Based on these data it may be suggested that families with lower levels of income desired more accommodations within the next five years than families with higher income levels. It would appear that higher level income families already obtain these accommodations; whereas, lower income families advocate these accommodations for the future.

Family responses to the statement that an accommodation would not be desired in five years revealed an upward trend in positive response in 16 lodging accommodations as family income levels increased (Table 5). As income levels increased, the positive responses to the accommodations decreased in two accommodations. There was evidence of no trend in 13 accommodations. The data suggested that, in general, as family income level increased, there was greater response to the position of no desire for additional accommodations in five years.

TABLE 5

PERCENTAGE OF POSITIVE FAMILY RESPONSES TO MOTEL ACCOMMODATIONS
DESIRED OR NOT DESIRED WITHIN FIVE YEARS

Accommodations	Family Annual Income Levels					
	Desirable			Not Desirable		
	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c
Separate dressing room	20	10	7	15	16	27
Toilet separated area	28	15	18	26	17	24
Individual temp. controls	14	11	3	5	0	0
Queen or king sized bed	21	9	7	14	18	13
Vibrating mattress	23	10	12	48	61	47
Vibrating chair	23	13	12	55	63	77
Second toilet	29	27	12	27	44	64
Second wash sink	23	15	6	21	28	44
Heat lamp in bathroom	23	4	0	36	45	30
Vanity in bathroom	17	4	10	29	15	13
Telephone in bathroom	17	12	3	54	80	76
Whirlpool in bathroom	31	27	19	39	52	42
Movies in room	43	16	13	30	45	47
Stereo music in room	21	15	6	17	23	24
Indoor swimming pool	29	13	15	17	23	24
Recreational areas	23	6	6	23	28	30
Vended food dispensers in room	31	27	6	38	47	59
Vended items outside room	9	9	6	14	4	9
Baby-sitting in room	26	4	0	54	75	88
Valet services	23	6	9	48	67	58
Child care center	28	17	11	41	71	83
Doctor on call	35	30	25	10	11	11

TABLE 5 (CONTINUED)

Accommodations	Family Annual Income Levels					
	Desirable			Not Desirable		
	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c	Below \$13,000 ^a	\$13,001 to \$23,000 ^b	Above \$23,001 ^c
Sauna bath	26	15	12	44	54	52
Health club	23	11	6	59	66	66
Playground	20	6	3	23	36	46
Carpeted bathroom	19	13	12	31	33	29
Decorator sheets	26	9	13	28	32	28
Cooking appliances in room	33	11	12	23	40	24
Room service	13	2	3	23	30	33
Door chain for security	10	4	0	0	0	3
Safe for valuables	20	2	13	20	27	31

^aN = 45.^bN = 47.^cN = 36.

Caution should be exercised in interpreting these data. The percentages of positive responses to accommodations were less than 50 percent in most instances. The data merely indicated trends in continuous innovations of desirable lodging accommodations by comparing three family annual income levels.

IV. IMPLICATIONS

Agreement and disagreement between families and motel operators on desirable continuous innovations in motel accommodations varied by family annual income levels (Appendix B, Table 29). Families with incomes below \$13,000 provided greater disagreement with motel operators than families in the higher income levels. Whereas, families in the income level above \$23,001 provided greater agreement in desirable and nondesirable accommodations than families from the lower income levels.

Responses between family income levels varied. A trend was observed that indicated families with higher income levels utilized more accommodations than families with lower annual income levels. Subsequently, the percentage of positive responses to desired accommodations decreased as income level increased when the family responded to potential use of additional accommodations. Lower income level families tended to desire more accommodations within the next five years. Conversely, higher level income families responded favorably to the statement that additional accommodations would not be desired within five years.

Agreement and disagreement in accommodations between families and motel operators and between families in three income levels were examined. It is evident that families in different income levels desire different accommodations. The willingness of different income level families to pay for different accommodations should be examined in future research. The motel operator should utilize the data since income levels of their clientele could be a guide to family desires in lodging accommodations. By providing for these desires, the operator should be successful. Both families and motel operators may be satisfied.

CHAPTER VI

KNOWLEDGE OF MOTEL ACCOMMODATIONS BY SELECTED FAMILY VARIABLES

I. INTRODUCTION

Motel operators manage facilities for the purpose of fulfilling specific and predetermined goals, such as a certain percent of profit on sales or a return on their investment. Human tendency is to perceive change mainly in terms of self fulfillment. The desire for self fulfillment on the part of the motel operator provides the customer with leverage for securing desired accommodations. By providing these accommodations, the motel operators may fill their operational and personal goals.

Accommodations may be deemed desirable by the public but still not be available. Accommodations also may be provided which are not necessarily desirable. Availability of accommodations is accomplished only when motel operators are willing and have the resources to provide those accommodations. A method of matching desires of guests and motel operators is needed. It would be valuable to seek opinions on future desirable accommodations from both guests and motel operators. Agreement among these opinions would indicate knowledge or awareness of desirable accommodations. Since the successful motel operator fills the needs of the guests and needs differ depending upon specific characteristics of the guests, the relationship between characteristics and needs must be exposed.

A purpose of this project was to examine levels of agreement between families with different travel characteristics and motel

operators in continuous innovations for desirable motel accommodations. Continuous innovations were defined as continually changing products and services (Robers and Shoemaker, 1971).

II. PROCEDURE

The general procedure for this study was detailed in Chapter III of this dissertation. Overall knowledge of desirable motel accommodations provided general information. Differences in responses were observed when the data compiled by the total family sample were compared with data based on selected variables of the family sample. The completed questionnaires from families contained information on the number of members in the family who normally stayed together in a motel, the number of nights stayed in a motel on their last trip, the length of the last family trip, when the family last stayed in a motel, the main purpose for their last trip, and income levels. The proportions of families in various response categories also were calculated.

III. RESULTS AND DISCUSSION

Comparisons of Selected Family Variables and Motel Operators with Total Responses

Comparisons were made with the chi square probabilities between responses of motel operators and all families and the chi square probabilities between responses of motel operators and responses from families in selected variable groups (Appendix B, Table 30). Chi square difference between groups of $P \geq 0.30$ were

considered as a noticeable difference. Responses from all 137 families and the responses from only the 58 families who normally have one or two family members staying in a motel provided for noticeable differences in chi square values for the seven accommodations of the separate dressing room, heat lamp, vanity, telephone in bathroom, stereo music, vended items, and decorator sheets.

Agreement with seven accommodations between the 58 families where one or two members stayed in the motel and the total 137 families was evident by chi square probabilities ≤ 0.05 . These accommodations had to do with the toilet, recreation, food, and valet services, and security. Levels of chi square ≥ 0.70 were evident in both groups of families for three other accommodations.

By combining those accommodations with chi square probabilities ≥ 0.70 and ≤ 0.05 , a total of 10 accommodations had similar chi square values. This indicated that all sample families were from the same population. In 14 accommodations, a determination could not be made. Based on these data, the responses of the total 137 families probably were not the same as the 58 responses from families in which only one or two members of the family stayed together in a motel.

Differences were evident in the comparisons of chi square values between the 137 total families and those 77 families in which more than two members of the family stayed together in a motel room and motel operators. There were noticeable differences in the accommodations of a second sink, vanity, baby-sitting service, and room service. However, in both the total number of families and the 77

families in which more than two family members stayed in the motel, chi square values were ≤ 0.05 in eight accommodations. In three accommodations both groups had values ≥ 0.70 . By combining the accommodations with chi square values of ≤ 0.05 and ≥ 0.70 there was agreement between the total family respondents and those respondents in which two or more members of the family normally stayed together in a motel in 11 of the 31 accommodations listed on the questionnaire. There was disagreement with four accommodations. In 16 accommodations no agreement or disagreement could be established. Based on the data it appeared that families with more than two members which stayed together in a motel more closely resembled the total population than the families who had one or two members in a motel room.

