Title: INNOVATORS AND NON-INNOVATORS IN FURNITURE PURCHASE COMPARED ON THEIR CREATIVITY, CHANGE ORIENTATION, AND SOCIAL PARTICIPATION

The study determines and compares the characteristics of innovators (defined as purchasers of wood furniture of similar line, curve, mass, function, and cost).

Null hypotheses were written predicting that there would be no difference between innovation in purchase of furniture and age, creativity, social participation, socio-economic level, exposure to mass media, and change orientation.

The sample consisted of those who purchased contemporary plastic furniture or similar furniture made of wood from the two stores who carried such furniture in a city of 400,000 people located in the Pacific Northwest. A questionnaire containing a measure for each variable was mailed to each member of the sample. The data were analyzed by the chi square, z test, t test, and simple correlations.
Creativity was found to be significantly related to innovativeness in the purchase of furniture. No significant relationship was found between innovativeness and the age of the consumer, social participation, socio-economic level, exposure to mass media, or change orientation.

Further study is recommended utilizing a larger sample, and investigating the diffusion of another type of project.
Innovators and Non-Innovators in Furniture Purchase Compared on Their Creativity, Change Orientation, and Social Participation

by

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DEFINITION OF TERMS AS USED IN THIS STUDY

Innovators
members of a community who are first to accept a new product or idea. For the purpose of this study, purchasers of contemporary plastic furniture shall be called innovators.

Non-Innovators
members of a community who follow the innovators in acceptance of a new product or idea. For the purpose of this study, purchasers of wood furniture shall be called non-innovators.

Social Participation
Activities taken part in by an individual in and beyond his community.

Socio-Economic Level
The social position an individual holds in his society determined by his occupation and educational level.

Creativity
The power or quality of creating.

Change Orientation
Readiness to accept change.

Diffusion
The process by which meaningful communications about an innovation are exchanged among members of a society.
INNOVATORS AND NON-INNOVATORS IN FURNITURE PURCHASE COMPARED ON THEIR CREATIVITY, CHANGE ORIENTATION, AND SOCIAL PARTICIPATION

CHAPTER I

INTRODUCTION

Origin and Statement of the Problem

Some of the greatest struggles of life that man has encountered have been with the acceptance of new products and ideas into his daily life resulting in widespread change. "The explosion and shock of innovations on the minds of people are just as real and devastating as the nuclear missiles of modern military machines." (Rogers, 1968, p. 1)

There have been an unlimited number of technological advances made since the turn of the century affecting not only industry and agriculture, but also the home. The consumer has been faced with the difficult task of accepting or rejecting innovations. Innovations are ideas or products which are perceived as new by the individual. (Rogers, 1968)

Research indicates that each individual goes through certain mental stages before acceptance; he first becomes aware of the new product, develops an interest in it, evaluates the product for his own purposes, tries it on a trial basis, and finally adopts it. (Beal and
Bohlen, 1957) People proceed through these mental stages at different rates causing varying times of adoption. Consequently, the product is diffused through society with the innovators as the first to accept the new product or idea. The next group to adopt is the Early Adopters, then the Early Majority, the Late Majority, and finally the Laggards. (Rogers, 1968)

Each adopter group possesses differing characteristics which cause them to make the decisions they do. The studies conducted by Lionberger (1960), Beal and Bohlen (1957), and Rogers (1968) indicate that the Innovators are more change oriented, more active in and beyond the community, of higher socio-economic level, and have a greater exposure to mass media. This group comprises three to five percent of the community. The remainder of the groups may be considered non-innovators and are older, not active beyond the community, receive fewer sources of mass media, and are of a lower socio-economic level.

Due to the interest of the land-grant institutions, the majority of the published research regarding diffusion of a new product or idea and the acceptors and non-acceptors has been conducted in the area of agriculture. (Lionberger, 1960)

Perhaps the most widely known researchers of the diffusion process are Lionberger, Rogers, and Beal and Bohlen. Each of these men had done extensive research on the subject in regard to
the acceptance of agricultural products and practices, but there are others who have also conducted significant studies. Ryan and Gross (1943) studied the diffusion of Hybrid Seed corn in two Iowa communities and found that acceptors were younger than non-acceptors. Gross and Taves (1952) conducted a study of the adopters of ten specific recommended farm practices. Their results indicated that adopters were younger, had larger farms, higher incomes, more education, and read more library books, more bulletins, subscribed to more magazines and newspapers, and took frequent trips to the nearest metropolitan center.

Generally adopters are younger than non-adopters, but there is some evidence to the contrary. Gross (1949) studied the acceptors of the McLean process of hog sanitation and found that they were not younger. He did determine that the acceptors were better educated, had larger farms and higher incomes than the non-acceptors. In their study, Marsh and Coleman (1955), studied the acceptance of 16 specific farm practices, and found that in 14 of these practices the adopters had more education and had a higher socio-economic level. They were also more active beyond the community in that they participated in Farm Bureau activities.

In regard to change orientation, Wilkening (1950) discovered that there was a positive relationship between acceptance of improved farm methods and the desire for change. Back (1958) made a study
in Puerto Rico of people who were change oriented. He studied their personal characteristics to determine their differing reactions to innovations. He discovered a relationship between creativity and ambition, and established that these personal characteristics are associated with modernistic attitudes.

These findings, combined with the results of other diffusion research, provide a reference and general theories as to the diffusion of an innovation as well as to the specific characteristics of each adopter group. However, Graham (1956) has cautioned against making generalizations in regard to diffusion by suggesting that the acceptance of any single innovation cannot be an index to the acceptance of others.

There is a great need for extended research and dissemination of information about the actual diffusion of a new product or idea. According to Rogers (1968), the findings in regard to diffusion in each discipline are largely ignored by those in other disciplines. He further stated that one important purpose for research on diffusion is to determine ways in which the process may be hastened. The findings of the research must then be diffused and integrated in order to be advantageous.

The writer has held a great interest in the innovative plastic furniture as it has been developed and introduced on the market. It is a product which is relatively new and may be considered
innovative, and there is no published research on its diffusion. The value of studying the contemporary plastic furniture is that it is a different type of product than has been investigated in the past with reference to diffusion, and it is in great contrast to the agricultural products about which much more is known.

A doubling in dollar value of the furniture industry over the next ten years has been predicted by Mr. John Snow, Vice-President of the National Furniture Manufacturing Association. (Plastics make ... 1969) It is unlikely that wood, due to its dwindling supply and rising cost of labor and prices would be able to fulfill this demand. It has become necessary then to initiate the use of other materials for furniture production. Plastic developed into furniture that is of contemporary design, and used as a material for its own esthetic qualities comprises four percent of the overall furniture market. (Plastics make ... 1969) Consequently, purchasers of contemporary plastic furniture may be considered Innovators.

In this research, contemporary plastic furniture was selected as the innovative product for the study of diffusion. The study consisted of determining certain characteristics of consumers who purchased contemporary plastic furniture and consumers who purchased similar furniture made of wood, and comparing the characteristics of these two groups. The results of this study will serve as a contribution to research on diffusion and will be related to theories and
findings of past research which may provide strength to existing beliefs. Consequently, the scope of research on diffusion will be broadened.

**Purpose of the Study**

The purpose of this study is to determine the characteristics of the consumers of contemporary plastic furniture (innovators) and the factors associated with the purchase of such furniture, as compared to those consumers who purchase furniture made of wood of similar line, curve, mass, function, and cost (non-innovators).