Family responses were examined by the number of days the family stayed in a motel on their last trip. Agreement between the total families and 122 families which stayed in a motel seven days or less was evident by chi square values ≤ 0.05 in 11 accommodations and values ≥ 0.70 in two additional accommodations. In the other 18 accommodations disagreement was not evident which led to the observation that those families which stayed seven days or less in a motel on their last trip were similar to the total family population. The data on the 15 families which stayed more than eight days in a motel on their last trip were not sufficient for discussion.

Levels of agreement were similar when comparing the chi square values of the total families and values of the 96 families whose last trip was for seven days or less as evidenced by values ≤ 0.05 in 11

accommodations and by values ≥ 0.70 in two accommodations. However, noticeable differences in values were evident with the accommodations of the queen or king sized bed, a heat lamp, telephone in bathroom, movies in room, carpeted bathroom floor, decorator sheets, and a door chain for security. No determination of agreement could be made with the remaining 11 accommodations. The similarity of the families whose last trip was seven days or less and the total families was clearer than any other comparisons made.

Data from 99 families who stayed in a motel within the last year were compared to data from the total 137 families. Agreement was evident by chi square value ≤ 0.05 with eight accommodations and by values ≥ 0.70 with three accommodations. There was a difference in chi square values with the baby-sitting accommodation. In the other 19 accommodations agreement or disagreement could not be determined.

The purpose of the last family stay in a motel was examined as additional evidence on desirable family accommodations. The chi square values of the 52 families who indicated a regular family vacation as the main purpose for their last stay in a motel were compared to the chi square values of the total 137 families. There were differences in values with the eight accommodations of individual room controls, heat lamp, vanity in bathroom, indoor swimming pool, vended items, baby-sitting service in room, sauna bath near room but within motel, and room service for food service. Chi square values ≤ 0.05 or ≥ 0.70 were established in ten accommodations indicating

agreement between these two groups of respondents. Levels of agreement could not be determined for the other 15 accommodations.

Family Response Categories

The responses of families may be examined by specific categories. The families indicated the number of family members who normally stayed together in a motel (Table 6). The largest single group of families indicated that two members of the family normally stay together in a motel. The next largest group was three members, followed by four, five, one, six, seven, and eight or more. More

TABLE 6
NUMBER OF FAMILY MEMBERS STAYING
TOGETHER IN A MOTEL ROOM

Number of family members who stayed together	Percent of total family respondents*
1	4
2	39
3	22
4	18
5	11
6	4
7	2
8	1

*Rounded to nearest percentage, N = 135.

than one-half the families indicated two or three members of their family stayed together.

The responses of families indicating the number of nights stayed in the motel on their last trip is shown in Table 7. More than one-half of the families stayed in a motel one to three nights on their last trip, while only 26 percent stayed between four and seven nights.

Although not presenting overall respondent data Blomstrom (1967) indicated length of stay in a motel or hotel by the purpose of travel. Of the respondents who were on their trip mainly for business, but with some pleasure included, a total of 77 percent of the respondents stayed three or less nights. Whereas, in this study, of the respondents who stayed in a motel or hotel mainly for pleasure, but with some business, 66 percent stayed three or less nights.

TABLE 7
NUMBER OF NIGHTS IN MOTEL
ON LAST FAMILY TRIP

Number of nights	Percentage of total respondents*
1 to 3	66
4 to 7	26
8 to 14	7
15 to 21	2
over 22	0

*Rounded to nearest percentage, N = 133.

When averaging responses by categories of travelers in the Blomstrom study, 80 percent stayed one, two, or three nights in a motel, which was greater than the 66 percent of the families who stayed between one and three nights from this research. This provides an indication that the public is perhaps not staying as many nights in motels as they did ten years ago. However, the Blomstrom data also included the business traveler who might stay longer than families.

The number of days on the last family trip was examined (Table 8). More than one-half of the family trips were between one and seven days, or one week or less. When comparing the category of one to seven days as the number of days on the last trip and the category of one to seven days stayed in a motel, the data indicated a discrepancy

TABLE 8
NUMBER OF DAYS ON LAST FAMILY TRIP

Number of days	Percentage of total respondents*
1 to 3	35
4 to 7	37
8 to 14	21
15 to 21	6
over 22	2

*Rounded to nearest percentage., N = 134.

since 93 percent of the families stayed in a motel from one to seven days, but only 82 percent of the families took trips that lasted from one to seven days. These data did not provide information as to where these families stayed during the remainder of their trips. The families which stayed in a motel one to seven days must have included some of the families whose last trip was more than seven days in duration.

The main purpose of the last family trip was investigated (Table 9).

TABLE 9
MAIN PURPOSE OF LAST FAMILY TRIP

Purpose of trip	Percentage of total respondents*
Visit with relatives and friends	21
Regular vacation (other than visiting relatives and friends)	40
Mainly pleasure but combined with some business	10
Mainly business but combined with some pleasure	9
Educational and cultural	2
Other pleasure.	9
Other purposes	9

*Rounded to nearest percentage, N = 129.

Vacations accounted for the largest percentage of family trips followed by visits with relatives and friends. It is apparent that motel operators must focus attention on families who are on vacation or visiting relatives and friends as their largest potential class of family guests.

Nine categories of income ranges were presented in the questionnaires to families. Responses from completed questionnaires provided the data for Table 10.

TABLE 10
INCOME RANGES OF FAMILIES

<u>Annual income range</u>	<u>Percentage of total respondents*</u>
Below \$7,000	5
\$7,001 to \$10,000	18
\$10,001 to \$13,000	12
\$13,001 to \$17,000	15
\$17,001 to \$20,000	14
\$20,001 to \$23,000	9
\$23,001 to \$26,000	9
\$26,001 to \$29,000	5
Above \$29,001	13

*Rounded to nearest percentage, N = 130.

Approximately 35 percent of the families had annual incomes of less than \$13,000, 37 percent had annual incomes between \$13,001 and \$23,000, while 28 percent had annual incomes above \$23,001.

Blomstrom (1967) found more families in lower income ranges and in the above \$30,000 income bracket. Due to inflation and the ten years span between the Blomstrom study and this study, these differences appear reasonable. Regional income ranges also could indicate reasons for differences in the higher income bracket.

These data on family categories might provide motel operators with useful information on family clientele. In addition, the information might lead to additional research into demographic profiles of families desiring specific lodging accommodations.

VI. IMPLICATIONS

Agreement on motel accommodations between families and motel operators was presented by selected family variables. The number of members in the family who stayed in the motel room was examined. It was suggested that if the motel operator could not survey his entire family traveler potential, the motel operator might concentrate on those families who had more than two members stay in the same motel room. These families were more similar to the total families than were the families in which only one or two members stayed in the room.

Families who stayed seven days or less in a motel on their last trip provided responses that were similar to the responses of all families. This also was true of families who stayed in a motel within the last year. Responses from families on vacations also were similar to the total sample population.

Data categorized into percentages does, however, provide useful information to the motel operator. Since more than one-half of the families had one to three members stay in the room, the motel operator should provide accommodations for at least three persons per room. Since approximately 66 percent of families stay one to three nights in a motel, the operator might plan operations for this characteristic. This group of guests provides for high potential use of motels.

Vacations accounted for the greatest number of family trips. The implication exists for a large portion of motel operators to be concerned with the accommodation desires of the vacationer. The motel operator who has knowledge that the guests are on vacation should arrange for specific accommodations if guests are to be satisfied. Income level data indicated that approximately one-third of the family motel users are in the income level below \$13,000, one-third in the level between \$13,001 and \$23,000, and one-third in the above \$23,000 bracket. The motel operator might focus on a certain income level and attempt to satisfy all the needs characteristic of that level.

CHAPTER VII

THE DECISION MODEL

I. INTRODUCTION

Consumer research in a managerial framework should be developed as a continuous monitoring framework (Engel et al., 1968). A paradigm of the innovation process to formalize consumer decisions to adopt or reject changing consumer products was developed by Rogers and Shoemaker (1971). The paradigm contained the four functions or stages of knowledge, persuasion, decision, and confirmation.

Knowledge was defined as exposure to the innovation existence and awareness of how the innovation works. Persuasion was considered the formation of favorable or unfavorable attitudes toward the innovation. The process of activities undertaken which lead to the choice to adopt or reject the innovation was considered the decision function. Reinforcements for the decision was the confirmation stage of the paradigm.