**Objectives**

In order to determine and compare the characteristics of innovators and non-innovators, the following null hypotheses were posed:

There will be no difference between the innovators and the non-innovators on:

- $H_0 \text{ I.}\ $ age
- $H_0 \text{ II.}\ $ socio-economic level
- $H_0 \text{ III.}\ $ creativity
- $H_0 \text{ IV.}\ $ exposure to mass media
- $H_0 \text{ V.}\ $ social participation
- $H_0 \text{ VI.}\ $ change orientation
Assumptions

The instruments of measure that were used are valid and reliable.

Each member of the population answered the questionnaire honestly and to the best of his ability.
CHAPTER III

REVIEW OF RELATED LITERATURE

Plastic is a material that has been in existence for nearly a century; initially it was used only in the kitchen, but more recently it has moved into other parts of the home. Plastic is being used more extensively because of its flexibility and the fact that it can be tailored to meet specific needs. Its contributing characteristics are that it is light in weight, comes in a wide range of colors, has good physical properties such as transparency and opaqueness, and is adaptable to mass production for it can be formed into a rigid, seamless shape. (Harsha, 1960) Plastic has a wide variety of uses from the many types of vehicles in which we are transported, to new low-cost housing, to the furnishings, lighting, and floor coverings included in our home.

History of Plastics

"Today's plastic products result from one of the most intensive research efforts in history." (Harsha, 1960, p. 42) Plastics were developed 100 years ago for commercial use when such materials as oxygen, hydrogen, nitrogen, chlorine, and sulphur were combined to create this man-made material. In 1868 John Wesley Hyatt created the first commercial plastic called cellulosic nitrate. He created
it as a substitute for ivory used in billiard balls because of the shortage of ivory at that time. The first photographic film used by Eastman in the 1880's was made of this Celluloid, followed by motion film.

(Short history . . . 1960)

The plastics industry took its second major step forty-one years later when Dr. Henrik Baekeland introduced phenolformaldehyde resins which were given the name Bakelite. He was also the first man to develop techniques to convert plastics for commercial use. From 1909 to 1926 cold molded and casein plastics were developed followed by cellulose acetate in 1927 which became the first injected molded plastic in 1929. The vinyl resins came in 1927, polystyrene, and then in 1942 polyethylene and the polyesters were introduced. Newer materials include the acrylics and the urethanes. (Short history . . . 1960)

There are two major classes of plastics -- thermosets consisting of products which, once melted and formed, cannot be remelted. The larger class of plastics is called thermoplastics which can be melted and reformed repeatedly. The thermoplastics include the vinyls, saran, acrylics, cellulosics, polycarbonates, nylons, polystyrenes, polyformaldehyde, polyethylenes, and polypropylene. The thermosetting plastics are polyesters, alkyds, ureas, epoxides, melamines, phenolics, and polyurethanes. Special types include silicones, synthetic latexes, and ion-exchange resins. (Short history . . . (1960)
Plastics in the Furniture Industry

By taking a look at the new, innovative designs of furniture, one may not only receive a view of what the future holds for consumers in their homes, but also in industry. Already being commercially produced are the inflatables, expandables, foams, and acrylics. Plastic, as the basic material for these new designs, allows for a break from the traditional, and according to its volume sales, it appears to not be just a passing fad. (When furniture . . . 1968)

Donald A. Irwin, marketing director for urethane chemicals of Uniroyal, Inc. stated, "the furniture industry is becoming one of the plastic industry's fastest growing markets." (Plastics make ... 1969, p. 50) The new revolution of plastics for furniture has two sides. The first is visible because it looks and acts like plastics. It comes in the colorful, flowing, molded chairs of urethane foam or the acrylic see-through tables and chairs. The second and larger side is not as apparent for this is the plastic that imitates wood and is used in structural pieces. Either image of the plastics revolution will provide competition for the current major material of furniture -- wood. The rising costs of the production of wood furniture due to its smaller supply and higher labor costs have caused some manufacturers to turn to plastics. Unfortunately, the cost of plastic furniture is not noticeably less than wood, for plastic is not merely a cheap substitute. Plastics may, however, prevent steeper climbs in the
rising costs of furniture. (Plastics make . . . 1969)

There are a selected few plastics generally used in the making of furniture. Their generic names and characteristics are:

1. ABS (Acrylonitrile-butadiene-styrene)--This is a tough, rigid material which generally appears in colorful, non-padded molded chair shells; it is not used as a wood substitute. The cost is high and the prediction is that it will reach 15 million pounds used per year by 1975.

2. Acrylics--These are clear and light reflecting and can be used as tubular rods or as flat sheeting cut into shapes.

3. Polyurethane--This is used for chair shells as well as for the imitation of wood. Also, it can be used for a low-density foam cushion over the rigid foam chairs. By 1975, it is estimated that 250 million pounds will be used per year in furniture.

4. Polyethylene--This type of plastic is used as rigid, molded, non-upholstered small seat shells.

5. Polystyrene--It is the most widely used plastic for furniture because of its good structural qualities and low cost. Its use is also for chair shells. (Furniture 1970 . . . 1969)
The expandables use polyurethane foam in many forms, as rigid as wood, or as soft as a pillow. The furniture is produced by using several plastic liquids in a mold and allowing them to take shape. The finished pieces are made with no internal rigid structure so they are placed in a vacuum and compressed into a package. When the package is cut, air expands the piece within forty-five minutes. (Expandables . . . 1969)

The inflatables can be deflated and inflated with a vacuum or a pump. They are made of high-quality, heavy gauge polyvinyl chloride which is treated to prevent sticking to the skin. Furniture which can be made includes tables, lamps, chairs, and sofas. (Expandables . . . 1969)

The acrylics are rigid, flat sheets of plastic which lend themselves to cutting to create a variety of shapes, or to melting and molding to achieve new designs. This type of plastic generally finds its place in tables and accessory items for the home. (Expandables . . . 1969)

Robert Lauter, Vice-President of Macy's who promote collections of plastic furniture, believes it "has the earmarks of bigness--new design, color, great designers, a new look, function." (Plastics make . . . 1969, p. 52)
"An innovation is an idea perceived as new by the individual." (Rogers, 1968, p. 13) The important concept of innovation as emphasized by Ladewig (1969) is a perspective an individual has in regard to a new product or idea. It is not associated with acceptance by society, simply by the individual. Consequently, if a product or idea is new to an individual, it is to him an innovation. Innovativeness is the degree to which an individual is relatively earlier to adopt new products or ideas than the other members of his society. Likewise, an innovator is first to accept a new idea or product.

Adoption of a new product or idea is far more complex than its mere acceptance by an individual. Adoption "is a cultural, social, and psychological change as well. There is a corresponding change in the attitudes, thoughts, values, and behavior of the people who are affected by the material change." (Ladewig, 1969, p. 245) The factor common to all adoption is time, for adoption takes place over a period of time from the first awareness to regular use. (Copp, Sill, Brown, 1958) According to Gallup (1955), there is a long period of time after an individual has mentally accepted an idea until it is incorporated into his thinking and eventual use. This span of time is described as a period of absorption.
Although Copp, Sill, and Brown (1958) suggest that scientific methods cannot be used to determine the exact stages an individual proceeds through in the adoption process, they generally agree with Lionberger (1960) and Rogers (1968), that the mental process by which people adopt new ideas or practices may be broken up into five stages:

1. Awareness Stage
The first knowledge about a new idea, product, or practice.

2. Interest Stage
The active seeking of extensive and detailed information about the idea to determine its usefulness.

3. Evaluation Stage
Studying the acquired information in respect to the current conditions into which the practice would have to fit.

4. Trial Stage
The initial trying out of the idea or practice; becoming familiar with it and the way in which it works.

5. Adoption Stage
The full adoption of the practice.

Gallup (1955) presented certain aspects of a new product or idea that will bring about a change, which may be considered in order
to predict successful acceptance. These include: the complexity of the change; whether it will cause a mental struggle on the part of the adopter; the degree of difference from the usual practice or product; if the new product can provide competition with the currently accepted product; if the new idea can be demonstrated and proven; if there is a felt need for the new idea or product; and the frequency with which the public is reminded of the new product.

There are always some people who adopt first, some who adopt last, and some who never adopt. (Lionberger, 1960) Rogers (1968) has presented the adopter categories as: (1) Innovators who are first to accept a new product or idea, (2) Early Adopters, (3) Early Majority, (4) Late Majority, and (5) Laggards. Rogers (1958) theorized that adoption distributions are normal and bell-shaped. Generally, most human characteristics are normally distributed whether it be physical or mental traits. "Hence, we may expect a variable such as the degree of technological change, measured in terms of the time pattern over which individuals adopt farm practices will be normally distributed." (Rogers, 1958, p. 347) If one were to consider the mean and standard deviation of the distribution and divide it into five areas, on an accumulative basis, the distribution would approach an "S" curve. (Rogers, 1958)

According to Beal and Bohlen (1957) innovators comprise three to five percent of any group or community. They are described as
the well-established, high income people who are financially able to take risks in being the first to purchase something new. They are not influenced greatly by other members of the community. They travel more and are active beyond the community. Innovators receive significantly more magazines and newspapers and have sources of information beyond the community. They are change oriented.

Engel, Kegerreis, and Blackwell (1969) conducted a study of innovators and their acceptance of an automobile diagnostic center. They used 249 innovators and 173 non-innovators and personally interviewed each individual in order to determine his decision-making process, personality characteristics, attitudes, and socio-economic level. The innovators proved to be more thoughtful buyers. They had a greater desire to try new ideas, they were more prone to buy products earlier, possessed a greater tendency to be rational, and they used considerable initiative in seeking information. Barelson and Steiner (1964) described innovators as . . . "like the rank of file of their associates, but of slightly higher educational or social status; they give much greater attention to the mass media on the topics of their opinion leadership; they are better informed, more partisan, and more active than their associates." (Barelson and Steiner, 1964, p. 550)

In regard to contemporary plastic furniture, Edward Frank of Moreddi, Inc., theorized that the purchasers fall into "an educational
or taste group; and they appear to be a more creative, artistic group."

(Plastics make . . . 1969, p. 51) Mr. Robert I. Lauter of Macy's believes that "plastics will find their acceptance among the young people who have their own values and are seeking a new esthetic."

(Plastics make . . . 1969, p. 52)

Generally, in contrast to innovators, non-innovators are more advanced in age, are localities in that they are not active beyond the community, do not utilize a large number of different information sources, and financially, are unable to take risks.

Rogers (1968) has described the remainder of the adopter categories which make up the non-innovators. The Early Adopters possess the greatest amount of opinion leadership. They are the people who serve as the role model for the other members of the society. They are successful and have a discrete use of new ideas. The Early Majority are those who adopt just before the average member of the social system. They participate with peers, but do not often fill positions of leadership. The Late Majority adopt new ideas just after the average adopter. These people may adopt out of economic necessity or as a result of social pressure. The Laggards are the last to accept an innovation. They may even be near-isolates. They are oriented to the past and make their decisions in that framework. Their adoption lags far behind their first awareness of an innovation.
Even though a person has decided to adopt a new practice fully, there is no guarantee that he will continue to use it. His decision must be continually reinforced and there must be a counteracting of competing influences. (Lionberger, 1960)

There has been significant research which has been conducted in regard to the diffusion of various types of products, particularly in the area of agriculture.

Farming is one area of study in the broader field of technological change. This area is of particular interest to the sociologist, since it is the type of technological change which is still highly influenced by the social relationships and by the cultural content of rural life. (Wilkening, 1950, p. 352)

Some studies provide support and some dispute the generally accepted characteristics of innovators and non-innovators. These are presented as they pertain to the variables of this research.

**Age of Adopters**

While there is some evidence to the contrary, generally, innovators are the younger members of the society. Davis (1940) theorized that the young are being exposed to a greater degree of change at an earlier age; consequently, they are more idealistic and able to accept new ideas and products more readily.

Gross and Taves (1952), in their study of adopters of ten recommended farm practices in two counties in Iowa, found acceptors younger than non-acceptors. Acceptors were also younger in the Ryan
and Gross (1943) study of the diffusion of Hybrid Seed corn in two Iowa communities. Belcher (1958) studied the acceptance of the polio vaccine in two counties in Georgia. He determined that only age and social participation were significantly related to acceptance of the medical practice.

Marsh and Coleman (1955) determined that in only seven of the 16 farm practices studied, age was related to adoption, and Gross (1949) found, while studying acceptors of the McLean process of hog sanitation, that they were not younger. Corey (1971) reported that in his study of 755 male and female innovators in the purchase of automobiles in Los Angeles County, there was no significant relationships between age and the acceptance of innovation.

Bylund (1963) conducted in-depth interviews with 331 homemakers from families which included both a husband and wife in order that he might determine acceptance of new food products in two Pennsylvania cities. He classified the participants into three groups according to their responses: the upper 16 percent were in the High Triers group, the middle 68 percent were the Majority, and the Low Triers were the lowest 16 percent. The age of the husband and wife was significantly related to the number of new food products tried. There was no homemaker in the High Trier group over the age of 55 which indicated that people included in the study over this age were less receptive to change.
**Socio-economic Level of Adopters**

Socio-economic level of an individual is determined not only by income, but also by educational and occupational levels. "Education is one of the basic values in our society since it is the means to occupation, status, and other goals." (Wilkening, 1950, p. 359)

Wealth, educational and cultural levels are factors associated with adoption and have effect on diffusion. (McVoy, 1940) In his study of the adopters of health practices, Lowry (1958) discovered a relationship between adoption and socio-economic level. Education was positively associated with adoption. Adoption scores increased as income increased. There was also an increase in median adoption scores with the socio-economic status of the household.

Marsh and Coleman (1955) studied 393 farmers in a single county in Kentucky in order to relate factors of adoption to the acceptance of 16 farm practices. They found that in 14 of the 16 farm practices studied, education and socio-economic level discriminated between adopters and non-adopters. Gross (1949) found acceptors were better educated and had larger farms and higher income. Gross and Traves (1952) determined that acceptors had larger farms, higher incomes, more education, and read more library books.

In the study conducted by Bylund (1963) of acceptance of new food products, income was found to be related to the number of new
food products tried. Bylund concluded that low income would be a limiting factor in trying new foods. Also, a significant relationship was found between the number of years of formal schooling of the housewives and the number of new food products that were tried. Only a slight relationship could be found between the number of food products tried and the occupation of the head of household.