A purpose of this project was to develop a managerial decision model for the identification and implementation of continuous innovations in lodging accommodations desired by the family when they are away from home. A model is a replica of the phenomena it was intended to designate. It specifies the elements and represents relationships among the elements (Engel et al., 1968).

II. PROCEDURE

An appropriate decision model was identified after a review of literature. Research applicable to the functions in the Rogers and Shoemaker (1971) paradigm was reviewed for the purpose of better understanding for application of the model to the decision making process in the lodging industry.

Data on lodging accommodations were obtained through mailed questionnaires to selected families and motel operators. Data were theoretically applied to the decision model.

III. RESULTS AND DISCUSSION

A managerial decision model for lodging decision makers was formulated in paradigm form for ease of visualization of the five distinct phases or stages (Figure 1).

Each phase of the model was designed to provide data for application to the following questions:

- Phase 1 What agreement exists between families and motel operators for desirable continuous innovation in lodging accommodations?
- Phase 2 How do lodging decision makers form favorable or unfavorable attitudes toward continuous innovations?
- Phase 3 What are the decision processes and activities that lodging decision makers use in making decisions to adopt or reject continuous innovations?

What is the reinforcement process for innovation decisions?

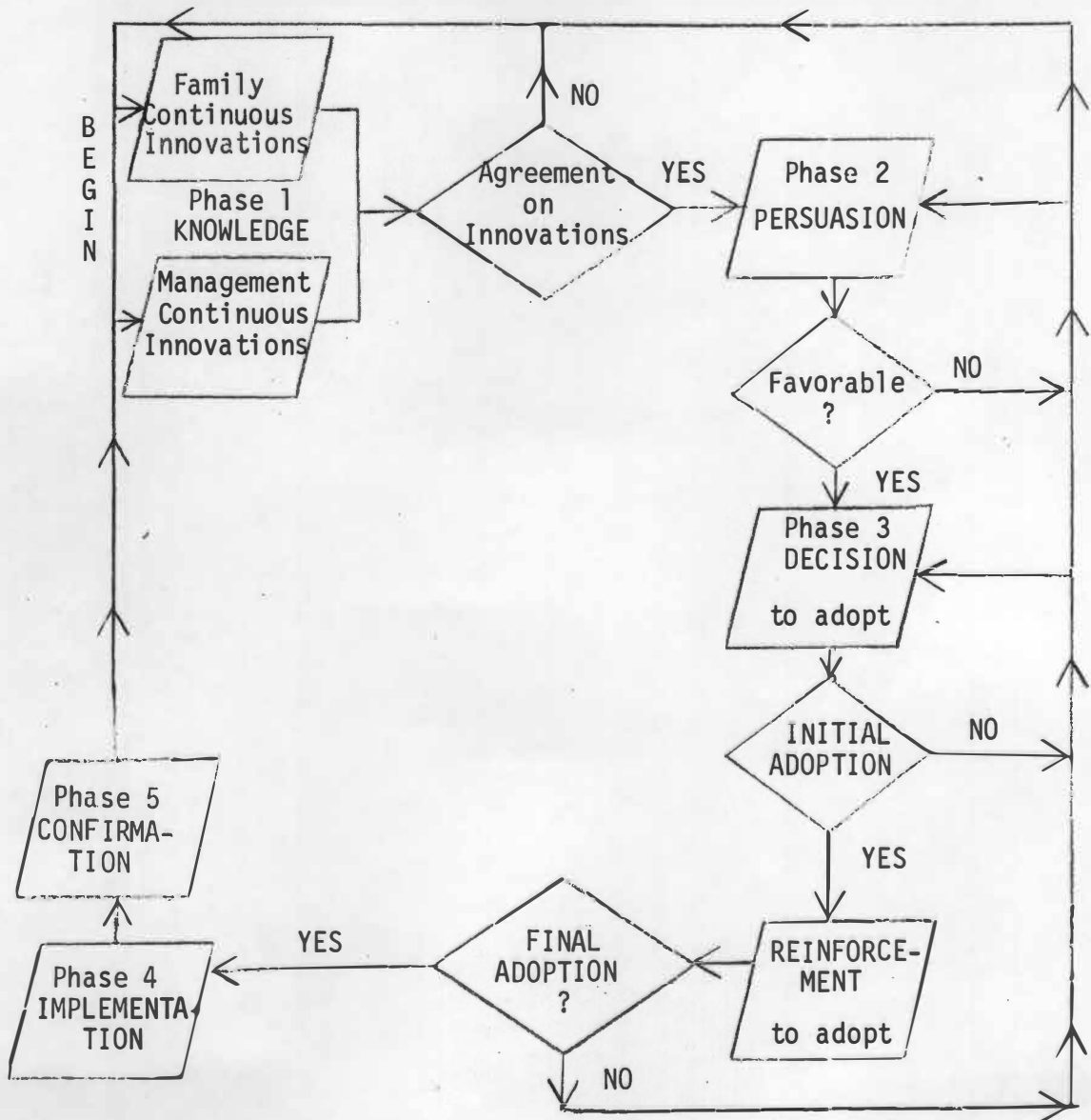


Figure 1. Decision and Implementation Model for Continuous Innovation in Lodging Accommodations.

- Phase 4 What are the implementation processes utilized and the considerations of the lodging decision makers whereby continuous innovations are implemented?
- Phase 5 How do lodging decision makers confirm the decision to adopt continuous innovations?

The responses to a mailed questionnaire to families and motel operators were analyzed. Of 31 listed motel accommodations agreement between families and motel operators was obtained in only two accommodations. Both the families and motel operators indicated the desirability of individual room controls for heat and air conditioning and for vended items near the motel room. These data represent the knowledge phase of the model. The data were hypothetically applied to the remaining parts of the model. This was accomplished by examining other research reported in the literature and applying the knowledge phase to additional stages in the model. The following discussion refers to published research on the topics of persuasion and the decision process and suggests potential research in the lodging industry.

Persuasion, the second phase of the paradigm, concerns the attitude formation of the manager toward the need for individual room controls. Since attitudes are formulated to an extent by agreement with peer groups of the individual, peer groups of the lodge decision maker must be examined (Halloran, 1967). Although the individual has certain characteristics which direct attitudes, management personnel tend to have positive attitudes toward group effectiveness and team effort (Leidecker and Hall, 1974). Even in team decision making an individual who has authority over others may influence

attitudes as can an individual who is considered an expert on a subject (Halloran, 1967). In addition, ego involvement affects the extent and direction of attitudes toward innovations and also must be examined (Golembiewski, 1970).

The decision processes and activities before a decision is made to adopt or reject the continuous innovation might be affected by many factors. Decision making begins with the recognition of problems (McDonnell, 1974). In this project, recognition consisted of the agreement between families and motel operators for the need of individual room controls and vended items. Once the problem is recognized, investigation and analysis of information, formulation of alternative solutions, and the selection and implementation of an alternative follows. Difficulties arise in the decision process that might be attributed to bias, pressures, obligations, lack of data, and distortion in judgments (Wright, 1974). Decisions are affected by the personal attributes of the individual decision maker such as age, prior decision making experience, intelligence, interests, and risk taking propensity (Taylor, 1975; Slovic, 1972; Taylor and Dunnette, 1974; McKenney and Keen, 1974; Wynne and Dickson, 1975). Decisions frequently are made by groups of people rather than one individual. In such cases, the positions of individuals, pressures on the group, and leadership qualities of group individuals must be considered (Frederickson and Kizziar, 1973).

Initial adoption follows the decision to adopt and frequently is undertaken on a trial basis. In the case of the need for individual room controls for heat and air conditioning and vended items near the

room, the lodge decision maker would reexamine the decision by proceeding through the decision process again. The reexamination might involve additional information which was not available in the initial decision. Once reinforcement for the original decision is obtained, room controls and vending areas normally would be installed in some of the motel. The specific implementation process would vary from situation to situation; however, frequently much of the implementation process would have taken place during the formation of the original decision. To complete the paradigm the specifics must be researched in the lodging industry.

Confirmation is the process by which the decision maker verifies the implementation phase. In confirmation, the decision process is again involved but with additional available data such as feedback from guests. A positive confirmation is verified by guest satisfaction. The measurement of the degree of satisfaction is another aspect of research suggested.

The developed decision model is, at this point, hypothetical. The model provides a framework for research in the specific areas of managerial decision making in the lodging industry. Questions have been presented for each phase of the model. Future research results will need to provide the answers.

IV. IMPLICATIONS

The initial stage of the decision model has been researched and has provided data for hypothetical application to additional phases of the model. The knowledge phase of the paradigm should be modified

for more optimum utilization of the resources through the utilization of first class mailings rather than third class mailings.

Research has been undertaken on each phase of the decision model but not within the lodging industry. Duplication of research reviewed in the literature needs to be accomplished and specifically applied to lodging facilities.

Hypothetically, in order to affect a favorable attitude for the continuous innovation of individual room controls, the individual lodging decision maker must be researched for peer association, amount of team efforts, individual ego involvement, and the influence exerted by authority or experts. Presumably, the proper manipulation of these factors might provide a favorable attitude on the acceptance of individual room controls. This would set the climate for the next phase which would be the examination for adoption of this continuous innovation.

Since the decision making process is complex and is affected by both individual characteristics of decision makers and by the interaction of individuals in group decision processes, the lodge decision maker must be examined concerning all these factors to specifically see how decisions are made within the lodging industry.

The basic framework has been provided, but these concepts need documentation. Future research in the lodging industry may provide the needed documentation.

CHAPTER VIII

SUMMARY

This research has focused on the importance for lodge operators to give close attention to customers and determine what they desire in lodging accommodations. In reviewing the literature, a variety of information was found concerning desired lodging accommodations but specific preferences of traveling families was not examined.

Accommodations may be deemed desirable by families but still not be available. Availability of accommodations is accomplished only when the lodge operator is willing and has the resources to provide the accommodations. A method to formulate agreement among families and motel operators in desirable accommodations was developed as well as a decision model of the decision process by which these accommodations may be implemented. The objectives of this research were:

1. To develop a decision model for the identification and implementation of continuous innovations in lodging accommodations desired by families when they are away from home.
2. To develop a procedure to identify levels of agreement in continuous innovations in motel accommodations desired by families and considered desirable by motel operators from the Standard Statistical Metropolitan Areas (SSMA) in the East South Central States of Tennessee, Kentucky, Alabama, and Mississippi.

Data were obtained on accommodations through questionnaires mailed to families and motel operators. Chi square was utilized to determine evidence of levels of disagreement between responses of families and motel operators. Differences at the 0.05 level were considered significant. Chi square probabilities of 0.70 or greater were interpreted as a clear indication of no evidence of lack of agreement. The obtained data were theoretically applied to a developed five stage decision model.

In only two accommodations were there clear indications of lack of disagreement between families and motel operators. The two accommodations desired within the next five years were individual room controls for heat and air conditioning and vended items near each room. There was evidence of lack of disagreement on accommodations that should not be offered within five years. The accommodations included a vanity and telephone in the bathroom, a carpeted bathroom, an indoor pool and health club, movies in the room, and a child care center.

The examination of data by family annual income levels revealed additional differences in preferences for accommodations. There was greater agreement between motel operators and families in the higher income levels. Families in the below \$13,000 annual income level had greater disagreement with motel operators. Comparison between family income levels provided evidence that as family income levels increased there was less desire for additional accommodations; whereas, lower level income families desired additional accommodations. Approximately

one-third of the sample population had annual incomes of below \$13,000, one-third had incomes between \$13,001 and \$23,000, and one-third had incomes above \$23,001. Preferences in accommodations were examined by income level.

Profile data on families were obtained which provided general descriptions of family clientele. The family characteristics provided by this data were compared to the overall population.

Families where more than two members stayed in the same motel room provided responses similar to responses from the entire sample population as were the responses of families who stayed seven or less days in the motel and stayed in a motel within the last year. Vacations accounted for the largest number of family trips. Responses from vacationing families were different than responses from the entire sample population. The motel operator might benefit by knowing characteristics of the customers. The knowledge could lead to better serving the desires of the customer.

The procedure to collect data for the identification of levels of agreement in continuous innovations in motel accommodations between families and motel operators completed the first phase of the developed decision model. The data were theoretically applied through phases of the model. The decision model provides potential for applied research in the lodging industry.

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LIST OF REFERENCES

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APPENDIXES

APPENDIX A

QUESTIONNAIRE, MAILING SAMPLES

QUESTIONNAIRE

FAMILY ACCOMMODATIONS PREFERENCES SURVEY
Food and Lodging Administration
College of Home Economics
The University of Tennessee, Knoxville 37916

Providing for the motel preferences of the family away from their home is a complicated task. Before motels can provide for these preferences, the preferences must be clearly known and understood. The purpose of this survey is to help determine the preferences of families in motel accommodations when they are away from home.

Please assist by completing this questionnaire. Your individual responses will be combined with other responses and analyzed.

Please check (✓) the appropriate box for these questions:

1. How many members of your family normally stay together in a motel?

1 2 3 4 5 6 7 8 or more
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

2. On your last family trip, how many nights did you stay in a motel?

1 to 3 days 4 to 7 days 8 to 14 days 15 to 21 days
☐ ☐ ☐ ☐
over 22 days
☐

3. What was the length of your last family trip?

1 to 3 days 4 to 7 days 8 to 14 days 15 to 21 days
☐ ☐ ☐ ☐
over 22 days
☐

4. When was the last time your family stayed in a motel?

Within 1 year Between 1 and 5 years More than 5 years

☐
☐
☐

Never stayed

☐

5. What was the main purpose of your last family stay in a motel?
(Check only answer nearest the main purpose or write in exact purpose)

- ☐ Visit with relatives and friends
- ☐ Regular vacation (other than visiting relatives and friends)
- ☐ Mainly pleasure but combined with some business
- ☐ Mainly business but combined with some pleasure
- ☐ Educational and cultural
- ☐ Other pleasures
- ☐ Other purposes (please specify) _____

6. In which of the following ranges does your family yearly income fall?

- ☐ Below \$7,000
- ☐ Between \$7,001 and \$10,000
- ☐ Between \$10,001 and \$13,000
- ☐ Between \$13,001 and \$17,000
- ☐ Between \$17,001 and \$20,000
- ☐ Between \$20,001 and \$23,000
- ☐ Between \$23,001 and \$26,000
- ☐ Between \$26,001 and \$29,000
- ☐ Above \$29,000

Please go through the list of motel accommodations and indicate your opinion using the following marking system:

- 1. have used - Check (✓) column 1 if your family has used this motel accommodation
- 2. would use currently - Check (✓) column 2 if your family would use if available
- 3. not seen but desire within 5 years - Check (✓) column 3 if you have not seen the accommodation offered but think the public would like it offered within the next 5 years
- 4. would not use - Check (✓) column 4 if your family would not use the accommodation today or within 5 years

Each item should be checked only once with the exception that both columns 2 and 3 could be checked for the same item. Base your response on the price you have usually paid for your family motel accommodations.

	1	2	3	4
Dressing room separate from sleeping or bath area	—	—	—	—
Toilet area apart from bath area	—	—	—	—
Individual room controls for heat, air flow, air conditioning	—	—	—	—
Queen or king sized bed rather than a regular size or single size	—	—	—	—
Vibrating mattress	—	—	—	—
Vibrating chair	—	—	—	—
Second toilet	—	—	—	—
Second wash sink	—	—	—	—
Heat lamp in bathroom	—	—	—	—
Vanity in bathroom	—	—	—	—
Telephone in bathroom	—	—	—	—
Whirlpool in bathroom	—	—	—	—
Movies in room	—	—	—	—
Stereo music in room	—	—	—	—
Indoor swimming pool	—	—	—	—
Recreational areas--ping pong, shuffle board mini golf	—	—	—	—
Vended food dispensers <u>in</u> room--soft drinks, alcohol, foods	—	—	—	—
Vended items outside room but close to room	—	—	—	—
Baby-sitting service in room	—	—	—	—
Valet services for cleaning of clothes, shoes	—	—	—	—
Child care center with facilities for complete care	—	—	—	—
Doctor on call	—	—	—	—
Sauna bath near room but within motel	—	—	—	—
Health club within motel	—	—	—	—
Playground	—	—	—	—
Carpeted bathroom floor	—	—	—	—
Decorator sheets	—	—	—	—
Cooking appliances in room such as coffee machine, frying pan	—	—	—	—
Room service for food service	—	—	—	—
Door chain for security	—	—	—	—
Safe for security of valuables	—	—	—	—

What additional accommodations would you like to see offered to the public within the next five years?