Creativity of Adopters

In his study of the acceptors of change in Puerto Rico, Back conducted an extensive study of personality characteristics and their association with one another, and with adoption. Individuals may be of the same social level in society and they may be influenced by like circumstances, but these individuals vary in their acceptance of innovations. It is necessary to delve into their personal characteristics for a possible solution to their differing reactions to innovations.

In the above cited study, creativity, optimism, ambition, modernism, and variability were investigated. Back discovered that creativity and ambition are closely related. Creativity was also associated with modernistic attitudes; however, creativity is less related to age than to education and ambition. The fact that creativity was associated with modernism was "interpreted as indicative of an underlying disposition toward all change." (Back, 1958, p. 336)
In research unrelated to agriculture, Barron (1957) studied relationships between originality and personality characteristics. Tests of originality, personality, and intelligence were administered to 343 military officers in a three day testing program. Results indicated that originality was positively related to the complexity and scope of an individual, to impulsivity, and daring. Generally, the more original subjects possessed expressive dispositions and were willful and extreme individuals.

In another study conducted by Barron (1953), 92 college students participated and were put into controlled group situations to determine if they were influenced by the group in making decisions. Twenty-five percent proved to be Independents with the remainder of the participants classed as Yielders. The groups were given personality and originality tests and it was found that Independents view themselves as original, emotional, and artistic. Yielders described themselves as obliging, optimistic, efficient, determined, patient, and kind. Additional results indicated that Yielders were practical minded and group-oriented. Independents placed higher values on creativity, on interpersonal relation and the individual as opposed to the group.

Exposure of Adopters to Mass Media

The more isolated a person is from the outside world, the more resistant to change he is likely to be. Lionberger (1960) found an
association between a high rate of adoption with a wide and varied exposure to mass media.

Lazer and Bell (1966) hypothesized that innovators may not be exposed to mass media to the degree that the other adopter categories are, due to their lack of time to watch television or read magazines. However, in their study of mass media, they found that 50 percent of the innovators were exposed to three or more hours of television a day. Innovators also received a larger number of magazines into their home than the national average.

Gross and Taves (1952) found that acceptors of the ten farm practices more frequently took trips to the nearest metropolitan center, read more college bulletins, subscribed to more magazines and newspapers, and owned a radio.

Fisk (1959) made a random selection of principle meal planners and studied the influence of personal searching of the market, social groups, and mass media upon the purchase of new food products. His findings indicated that "persons who are inclined to receive messages from a wide variety of media are also inclined to exhibit the highest purchase rates of new products. The more information channels a consumer has access to, the higher the probability of purchase." (Fisk, 1959, p. 90)

Corey (1971) conducted a study of innovators in acceptance of automobiles, and another study of innovators and acceptance of new
food products. The results from both studies indicated that innovators were significantly more involved in activities directly related to the product of innovation, they read more printed media about their product, and were more informed about new developments in their innovation.

Bylund (1963) found that the High Triers of new food products appeared to obtain their information from mass media about the new products. They would then pass this information down to the Majority and the Low Triers who were influenced by the evaluation of the High Triers.

A study was conducted in 1955 by Beal and Rogers (1958) of 148 farm homemakers who resided in a trade area community in central Iowa. Their purpose was to determine factors at each stage of adoption which influenced homemakers in acceptance of new fabrics of nylon, Orlon, and Dacron. They found that at the awareness stage the mass media including radio, television, and magazines were most important. At the information stage agencies such as agricultural extension and informal meetings with friends and family were most influential. Informal associations were the principle source of influence and most often used at the application stage. The greatest commercial influence occurred at the trial stage in that the homemakers had at this point decided to try the new fabrics on a trial basis so they were interested to know what to buy and how was best
to care for it. Personal satisfaction with the trial stage led the homemakers to the final stage of adoption.

Social Participation of Adopters

McVoy (1940) suggested that influencing factors of diffusion are not only communication, but transportation facilities, and degree of urbanization. Coughenour (1960) found that for acceptors, contacts with information sources beyond the community were valuable. Marsh and Coleman (1955) found that adopters of 14 of 16 agricultural practices participated in the Farm Bureau activities and they had read one or more farm bulletins within the prior two years. Gross and Taves (1952) discovered that acceptors belonged to cooperatives significantly more frequently than non-acceptors, and they participated in more community recreational activities. Gross (1949) found that acceptors of the McClean system of hog sanitation participated in cooperatives.

In the acceptance of new food products, Bylund (1963) determined that generally High Triers enjoyed participating in formal organizations more and that those husbands and wives who together belonged to formal organizations tried relatively more new food products.
Change Orientation of Adopters

With each new idea or product, there are always those who will accept it and those who will do their best to resist the change.

Back, (1958) in his research of acceptors of change in Puerto Rico, found that changers were more likely to be men, they were a little younger, and they were better educated. Not only is a high level of income associated with changeability, but the occupation was also distinguished. High change orientation was positively correlated with a high status job. Resisters to change were laborers, service workers, and farm workers.

The total picture of changeability points to persons with an opportunity for social mobility, who are young enough to look to the future, and who fit into the government programs for education and economic change. (Back, 1958, p. 338)

Wilkening (1950) conducted a study with a socio-psychological approach to the acceptance of new farm practices. He developed an index of 12 items including eight recommended innovative farm practices. He interviewed 80 farmers and found a positive correlation between adopters and the desire for change in the schools, movies, and religion, and a positive attitude toward education for boys going into farming.
CHAPTER III

PROCEDURE

The first step in proceeding with the study was to select tests which would appropriately measure the characteristics selected for investigation of innovators and non-innovators. The second step was to develop the questionnaire containing these measures. Thirdly, the population was selected and the questionnaire was sent to each member and returned by mail to the writer. Lastly, the results were computed, analyzed, and conclusions were drawn and summarized.

Selection and Development of the Instruments

Socio-Economic Level

To measure the socio-economic level of the subject, Hollingshead's (1965) Two Factor Index of Social Position was applied. This measure was developed as a procedure to estimate the position an individual holds in society. Social class position is determined by two factors: occupation and education. Occupation represents the skill of an individual and education is indicative of knowledge and cultural tastes. Through this information, along with statistical techniques, the social position of a member of our society may be reasonably determined. (Hollingshead, 1965) The validity of the index was established by a study of social stratification and mass
communication with the Index of Social Position used as the measure of social hierarchy. The results from the study indicated that the boundaries of each level of Social Position developed by Hollingshead are "substantially correct." (Hollingshead, Redlich, 1958)

Creativity

The Preconscious Activity Scale by Holland and Baird (1968) was used to determine the creativity of the participant. The PAS was derived from the theory of Lawrence Kubie which defines the preconscious as the portion of the mind that lies between the unconscious and the complete awareness. "Ideas and concepts are freed from their usual associations in the preconscious. Ideas can then merge, split, and combine in new or unusual ways." (Holland, Baird, 1968) The newly formed concepts are the basis of creativity; therefore, the original person is one who benefits from this preconscious activity.

It was established that persons who have a subjective outlook, who are expressive, who are able to use their inner feelings, and are not overly critical are more creative than people who are conventional and rational. On the basis of this information, 38 true-false questions were devised to make up the scale.

The estimated reliability was .77 for male and .75 for female college freshmen when the PAS was administered to a large national
sample of college students. In another sample of three colleges the
test-retest reliability for 215 male and 168 female freshmen college
students was .71 and .77 for a nine-month interval. (Holland, Baird,
1968)

Exposure to Mass Media

Exposure to mass media was measured with a scale used by
Lazer and Bell (September, 1966) in their study of innovators. A
wide and varied exposure was determined by both the number of
hours the respondent watched television per day and the number of
various types of magazines that come regularly into their home.

The theory behind a wide and varied exposure to mass media
was not merely that the consumer was exposed to the new product
or idea through the mass media, but rather, that the wider and
more varied the media exposure, the more open to new ideas and
concepts the consumer will be. (Lionberger, 1960)

Social Participation Scale

Chapin's (1937) Social Participation Scale was adopted to
measure the degree of the participant's activities in and beyond the
community. Chapin developed the scale in 1928 in order to measure
either a person's or a family's participation in community organiza-
tions. He included five organizational activities in the measure:
organization membership, attendance, contribution, committee memberships and office holdings. Several studies have been made of the reliability of the Social Participation Scale with reliability coefficients between .89 and .95 being reported. (Chapin, 1937)

Change Orientation

In his PhD dissertation, "An Analysis of Attitudes Toward Change Among the Employees of an Insurance Company," Donald A. Trumbo (1958) developed a Readiness to Change Scale. The Likert Scale consisted of nine questions concerned with change and jobs. The validity of the scale was tested based upon the assumption that a positive attitude toward change would be associated with acceptance of specific events of change and with participation in training programs. The reliability was reported at .79. (Trumbo, 1958)

The questionnaire was to be completed by the head of the household. Therefore, this change orientation scale designed to measure attitude to change in jobs was deemed appropriate as it was assumed the head of the household would be employed.
Collection of the Data

Selection of the Population

The members of the population studied were customers who had purchased contemporary plastic furniture or furniture made of wood of similar line, curve, mass, function, and cost from two retail furniture stores located in a city of 400,000 people in the Pacific Northwest.

At each store, one interior designer-salesman cooperated by noting his customers who had purchased contemporary plastic furniture and similar wood furniture between January and July, 1971. In order to keep line, curve, mass, function, and cost consistent between the plastic and wood furniture purchased, accessory pieces of furniture such as occasional tables and bookcases were held as the constant. Forty-one innovators and 32 non-innovators were included in the population.

A total response of appropriately completed questionnaires of only 15 of the non-innovators and 14 of the innovators resulted in the return of the writer to the one store willing to continue to cooperate. A collection of the names of ten additional innovators and ten non-innovators were obtained. These potential participants had made their purchase of furniture between July and November 1, 1971. This resulted in an additional three responses of non-innovators.
and one response from an innovator.

Data Collection Procedure

A composite of the questions from each measure was developed into a questionnaire which was duplicated and a copy was sent to each member of the population in July, 1971. A cover letter introducing the research being conducted accompanied the questionnaire. The subjects were asked to complete the questionnaire which was self-addressed and stamped, and return it by mail to the writer. A master list of the innovators and non-innovators was made with corresponding numbers given each person on the master list and their questionnaire.

The first mailing resulted in a response of 20 questionnaires from innovators and 16 questionnaires from non-innovators. Seven responses from the innovators and one from a non-innovator were not appropriately completed for use in the study as they were completed by females who were not heads of household. The writer contacted each of these respondents by telephone to verify the information and to request that the head of the household complete the second questionnaire that was sent to them. Only one response from an innovator was received. This resulted in a total of 14 useable questionnaires from innovators and 15 questionnaires from non-innovators.
A second letter and copy of the questionnaire was then sent to each person who had not returned the first questionnaire. Only one response from an innovator was received.

After receiving from one of the two stores which participated, the names of 20 additional members of the population who had purchased either wood or contemporary plastic furniture between July and November, 1971, the new potential participants were each sent a copy of the questionnaire along with the cover letter in the same manner as was previously done. This resulted in one additional response from an innovator and three additional responses from non-innovators. One response from an innovator was received too late to be included in the study. (See Table 1.)

**Selection of Statistical Tests**

The Chi Square was used to analyze Hypothesis I.

Hypotheses II, IV, and V were analyzed by the t-test which tests the difference between two means. In this research, it was the means of the scores of the innovators and the non-innovators. (Hoel, 1966)

The z test was applied to the data of Hypotheses III and VI. The z test compares the means of two samples and is expressed as the deviation of a score from the mean in standard deviation units. (Hoel, 1966)
TABLE 1. Distribution of Responses

<table>
<thead>
<tr>
<th></th>
<th>Innovators Questionnaires</th>
<th></th>
<th>Non-innovators Questionnaires</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sent</td>
<td>Returned Useable</td>
<td>Non-useable</td>
<td>Percent Useable</td>
</tr>
<tr>
<td>1st List</td>
<td>41</td>
<td>14</td>
<td>6</td>
<td>34.15%</td>
</tr>
<tr>
<td>Reminder</td>
<td>20</td>
<td>1</td>
<td>-</td>
<td>.05%</td>
</tr>
<tr>
<td>2nd List</td>
<td>10</td>
<td>1</td>
<td>-</td>
<td>.10%</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>16</td>
<td>6</td>
<td>31.90%*</td>
</tr>
</tbody>
</table>

* The percentages cannot be totalled as the original number is different in each classification.
Beyond analyzing the data in accordance with each hypothesis, simple correlation was used to determine if there was a correlation between variables. The value for r was computed and converted to a t value by the formula:

\[ t = r \sqrt{\frac{N-2}{1-r^2}} \]

**Methods of Analysis**

**Socio-Economic Level**

Hollingshead's Two Factor Index of Social Position required the participant to give his occupation along with a brief description. It then asked the highest level of education the subject had completed, including a brief description of that education. Lastly, it asked the highest educational degree completed. The data were scored according to the following occupational and educational scales:

**Occupational Scale**

1. Executives of large concerns, major professionals.
2. Managers of medium size businesses, and lesser professionals
3. Administrative personnel of large concerns, owners of small independent businesses, semi-professionals
4. Owners of little businesses, clerical, sales workers, technicians
5. Skilled workers
6. Semi-skilled workers
7. Unskilled workers
Educational Scale

(1) Graduate professional training
(2) Standard college or university graduate (4 years)
(3) Partial college training (at least 1 year)
(4) High School graduate
(5) Partial High School
(6) Junior High School (completed grades 7-9)
(7) Less than 7 years of school

Factor weights used were seven for occupation and four for education. The number corresponding to the subject's occupation was multiplied by seven and added to the corresponding number of the subject's education multiplied by four. The sum was the socio-economic score assigned the individual. To determine the socio-economic class, Hollingshead's classification of scores was used, as follows:

<table>
<thead>
<tr>
<th>Socio-economic class</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Upper-upper</td>
<td>11-17</td>
</tr>
<tr>
<td>II Upper-middle</td>
<td>18-31</td>
</tr>
<tr>
<td>III Middle</td>
<td>32-47</td>
</tr>
<tr>
<td>IV Lower-middle</td>
<td>48-63</td>
</tr>
<tr>
<td>V Lower</td>
<td>64-77</td>
</tr>
</tbody>
</table>

Creativity

The 38 true-false questions which made up the Preconscious Activity Scale, were scored according to the correct answers as provided by the authors of the measure. The higher the correct number of answers, the higher the subject was rated on the originality scale.
Exposure to Mass Media

A wide and varied exposure to mass media was measured and analyzed in two parts: television, and magazines that come into the home. The respondent was asked to check from a group of six the number of hours he watches television per week.