Since this questionnaire is being mailed to a limited number of families, it is extremely important that we receive the completed questionnaire before the entire project can be completed.

Please place the completed questionnaire in the enclosed business reply envelope and mail it today. Thank you very much for your cooperation and assistance.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

QUESTIONNAIRE

MOTEL OPERATORS' LODGING ACCOMMODATIONS SURVEY

Food and Lodging Administration

College of Home Economics

The University of Tennessee, Knoxville 37916

Providing the exact motel accommodations desired by traveling families can be a problem. Motel operators and the traveling public do not always agree on what is desired. The purpose of this survey is to help determine what accommodations are currently offered to traveling families and what the operators expect to be offering within the next five years.

Please assist by completing this questionnaire. Your individual responses will be combined with the responses of other selected motel operators and analyzed to obtain a regional overview.

Please go through the list of motel accommodations and indicate your opinion using the following marking system:

1. currently offer - Check (✓) column 1 if you currently offer the accommodation in normal rooms (excluding special rooms, such as suites)
2. would offer if desired - Check (✓) column 2 if you would offer the accommodation in most rooms if your customers desired it
3. currently do not offer but will--
5 years - Check (✓) column 3 if you currently do not offer the accommodation but think you will have to offer it within 5 years
4. would not offer - Check (✓) column 4 if you feel the accommodation should not be offered within the next 5 years

Each item should be checked only once with the exception that both columns 2 and 3 could be checked for the same item. Base your answers on your normal family rate.

	1	2	3	4
Dressing room separate from sleeping or bath area	—	—	—	—
Toilet area apart from bath area	—	—	—	—
Individual room controls for heat, air flow, air conditioning	—	—	—	—
Queen or king sized bed rather than a regular size or single size	—	—	—	—
Vibrating mattress	—	—	—	—
Vibrating chair	—	—	—	—
Second toilet	—	—	—	—

	1	2	3	4
Second wash sink	___	___	___	___
Heat lamp in bathroom	___	___	___	___
Vanity in bathroom	___	___	___	___
Telephone in bathroom	___	___	___	___
Whirlpool in bathroom	___	___	___	___
Movies in room	___	___	___	___
Stereo music in room	___	___	___	___
Indoor swimming pool	___	___	___	___
Recreational areas--ping pong, shuffle board mini golf	___	___	___	___
Vended food dispensers <u>in</u> room--soft drinks, alcohol, foods	___	___	___	___
Vended items outside room but close to room	___	___	___	___
Baby-sitting service in room	___	___	___	___
Valet services for cleaning of clothes, shoes	___	___	___	___
Child care center with facilities for complete care	___	___	___	___
Doctor on call	___	___	___	___
Sauna bath near room but within motel	___	___	___	___
Health club within motel	___	___	___	___
Playground	___	___	___	___
Carpeted bathroom floor	___	___	___	___
Decorator sheets	___	___	___	___
Cooking appliances in room such as coffee machine, frying pan	___	___	___	___
Room service for food service	___	___	___	___
Door chain for security	___	___	___	___
Safe for security of valuables	___	___	___	___

Since this questionnaire is being mailed to a limited number of motel operators, it is extremely important that we receive the questionnaire before the entire project can be completed.

Please place the completed questionnaire in the enclosed business reply envelope and mail it today. Thank you very much for your cooperation and assistance.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville
Knoxville, Tennessee 37916

Dear Head of the Family:

In 5 days you will receive a questionnaire designed to determine your family's desires in motel accommodations when they are away from home. The project, by the Food and Lodging Administration Program, is being undertaken in an attempt to better identify your family's motel needs. Please complete the questionnaire the day it is received and return it in the pre-addressed business envelope. We appreciate your help in this project.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville
Knoxville, Tennessee 37916

Dear Motel Operator:

In 5 days you will receive a questionnaire from the Food and Lodging Administration Program concerning the accommodations you offer to traveling families and what accommodations you expect to be offering 5 years from now. Only a selected number of operators are being sent the questionnaire; please complete the questionnaire and return it the day it is received. We need your response and appreciate your help with this project.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville 37916

Dear Head of the Family:

As American families travel they require many types of service in motel accommodations. Perhaps you have experienced a situation in which the accommodations that your family desired were not available, or just the opposite situation, in which much more was offered than what you wanted, costing more than you normally pay. To better understand family preferences in motel accommodations, a regional survey is being undertaken by the Food and Lodging Administration Program of The University of Tennessee, Knoxville.

Will you tell us what your family prefers in motel accommodations when they are away from home? It will take about 10 minutes to complete the enclosed questionnaire. Your responses will be combined with other responses to provide a regional overview. You will not be individually identified in the results. Since only a limited number of questionnaires have been mailed, it is important that we receive your completed questionnaire by July 30.

A pre-addressed business reply envelope is enclosed--please mail the completed questionnaire today. This may provide the basis for future motel accommodations in which families may more readily obtain what they desire in accommodations. Your assistance and time with this survey are greatly appreciated.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville 37916

Dear Motel Operator:

The Food and Lodging Administration Program of The University of Tennessee, Knoxville is conducting a regional survey to determine what lodging accommodations are currently offered to traveling families and what accommodations you expect to be offering within the next five years.

Your motel has been selected from the state Hotel-Motel Association membership list. Since a limited number of operations have been selected from Tennessee, Mississippi, Kentucky, and Alabama, your response is urgently needed. Will you help with this project by completing the attached questionnaire which should take about 15 minutes.

Please enclose the completed questionnaire in the return envelope and mail it today. Your answers will be combined with responses from other motel operators. Your responses will not be individually identified in the results.

When the project is completed, a copy of the report will be mailed to your state association office for your examination. Your assistance and time is greatly appreciated.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville 37916

Dear Head of the Family:

Recently questionnaires concerning motel services were mailed to selected families by The Food and Lodging Administration Program at The University of Tennessee. All completed questionnaires have not yet been returned.

If you have not mailed your completed questionnaire, would you please take about 10 minutes to complete the enclosed questionnaire and mail it today in the return pre-stamped envelope. Although you will not be individually identified, your reply is a vital part of the entire project.

We appreciate your help with this project.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville 37916

Dear Motel Operator:

Recently questionnaires concerning motel services offered to the public were mailed to selected motel operators by The Food and Lodging Administration Program at The University of Tennessee. All of the questionnaires have not yet been returned. These questionnaires are a vital part of a research project being undertaken.

If you haven't returned a completed questionnaire, please take about 10 minutes to complete the enclosed questionnaire and mail it in the pre-addressed envelope.

We appreciate your assistance.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville 37916

Dear Head of the Family:

Recently questionnaires concerning motel services were mailed to selected families by The Food and Lodging Administration Program at The University of Tennessee. All completed questionnaires have not yet been returned.

If you have not mailed your completed questionnaire, would you please take about 10 minutes to complete the enclosed questionnaire and mail it today in the return pre-stamped envelope. Although you will not be individually identified, your reply is a vital part of the entire project.

We appreciate your help with this project.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

Will you also mail the enclosed post card indicating that you have received the questionnaire. If you have already completed an earlier questionnaire, please indicate this on the card but also complete the enclosed questionnaire and mail it.

FOOD AND LODGING ADMINISTRATION PROGRAM
College of Home Economics
The University of Tennessee, Knoxville 37916

Dear Motel Operator:

Recently questionnaires concerning motel services offered to the public were mailed to selected motel operators by The Food and Lodging Administration Program at The University of Tennessee, Knoxville. All of the questionnaires have not yet been returned. These questionnaires are a vital part of a research project being undertaken.

If you have not returned a completed questionnaire, please take about 10 minutes to complete the enclosed questionnaire and mail it in the pre-addressed envelope. Postage has been prepaid.

We need and appreciate your completed questionnaire for the final phase of this research project.

Sincerely,

Louis A. Ehrcke
Industry Coordinator

Will you also mail the enclosed post card indicating that you have received the questionnaire. If you have already completed an earlier questionnaire, please indicate this on the card but also complete the enclosed questionnaire and mail it.

Dear Head of the Family:

Please check (✓) the correct boxes and mail today.

- ☐ I have received the questionnaire on motels
- ☐ I will return the completed questionnaire
- ☐ I will not be able to complete the questionnaire
- ☐ I have returned an earlier questionnaire but will also complete this questionnaire

Name _____

Address _____

Dear Motel Operator:

Please check (✓) the correct boxes and mail today.

- ☐ I received the motel operator's questionnaire
- ☐ I will return the completed questionnaire
- ☐ I will not be able to complete the questionnaire
- ☐ I have returned an earlier questionnaire but will also complete this questionnaire

Name of Motel _____

Address _____

APPENDIX B

TABLES

TABLE 11

ACCUMLATIVE NUMBER AND PERCENT OF RETURNED QUESTIONNAIRES FROM FAMILIES, N = 505

Days After Initial Mailing	*0	1	2	3	4	5	6	7	8	9	10	11	12	13	**14	15	16
Day of Week	F	S	SU	M	T	W	TH	F	S	SU	M	T	W	TH	F	S	SU
Number	0	0	0	0	0	1	2	5	0	0	8	1	3	2	0	0	0
Accummulative Number	0	0	0	0	0	1	3	8	8	8	16	17	20	22	22	22	22
Percent of Original Mailing	0	0	0	0	0	.2	.6	2	2	2	3	3	4	4	4	4	4
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
	M	T	W	TH	F	S	SU	M	T	W	TH	F	S	SU	M	T	W
	29	7	7	15	5	0	0	12	2	2	1	8	0	0	8	7	2
	51	58	65	80	85	85	85	97	99	101	102	110	110	110	118	125	127
	10	11	12	16	17	17	17	19	20	20	20	22	22	22	23	25	25
	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	
	TH	F	S	SU	M	T	W	TH	F	S	SU	M	T	W	TH	F	
	4	0	0	0	3	2	0	0	0	0	0	0	1	0	0	0	
	131	131	131	131	134	136	136	136	136	136	136	136	137	137	137	137	
	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	

*Initial mailing of questionnaires.

**Second mailing of questionnaires.

***Data collection ended.

TABLE 12

ACCUMULATIVE NUMBER AND PERCENT OF RETURNED QUESTIONNAIRES FROM MOTEL OPERATORS, N=355

Days After Initial Mailing	* 0	1	2	3	4	5	6	7	8	9	10	11	12	13	** 14	15	16
Day of Week	F	S	SU	M	T	W	TH	F	S	SU	M	T	W	TH	F	S	SU
Number	0	0	0	0	1	10	12	7	0	0	14	4	4	1	1	0	0
Accumulation Number	0	0	0	0	1	11	23	30	30	30	44	48	52	53	54	54	54
Percent of Original Mailing	0	0	0	0	.3	4	7	9	9	9	12	14	15	15	15	15	15
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
	M	T	W	TH	F	S	SU	M	T	W	TH	F	S	SU	M	T	W
	36	9	11	8	5	0	0	31	1	4	2	10	0	0	5	6	4
	90	99	110	118	123	123	123	154	155	159	161	171	171	171	176	182	186
	25	28	31	33	35	35	35	43	44	45	45	48	48	48	48	51	51
	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	*** 49	
	TH	F	S	SU	M	T	W	TH	F	S	SU	M	T	W	TH	F	
	2	0	0	0	9	4	0	1	0	0	0	0	5	0	0	0	
	188	188	188	188	197	201	201	202	202	202	202	202	207	207	207	207	
	53	53	53	53	56	57	57	57	57	57	57	57	58	58	58	58	

*

**Initial mailing of questionnaire.

***Second mailing of questionnaire.

Data collection ended.

TABLE 13

PERCENTAGE OF FAMILIES AND MOTEL OPERATORS INDICATING
DESIRABILITY OF ACCOMMODATIONS WITHIN THE
NEXT FIVE YEARS, $P \leq 0.05$

Accommodations	Families N = 137	Motel Operators N = 207
Toilet separated area	20	7
Vibrating mattress	15	6
Vibrating chair	16	5
Second toilet	23	3
Whirlpool in bathroom	26	12
Recreational areas	13	28
Vended food in room	22	8
Valet services	13	4
Doctor on call	30	22
Cooking appliances in room	18	5
Safe for valuables	12	4

TABLE 14

PERCENTAGE OF FAMILIES AND MOTEL OPERATORS INDICATING
DESIRABILITY OF ACCOMMODATIONS WITHIN THE
NEXT FIVE YEARS, $P \geq 0.70$

Accommodations	Families N = 137	Motel Operators N = 207
Vanity in bathroom	10	8
Telephone in bathroom	12	10
Indoor swimming pool	19	19
Health club	14	13
Carpeted bathroom	14	12

TABLE 15

PERCENTAGE OF FAMILIES AND MOTEL OPERATORS INDICATING
NONDESIRABILITY OF ACCOMMODATIONS WITHIN THE
NEXT FIVE YEARS, $P \leq 0.05$

Accommodations	Families N = 137	Motel Operators N = 207
Separate dressing room	18	41
Toilet separated area	21	64
Queen or king sized bed	15	25
Vibrating mattress	54	73
Vibrating chair	64	84
Second toilet	43	91
Second wash sink	29	59
Heat lamp in bathroom	37	23
Whirlpool in bathroom	44	70
Stereo music in room	21	37
Indoor swimming pool	22	67
Recreational areas	26	40
Vended food in room	47	77
Baby-sitting in room	72	23
Valet services	58	19
Doctor on call	12	26
Carpeted bathroom	32	64
Decorator sheets	30	57
Cooking appliances in room	31	82
Room service	27	15
Safe for valuables	25	8

TABLE 16

PERCENTAGE OF FAMILIES AND MOTEL OPERATORS INDICATING
NONDESIRABILITY OF ACCOMMODATIONS WITHIN THE
NEXT FIVE YEARS, $P \geq 0.70$

Accommodations	Families N = 137	Motel Operators N = 207
Individual temp. controls	2	3
Movies in room	41	40
Vended items outside room	9	8
Child care center	64	66

TABLE 17

ADDITIONAL COMMENTS OF FAMILIES ON ACCOMMODATIONS
DESIRED WITHIN THE NEXT FIVE YEARS

Category	Additional Comments
Cleanliness and upkeep	When traveling--I want a room that is <u>clean, quiet,</u> with comfortable beds and clean spreads. <u>I hate worn spotty spreads.</u> There is no excuse for them being dirty. Bed linens cleaner, including clean blankets and bedspreads. Nice clean rooms, not just half way. The last few times we've stayed, there were cob webs on the ceilings and found at least one bug. We don't stay at the most run down motels either. We've decided to start camping and save our money instead of paying for dumpy rooms. We have found accommodations to be generally quite good, but maintenance of facilities are usually poor, especially at state parks. Cleanliness is prime consideration.
Design	Quiet rooms! Better sound proofing from exterior noises. I've felt it's unfair because my family had to be divided into two rooms because there were 6 of us. Maybe an extra large room to accommodate without expense of 2 separate rooms. Child's room <u>adjoining</u> but separate from parents room instead of 2 beds in one room. All motels need better self service laundry facilities. Sauna in each bathroom. Adequate parking and hookups for campers and motor homes. This way you'll get the business on both ends.