- Less than 6 hours
- 6 but less than 11
- 11 but less than 16
- 16 but less than 21
- 21 but less than 26
- 26 or more

The participants were then asked the number of magazines in each category that come into their home regularly.

- Home and Garden
- General magazines
- News and Business
- Sports and Mens
- Hobby
- Fashion
- Fiction
- Buying Guides
- Literary
- Other

The percentage of innovators and the percentage of non-innovators in each category of number of hours of television viewed per week was determined and compared. The mean scores of innovators and non-innovators were also compared for the total number of magazines that come regularly into the home.
Social Participation Scale

Chapin's Social Participation Scale was employed; each of the organizational activities was assigned an arbitrary weight, and the sum of the weighted activities was taken as an index of social participation. Weight for each activity was: Member = one; Attendance = two, Financial Contribution = three, Member of Committee = four, and Offices Held = five. The larger the score, the higher the level of social participation.

Change Orientation

The Readiness to Change Scale presented five choices for response to each question. These choices ranged from negative to positive with a negative response = one, negative-neutral = two, neutral = three, positive-neutral = four, and positive = five. The numerical values for the nine questions were summed to give the score for the scale. Again, the higher the score, the higher the level of change orientation.

Limitations

Limitations of the study were as follows:

- The study was limited to purchasers of contemporary plastic furniture and purchasers of wood furniture of similar line, curve, mass, function, and cost.
- The participants in the study each made their purchase of furniture from one of two stores who carry such furniture and are located in an urban area of 400,000 people in the Pacific Northwest.

- The members of the population each made their furniture purchase between January and November 1, 1971.

- The population available for study was relatively small due to the limited use of contemporary plastic furniture at this time.

- The study was limited to those who completed and returned the questionnaire.
CHAPTER IV

FINDINGS

Description of the Sample

The total sample consisted of 34 subjects, 16 innovators and 18 non-innovators. Of the innovators 56.3 percent of the respondents were male; and of the non-innovators 88.8 percent were male.

Age

Age of the innovators ranged from a low of under 25 to a high in the age group of 56-65 years. The mode was in the group of 25-35 years.

The range of ages of the non-innovators was from the age group of 25-35 to the 46-55 age group. The mode was in the group of 25 to 35 years. The frequency distribution for age of the innovators and the non-innovators is found in Table 2.

<table>
<thead>
<tr>
<th>TABLE 2. Frequency Distribution of Years of Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of Age</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Under 25 years</td>
</tr>
<tr>
<td>25-35 years</td>
</tr>
<tr>
<td>36-45 years</td>
</tr>
<tr>
<td>46-55 years</td>
</tr>
<tr>
<td>56-65 years</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Mode</td>
</tr>
</tbody>
</table>

\[(X^2 = .5706, \ df = 2, .70 < p < .80)\]
The Chi Square test showed no significant difference in the age of innovators and the age of the non-innovators \( (X^2 = .5706, \ df = 2, .70 < p < .80). \)

**Socio-Economic Level**

Scores for the Index of Social Position ranged from 11 to 44 for innovators with the low score representing the highest socio-economic level. The mean score was 22.41.

The range of Social Position scores was from 11 to 47 for non-innovators with a mean score of 19.99. The frequency distribution for Social Position of both innovators and non-innovators is found in Table 3.

<table>
<thead>
<tr>
<th>TABLE 3. Frequency Distribution of Measure of Socio-Economic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Index of Social Position</strong></td>
</tr>
<tr>
<td>11-17</td>
</tr>
<tr>
<td>18-31</td>
</tr>
<tr>
<td>32-47</td>
</tr>
<tr>
<td>48-63</td>
</tr>
<tr>
<td>64-77</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
</tr>
</tbody>
</table>

\( (t = 1.1358, \ df = 32, \ p > .20) \)
No significant difference was found between innovators and non-innovators in socio-economic level ($t = 1.1358$, $df = 32$, $p > .20$).

Mass Media

Of the innovators, 37.56 percent viewed less than six hours of television per week. Twenty-five percent viewed six but less than eleven hours, 31.25 percent viewed eleven hours but less than sixteen hours, and 6.25 percent viewed sixteen hours but less than twenty-one hours. The mean number of magazines that came regularly into their home was 7.25.

For non-innovators, 61.11 percent viewed less than six hours of television per week, 22.77 percent viewed six hours but less than eleven, 5.55 percent viewed eleven but less than sixteen, and 5.55 percent viewed sixteen but less than twenty-one hours. Nine was the mean number of magazines that came regularly into the homes of non-innovators. The frequency distribution may be found in Tables 4 and 5.

No significant difference was found between innovators and non-innovators in the number of hours they view television ($t = 1.5949$, $df = 32$, $20 > p > .10$). There was also no significant difference between innovators and non-innovators in the number of magazines that came regularly into their home ($t = -0.5881$, $df = 32$, $p > .20$).
TABLE 4. Frequency Distribution of Measure of Exposure to Television

<table>
<thead>
<tr>
<th>Hours of Television Viewing</th>
<th>Innovators</th>
<th>Non-Innovators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6 hours</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>6 but less than 11</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11 but less than 16</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>16 but less than 21</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>21 but less than 26</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>26 or more</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>18</td>
</tr>
</tbody>
</table>

Mode

<table>
<thead>
<tr>
<th>Less than 6 hrs</th>
<th>Less than 6 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>(t = 1.5949, df = 32, .20 &gt; p &gt; .10)</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 5. Frequency Distribution of Measure of Exposure to Magazines

<table>
<thead>
<tr>
<th>Number of Magazines</th>
<th>Innovators</th>
<th>Non-Innovators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6-10</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>11-15</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16-20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21-25</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>18</td>
</tr>
</tbody>
</table>

Mean

<table>
<thead>
<tr>
<th></th>
<th>Innovators</th>
<th>Non-Innovators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>7.25</td>
<td>9.00</td>
</tr>
</tbody>
</table>

(t = 0.5881, df = 32, p > .20)

Creativity

For innovators, the mean score of the Preconscious Activity Scale was 23.75 of a possible 38. The range was from a low of 11 to a high of 34.
The mean score of the non-innovators on the Preconscious Activity Scale was 21.00. The range was from five to thirty-two.

The frequency distribution for the innovators and non-innovators may be found in Table 6.

TABLE 6, Frequency Distribution of Measure of Creativity

<table>
<thead>
<tr>
<th>PAS Score</th>
<th>Innovators</th>
<th>Non-Innovators</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>11-15</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>16-20</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>26-30</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>31-35</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>18</td>
</tr>
</tbody>
</table>

Mean: 23.75 21.00

(Z = 2.6035, df = 32, p < .01)

A significant difference was found on the Preconscious Activity Scale between innovators and non-innovators with the innovators scoring higher (Z = 2.6035, df = 32, p < .01).

Social Participation

The scores of the innovators ranged from zero to 101 on the Social Participation Scale. The mean was 23.25.

For the non-innovators, the mean score on the Social Participation Scale was 20.61, with a range from zero to fifty-three. The
frequency distribution for the innovators and the non-innovators may be found in Table 7.