TABLE 17 (CONTINUED)

Category	Additional Comments
Furnishings and Linens	Larger rooms at some motels.
	Would like better working area in room (typing, etc.). Am on road twice each month.
	Simple and plain with closer access to car--prefer only 2 story building.
	More single rooms.
	Would like to see two baths instead of one.
	Very firm mattresses (for those of us with back problems).
	Firm mattresses.
	Extra towels available--for more than 2 people.
	My favorite gripe--Too many times we have stayed at motels where they have only two <u>small</u> towels about the size of face towels, and sometimes no bath mat.
	Pillows too thick and bulky.
Entertainment Recreation	More waterbeds.
	Waterbeds.
	Automatic alarm for wake-up call.
	Electric alarm clock.
	Better reading lamps.
	Hair dryer in room.
	I would like to see small refrigerators installed in every room.
	More reliable T.V.
	More color T.V.'s.

TABLE 17 (CONTINUED)

Category	Additional Comments
Rates Prices	All weather tennis courts (covered).
	More rooms having stereo music!
	Electronic games (Magnavox Odyssey 2000) for use on room T.V.
	Radio.
	A night club with dining and dancing.
	Clean, modern, and reasonable rated rooms, since we use ours principally for bathing and sleeping.
	Excess luxury items could be cut out and concentrate on comfortable <u>good</u> service at a reasonable cost to meet needs of ordinary traveler. Exotic luxury type motels should be in special areas.
	Rates come down.
	Lower prices.
	Rates for children under 18, free with parents.
Extra Services	Honesty in advertising room charges. The discrepancies between billboards and rates are unbelievable.
	Would rather the accommodations we now have be kept up in good, clean, comfortable condition and prices of motels kept within a range that more people can afford.
	Two rate schedules: one higher rate for those staying at the motel all day and night--a lower rate for those just sleeping over night.
	Reasonable dining room prices!
	Good care for pets.

TABLE 17 (CONTINUED)

Category	Additional Comments
Adequacy of facilities	Since dogs and cats are many times the reason people either hesitate or refuse to take vacations because they have to leave them, it seems appropriate to provide arrangements for them (provided in separate quarters maybe). Some motels do and many do not.
	Newspapers delivered to room.
	Daily newspaper.
	Magazines in room.
	Larger capacity ice machines.
	If you stay only one night--many extras are not necessary.
	Security guards on grounds at all times.
	Security guards for car and personal safety.
	I would like to see more rooms. Most motels have a "no vacancy" sign up.
	At Six Flags St. Louis--not enough accommodations nearby in July.
	More than enough is provided in most motels we have used.
	The accommodations are very nice in the motels we have been in.
	Our vacations have ceased--however, we cannot find any complaints from motels where we have stayed.
	I have no complaints with present services--my travels are limited because of health. This may not help you--my apologies.
	More rest rooms in state and city parks that would be as good as those already available in most states that value the tourist trade.

TABLE 17 (CONTINUED)

Category	Additional Comments
Restaurant	At this time I feel that the above mentioned covers what a traveling family tends to expect.
	We only stay at Howard Johnson's or Holiday Inn.
	We would have answered this sooner but we have been on vacation. We are very happy to answer these questions for you. In case you're interested, the Howard Johnson's at Wilson Avenue in St. Louis is not a family restaurant. The help is rude; the place is dirty. We'll never use this place again.
	The House of Pancakes is a great place to take your family for meals. Also the Red Lobster. So if these places were located near more motels and hotels that would be nice. Also we think the rollaway bed should be a free service when using the family plans. And a dressing room idea is great, we sure could have used that. Also extra pillows and blankets stored in the room would be a big help. Also in the vended items in the room should include shampoo, and items that a busy mother might forget to pack.
	<u>Really good</u> restaurant.
	Better restaurant facilities.
Restaurant	There should always be a clean family priced restaurant--with children's prices.
	A list of eating establishments and prices and kind of food. It is hard to find a place to eat if you are unfamiliar in a town.
	Longer dining hours.
Restaurant	Buffet meals.

TABLE 18

PERCENTAGE OF FAMILIES WITH INCOMES BELOW \$13,000 AND
MOTEL OPERATORS INDICATING DESIRABILITY OF
ACCOMMODATIONS WITHIN THE NEXT
FIVE YEARS, $P \leq 0.05$

Accommodations	Families N = 45	Motel Operators N = 207
Separate dressing room	20	7
Toilet separated area	28	7
Individual temp. controls	14	4
Vibrating mattress	23	6
Vibrating chair	25	5
Second toilet	29	3
Whirlpool in bathroom	34	12
Vended food in room	31	8
Baby-sitting in room	26	6
Valet services	23	4
Doctor on call	35	6
Cooking appliances in room	33	5
Safe for valuables	20	4

TABLE 19

PERCENTAGE OF FAMILIES WITH INCOMES BELOW \$13,000 AND
MOTEL OPERATORS INDICATING DESIRABILITY OF
ACCOMMODATIONS WITHIN THE NEXT
FIVE YEARS, $P \geq 0.70$

Accommodations	Families N = 45	Motel Operators N = 207
Queen or king sized bed	21	22
Stereo music in room	21	23
Sauna bath	26	27

TABLE 20

PERCENTAGE OF FAMILIES WITH INCOMES BELOW \$13,000 AND
MOTEL OPERATORS INDICATING NONDESIRABILITY
OF ACCOMMODATIONS WITHIN THE NEXT
FIVE YEARS, $P \leq 0.05$

Accommodations	Families N = 45	Motel Operators N = 207
Separate dressing room	15	41
Toilet separated area	26	64
Vibrating mattress	48	73
Vibrating chair	55	84
Second toilet	27	91
Second wash sink	21	59
Telephone in bathroom	54	75
Whirlpool in bathroom	39	70
Stereo music in room	17	37
Indoor swimming pool	17	62
Vended food in room	38	77
Baby-sitting in room	54	23
Valet services	48	19
Child care center	41	66
Carpeted bathroom	31	64
Decorator sheets	28	57
Cooking appliances in room	23	82

TABLE 21

PERCENTAGE OF FAMILIES WITH INCOMES BELOW \$13,000 AND
MOTEL OPERATORS INDICATING NONDESIRABILITY
OF ACCOMMODATIONS WITHIN THE NEXT
FIVE YEARS, $P \geq 0.70$

Accommodations	Families N = 45	Motel Operators N = 207
Individual temp. controls	5	3
Sauna bath	44	48

TABLE 22

PERCENTAGE OF FAMILIES WITH INCOMES BETWEEN \$13,001 AND
\$23,000 AND MOTEL OPERATORS INDICATING DESIRABILITY
OF ACCOMMODATIONS WITHIN THE NEXT
FIVE YEARS, $P \leq 0.05$

Accommodations	Families N = 47	Motel Operators N = 207
Second toilet	27	3
Whirlpool in bathroom	27	12
Recreational Areas	6	28
Vended food in room	27	8
Doctor on call	30	6

TABLE 23

PERCENTAGE OF FAMILIES WITH INCOMES BETWEEN \$13,001 AND
\$23,000 AND MOTEL OPERATORS INDICATING AGREEMENT
ON THE DESIRABILITY OF ACCOMMODATIONS
WITHIN THE NEXT FIVE
YEARS, $P \geq 0.70$

Accommodations	Families N = 47	Motel Operators N = 207
Separate dressing room	10	7
Telephone in bathroom	12	9
Baby-sitting in room	4	6
Valet service	6	4
Child care center	17	17
Carpeted bathroom	13	12
Room service	2	5
Door chain for security	4	4
Safe for valuables	2	4
Health club	11	13

TABLE 24

PERCENTAGE OF FAMILIES WITH INCOMES BETWEEN \$13,001 AND
\$23,000 AND MOTEL OPERATORS INDICATING AGREEMENT
ON THE NONDESIRABILITY OF ACCOMMODATIONS
WITHIN THE NEXT FIVE
YEARS, $P \leq 0.05$

Accommodations	Families N = 47	Motel Operators N = 207
Separate dressing room	16	41
Toilet separated area	17	64
Vibrating chair	62	84
Second toilet	44	91
Second wash sink	28	59
Heat lamp in bathroom	45	23
Whirlpool in bathroom	52	70
Indoor swimming pool	23	62
Vended food in room	47	77
Baby-sitting in room	75	23
Valet services	67	19
Doctor on call	11	26
Carpeted bathroom	33	64
Decorator sheets	32	57
Cooking appliances in room	40	82
Room service	30	15
Safe for valuables	27	8

TABLE 25

PERCENTAGE OF FAMILIES WITH INCOMES ABOVE \$23,001 AND
MOTEL OPERATORS INDICATING DISAGREEMENT ON
THE DESIRABILITY OF ACCOMMODATIONS
WITHIN THE NEXT FIVE YEARS,
 $P \leq 0.05$

Accommodations	Families N = 36	Motel Operators N = 207
Heat lamp in bathroom	0	16
Recreational areas	6	28
Doctor on call	25	6

TABLE 26

PERCENTAGE OF FAMILIES WITH INCOMES ABOVE \$23,001
AND MOTEL OPERATORS INDICATING DESIRABILITY
OF ACCOMMODATIONS WITHIN THE NEXT
FIVE YEARS, $P \geq 0.70$

Accommodations	Families N = 36	Motel Operators N = 207
Separate dressing room	7	7
Individual temp. controls	3	4
Vanity in bathroom	10	8
Indoor swimming pool	15	19
Vended food in room	6	8
Vended items outside room	6	4
Carpeted bathroom	12	12
Room service	3	5

TABLE 27

PERCENTAGE OF FAMILIES WITH INCOMES ABOVE \$23,001 AND MOTEL
OPERATORS INDICATING DISAGREEMENT ON THE NONDESIRABILITY
OF ACCOMMODATIONS WITHIN THE NEXT FIVE YEARS, $P < 0.05$

Accommodations	Families N = 36	Motel Operators N = 207
Toilet separated area	24	64
Vibrating mattress	47	73
Second toilet	64	91
Whirlpool in bathroom	42	70
Indoor swimming pool	24	62
Vended food in room	59	77
Baby-sitting in room	88	23
Valet services	58	19
Carpeted bathroom	29	64
Decorator sheets	28	57
Cooking appliances in room	24	82
Room service	33	15
Safe for valuables	31	8

TABLE 28

PERCENTAGE OF FAMILIES WITH INCOMES ABOVE \$23,001 AND MOTEL
OPERATORS INDICATING NONDESIRABILITY OF
ACCOMMODATIONS WITHIN THE NEXT
FIVE YEARS, $P \geq 0.70$

Accommodations	Families N = 36	Motel Operators N = 207
Individual temp. controls	0	3
Telephone in bathroom	76	75
Vended items outside room	9	8
Sauna bath	52	48

TABLE 29

NUMBER OF ACCOMMODATIONS WHICH FAMILIES AND MOTEL
OPERATORS CONSIDERED DESIRABLE OR NOT
DESIRABLE WITHIN THE NEXT FIVE YEARS

Income Levels		Number Accommodations	
		Agreement	Disagreement
Below \$13,000	Desirable	3	13
	Not Desirable	2	17
\$13,001 to \$23,000	Desirable	10	5
	Not Desirable	0	13
Above \$23,001	Desirable	8	3
	Not Desirable	4	13

TABLE 30

CHI SQUARE PROBABILITIES OF DISAGREEMENT ON MOTEL ACCOMMODATIONS
BETWEEN MOTEL OPERATORS AND FAMILIES BY SELECTED VARIABLES*

Accommodations	Family Response Variables						Vacation as Purpose of Last Trip
	Total Response	1 or 2 Members in Motel	More Than 2 Members in Motel	7 or Less Days Stayed in Motel Last Trip	7 or Less Days on Last Trip	Stayed in Motel within One Year	
Separate dressing room	.104	.773+	.015**	.072	.080	.393	.389
Toilet separated area	.000**	.088	.000**	.000**	.002**	.003**	.023**
Individual temp. controls	.095	.300	.125	.045**	.040**	.191	.474
Queen or king sized bed	.054	.196	.147	.096	.466	.047**	.163
Vibrating mattress	.012**	.064	.025**	.007**	.006**	.067	.107
Vibrating chair	.003**	.100	.002**	.001**	.000**	.038**	.024**
Second toilet	.000**	.000**	.000**	.000**	.000**	.000**	.000**
Second wash sink	.314	.270	.621	.146	.124	.443	.205
Heat lamp in bathroom	.149	.749+	.111	.300	.798+	.244	.460
Vanity in bathroom	.733+	.203	.088	.500	.450	.823+	.298
Telephone in bathroom	.729+	.419	.859+	.465	.148	.908+	.823+
Whirlpool in bathroom	.001**	.062	.001**	.001**	.004**	.021**	.020**
Movies in room	.246	.481	.400	.618	.830+	.132	.299
Stereo music in room	.148	.631	.151	.350	.423	.131	.416
Indoor swimming pool	.919+	.907+	.937+	.803+	1.000+	.639	.483
Recreational areas	.002**	.009**	.057	.003**	.025**	.002**	.033**
Vended food disp. in room	.000**	.007**	.001**	.000**	.000**	.005**	.000**
Vended items outside room	.119	.439	.124	.063	.030**	.072	.420
Baby-sitting in room	.258	.057	.928+	.221	.204	.583	.909+
Valet services	.010**	.003**	.163	.003**	.005**	.058	.088
Child care center	.633	.929+	.560	.690	.794+	.715+	.794+
Doctor on call	.000**	.000**	.000**	.000**	.000**	.000**	.000**
Sauna bath	.078	.203	.227	.113	.181	.189	.849+
Families N = 137		58	77	122	96	99	52

TABLE 30 (CONTINUED)

Accommodations	Family Response Variables						Vacation as Purpose of Last Trip
	Total Response	1 or 2 Members in Motel	More Than 2 Members in Motel	7 or Less Days Stayed in Motel Last Trip	7 or Less Days on Last Trip	Stayed in Motel within One Year	
Health club	.978+	.785+	.879+	.886+	.987+	.861+	.998+
Playground	.572	.869+	.471	.834+	.944+	.457	.410
Carpeted bathroom	.749+	.953+	.662	.587	.223	.644	.933+
Decorator sheets	.598	.170	.803+	.838+	.940+	.559	.675
Cooking appliances in room	.000**	.011**	.002**	.000**	.000**	.001**	.072
Room service	.673	.618	.987+	.490	.944+	.804+	.974+
Door chain for security	.674	.881+	.768+	.512	.243	.911+	.795+
Safe for valuables	.010**	.006**	.106	.003**	.002**	.147	.148
Families N =	137	58	77	122	96	99	52

*N = 207 Motel Operators.

**Chi square probability $P \leq 0.05$

+Chi square probability $P \geq 0.70$.

VITA

Louis August Ehrcke was born in Walled Lake, Michigan on October 29, 1935. He received his education at Walled Lake Consolidated Schools, graduating in 1953. He was graduated from Michigan State University in 1957 with a Bachelor of Arts degree from the College of Business Administration, with a major in Restaurant Management. In 1970 he received the Master of Science degree from The College of Home Economics from Purdue University with a major in Institutional Management.

Included in his professional experience are positions of Director of Food Service at Pfeiffer College, Director of College Union at Wabash College, Director of Union Food Service at DePauw University, Assistant Manager at The Carolina Inn at The University of North Carolina, Food Manager at Purdue University, Assistant Professor and Acting Head of the Department of Restaurant, Hotel and Institutional Management at Purdue University, and Instructor and Industry Coordinator of the Food and Lodging Administration Program at The University of Tennessee, Knoxville.

Professional organizations in which he holds membership are the Council of Hotel, Restaurant and Institutional Educators, Hotel Sales Management Association International, American Home Economics Association, Tennessee Home Economics Association, and Alpha Kappa Psi. His honor societies are Phi Kappa Phi, Phi Tau Sigma, Phi Mu Alpha, and Omicron Nu.

He is the husband of Colleen C. Ehrcke of Knoxville Tennessee and has three daughters, Jane Ellen, Elaine Joan, and Diane Linda.