TABLE 7. Frequency Distribution of Measure of Social Participation

<table>
<thead>
<tr>
<th>Social Participation Scale Score</th>
<th>Innovators</th>
<th>Non-Innovators</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>11-20</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21-30</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>31-40</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>41-50</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>51-60</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>61-70</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>71-80</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>81-90</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>91-101</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>23.25</strong></td>
<td><strong>20.61</strong></td>
</tr>
</tbody>
</table>

(t = .0322, df = 32, p > .20)

No significant difference was found between the innovators and the non-innovators in their social participation (t = .0322, df = 32, p > .20).

Change Orientation

The range of scores on the Readiness to Change Scale for the innovators was from twenty-four to forty-one of a possible score of forty-five. The mean score was 32.50.
The scores on the Readiness to Change Scale for non-innovators ranged from twenty-five to forty. The mean score was 32.88. The frequency distribution for innovators and non-innovators may be found in Table 8.

**TABLE 8. Frequency Distribution of Measure of Change Orientation**

<table>
<thead>
<tr>
<th>Readiness to Change Scale Score</th>
<th>Innovators</th>
<th>Non-Innovators</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-27</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>28-30</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>31-33</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>34-37</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>38-40</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41-43</td>
<td>1</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>32.50</strong></td>
<td><strong>32.88</strong></td>
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(Z = .0363, df = 32, p > .95)

For the Readiness to Change Scale, no significant difference was found between the innovators and the non-innovators (Z = .0363, df = 32, p > .95).

In addition to testing specified relationships between variables, a study was made of correlations between variables.

The highest correlation between variables existed between Social Participation and Socio-Economic Level (r = -0.395, t = 2.43). Correlations were also apparent to a lesser degree between Social Participation and the Number of Magazines that came regularly
into the home of the participant ($r = 0.308, t = 1.803$), and between change orientation and creativity ($r = 0.329, t = 1.963$). No correlations existed in excess of .30 between the remaining variables.

Refer to Table 9 for correlation of variables.
<table>
<thead>
<tr>
<th></th>
<th>Creativity</th>
<th>Change Orientation</th>
<th>Social Participation</th>
<th>Exposure to Television</th>
<th>Socio-Economic Level</th>
<th>Number of Magazines</th>
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<tr>
<td>Creativity</td>
<td>1.00</td>
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<tr>
<td>Change</td>
<td>r=0.329</td>
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<tr>
<td>Orientation</td>
<td>t=1.963</td>
<td>1.00</td>
<td></td>
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<tr>
<td>Social</td>
<td>r=-0.065</td>
<td>r=-0.046</td>
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<tr>
<td>Participation</td>
<td>t=-.375</td>
<td>t=-.273</td>
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<td>Exposure to</td>
<td>r=-0.221</td>
<td>r=0.247</td>
<td>r=0.034</td>
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<tr>
<td>Television</td>
<td>t=1.273</td>
<td>t=1.44</td>
<td>t=.204</td>
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<tr>
<td>Socio-Economic*</td>
<td>r=0.148</td>
<td>r=0.251</td>
<td>r=-0.395</td>
<td>r=0.012</td>
<td>-1.00</td>
<td></td>
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<tr>
<td>Level</td>
<td>t=.846</td>
<td>t=-1.47</td>
<td>t=2.43</td>
<td>t=-1.11</td>
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<tr>
<td>Number of</td>
<td>r=-.0024</td>
<td>r=0.046</td>
<td>r=0.308</td>
<td>r=-0.007</td>
<td>r=-0.078</td>
<td>1.00</td>
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<tr>
<td>Magazines</td>
<td>t=-.135</td>
<td>t=.273</td>
<td>t=1.803</td>
<td>t=.0396</td>
<td>t=.454</td>
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N = 34
df = 32

*Low scores on the measure of Socio-Economic Level indicated a high Socio-Economic Status.
CHAPTER V

CONCLUSIONS

The following null hypotheses were postulated regarding the characteristics of innovators (purchasers of contemporary plastic furniture) and non-innovators (purchasers of similar furniture made of wood). From the results of the statistical study and analysis of the data, conclusions were drawn relative to the null hypotheses posed:

H₀ I. There will be no difference between the innovators and non-innovators on age. ($Z^2 = .5706$, df = 2, $0.70 < p < 0.80$) The null hypothesis cannot be rejected.

H₀ II. There will be no difference between the innovators and non-innovators on socio-economic level. ($t = 1.1358$, df = 32, $p > .20$) The null hypothesis cannot be rejected.

H₀ III. There will be no difference between the innovators and non-innovators on creativity. ($Z = 2.6035$, df = 32, $p < .01$) Purchasers of contemporary plastic furniture scored higher on creativity. The null hypothesis is rejected, and the alternative hypothesis is supported.

H₀ IV. There will be no difference between the innovators and non-innovators on exposure to mass media. For the number of hours they viewed television each week $t = 1.594$, df=32, $0.20 > p > 0.10$;
for the number of magazines that came regularly into their home
\( t = -0.5881, \ df = 32, \ p > .20 \). The null hypothesis cannot be rejected.

H₂. There will be no difference between the innovators and non-innovators on social participation. \( (t = .0322, \ df = 32, \ p > .20) \)
The null hypothesis cannot be rejected.

H₃. There will be no difference between the innovators and non-innovators on change orientation. \( (Z = -.0363, \ df = 32, \ p > .95) \)
The null hypothesis cannot be rejected.

**Discussion**

Of the six null hypotheses in the study, one was rejected and five were not rejected. A significant relationship was found between innovation and creativity. No significant relationship was found between innovation and age, socio-economic level, exposure to mass media, social participation, and change orientation.

Researchers such as Lionberger, Rogers, Beal and Bohlen who have conducted extensive studies of innovation and acceptance of agricultural products have found that innovators are of a higher socio-economic level, are more active in and beyond the community, have a greater exposure to mass media, and are more change oriented than non-innovators. Manufacturers and retailers in the plastic furniture industry believe that purchasers of contemporary plastic furniture are younger and are more creative. The results
of this study in comparing innovators and non-innovators indicated only that innovators scored significantly higher on creativity than did non-innovators.

Of the participants in the study, 42.35 percent of the non-innovators who were sent questionnaires responded with a usable questionnaire for the research. A return by 31.90 percent of the innovators contacted was received. The response of usable questionnaires from the first list of innovators and non-innovators indicates an even greater distinction between the groups. Of the original list, only 34.15 percent of the innovators responded, while 46.87 percent of the non-innovators responded. Such results may be indicative of the characteristics of these individuals. The innovators have been described as being independent and not group-oriented; their response of only about one-third of the sample implies that they chose to be more independent with respect to cooperation in this research. On the other hand, nearly one-half of the non-innovators responded.

The styles of plastic furniture and wood furniture that were used in the study were carefully controlled so that line, curve, mass, function, and cost were held constant with the only difference being the material of the furniture. The plastic furniture was of contemporary design; likewise, the wood furniture used for comparison was of contemporary style.
The age of the innovators did not differ from the non-innovators. The mode age group for both was 25-35 years of age. Apparently, both the plastic and wood furniture attracted the younger age group. Generally, past research indicates that adopters are younger, however, there have been exceptions. Gross (1949), in his study of the McLean process of hog sanitation found that the acceptors were not younger. Marsh and Coleman (1955) found in their research and study of acceptance of sixteen farm practices that in only seven of the practices were the adopters younger.

Again, the results of this study in regard to socio-economic level of innovators are different from the findings of studies conducted by Beal and Bohlen, Lionberger, and Rogers who found that adopters were of a higher socio-economic level with more education and larger farms.

The cost of contemporary plastic furniture was relatively high, and in an effort to keep the cost constant, the cost of the wood furniture was also relatively high. The mean score for the measure of socio-economic level indicated the innovators were in fact, of a slightly higher socio-economic level than the non-innovators. However, the difference was not significant. Therefore, with the cost of the plastic furniture being constant and relatively high, the socio-economic levels of the innovators and non-innovators was similar and relatively high.
For exposure to mass media, nearly twice the number of non-innovators as innovators viewed less than six hours of television per week. Generally, the number of hours of television viewed per week was greater for the innovators than for non-innovators, but the difference was not significant. However, the non-innovators had a slightly larger mean number of magazines that came regularly into their home than the innovators. These results differ from Lionberger's (1960) thesis that the less the exposure to mass media the greater the resistance to change, but findings from this study are consistent with Lazer and Bell's (1966) theory that innovators may not have enough time to watch television or read magazines and so their exposure to mass media will be significantly less than for non-innovators.

In nearly every case of past research that was reviewed, some indication was made of important information sources beyond the community which influenced adopters, or organizational activities in which the adopters participated in and beyond the community. However, in this study, although the innovators had a higher mean score on the Social Participation Scale than the non-innovators, the difference was not significant.

There was a negative correlation between Socio-Economic Level score (low score indicates high socio-economic level) and Social Participation of the consumers. Participants of a higher
socio-economic level also participated in more organizations in and beyond the community, particularly professional organizations. Gibson (1944) found in his study of the Agricultural Extension Service that extension participation varied with the socio-economic group. Participants of a low socio-economic level had a low degree of contact with the Agricultural Extension Station.

There was no significant difference in change orientation between innovators and non-innovators. These results provide no support for the existing belief that there is indeed a positive association between change orientation and the acceptance of new practices or ideas.

After analysis of the data, it appeared that the innovators and the non-innovators formed a rather homogeneous group with little difference in age, socio-economic level, social participation, exposure to mass media, and change orientation.

The significant results of this study reveal that with other characteristics of innovators and non-innovators being similar, there was a significant difference in creativity between innovators and non-innovators. Innovators are more creative as was predicted by the leaders in the plastic furniture industry.

The research conducted by Barron (1957) studying relationships between originality and personality characteristics may be interpreted relative to the acceptance of innovation. The original individual was described as possessing greater complexity and scope,
as being more impulsive and more daring. The innovator is the first in the community to accept a new product or idea, he is more impulsive in his acceptance of innovation; consequently, his decision-making process is not as time consuming as that of the non-innovator. The innovator is also more willing to take risks in purchasing a new product or experimenting with a new idea; in this regard, he is more daring than the non-innovator. In Barron's (1953) study of Independence and Yielders, the Independents viewed themselves as more original, emotional and artistic. The study revealed that the Independents placed higher value on creativity, interpersonal relation, and the individual. The innovator may be described as independent as he is not influenced by the members of the community; he is the first to accept an innovation. The results of this study indicate a relationship between creativity and the independence of an individual.

The study conducted by Back (1958) of the change oriented person in Puerto Rico may provide some insight also. He studied the personal characteristics of individuals which may influence their acceptance of change. These characteristics were creativity, ambition, modernism, and variability. He found a positive relationship between creativity and ambition, but not between creativity and age. Back also determined that creativity was associated with modernistic attitudes. Thus, in the study, creativity was positively
associated with innovators and the acceptance of innovation. Creativity may be the single most important variable associated with acceptance of change in materials used in the manufacture of furniture.
CHAPTER VI

RECOMMENDATIONS

For Use of the Present Study

In the past, the majority of the research on innovators and non-innovators and diffusion of a new idea or product has been conducted in the area of agriculture with the introduction of new agricultural products or processes. From this research, theories about diffusion and characteristics of innovators and non-innovators have been developed. However, we are cautioned by Graham (1956) against making generalizations; he indicated that the acceptance of one product may not serve as an index to the acceptance of other products.

The present study serves to broaden the knowledge on innovators and non-innovators of a different type of product. It provides an example of a product which has not, to the knowledge of the writer, been researched and findings published. The results of the study may be valuable to investigators of innovation in order to determine how the findings compare with past research and innovation and diffusion of other products, and to determine how they coincide or differ from established theories.
For Further Study

1. A similar study using a larger sample.

2. A similar study with a greater contrast in the design as well as the material of the furniture.

3. A similar study using another product or idea in order to broaden the study of innovators and non-innovators.

4. A study of the actual diffusion process of a new product or idea.

5. Research on the sequence of mental processes in acceptance of a new product or idea.
CHAPTER VII

SUMMARY

Origin and Statement of the Problem

The furniture industry has predicted that the production of furniture will double in dollar value over the next ten years. Wood for use in furniture is dwindling in supply and the rate in the cost of labor has caused the need to look elsewhere for suitable material to be used for furniture. The plastics industry is currently providing household items not only for the kitchen, but for other parts of the home as well. The plastics industry is producing furniture in increasingly larger amounts with success.

The writer has taken a great interest in contemporary plastic furniture as an innovative product, and desired to determine the characteristics of consumers who accept new products as compared with those consumers who chose not to accept the same product or idea.

Purpose of the Study

The purpose of the study was to determine and compare the characteristics of innovators (purchasers of contemporary plastic furniture) and non-innovators (purchasers of wood furniture similar in function, line, curve, mass, and cost). The following null
hypotheses were tested:

There will be no significant difference between the purchasers of contemporary plastic furniture and the purchasers of wood furniture on:

$H_0$ I. age

$H_0$ II. socio-economic level

$H_0$ III. creativity

$H_0$ IV. exposure to mass media

$H_0$ V. social participation

$H_0$ VI. change orientation

Procedure

The questionnaire was developed and consisted of background information, Hollingshead's Two Factor Index of Social Position to determine the socio-economic level; the Preconscious Activity Scale developed by Holland and Baird to measure creativity; Lazer and Bell's measure of exposure to mass media; Chapin's Social Participation Scale to determine activities in and beyond the community; and Trumbo's Readiness to Change Scale to measure change orientation.

The questionnaire was mailed to a total of 51 innovators and 42 non-innovators. This resulted in a sample of 16 innovators and 18 non-innovators for a total of 34 participants.
Conclusions and Discussions

Of the six null hypotheses posed, one was rejected and five were not rejected.

The null hypothesis which was rejected was:

H_o III. There will be no difference between innovators and non-innovators on creativity. Innovators scored higher on creativity than did non-innovators.

The five null hypotheses which were not rejected were:

There will be no difference between innovators and non-innovators on:

H_o I. age
H_o II. socio-economic level
H_o IV. exposure to mass media
H_o V. social participation
H_o VI. Change orientation

Results of the study indicated that there is no significant relationship between the purchase of contemporary plastic furniture and the age of the innovator, his socio-economic level, his exposure to mass media, his social participation in and beyond the community, and his change orientation.
The five factors of age, socio-economic level, exposure to mass media, social participation, and change orientation did not discriminate between innovators and non-innovators. However, there was a positive relationship between the innovators and creativity. This coincides with the prediction made by the people in the plastic furniture industry that purchasers of their product would be more creative. Barron (1953) determined that innovators placed a higher value on creativity, interpersonal relations, and the individual. The innovator is described as independent as he is not influenced by other members of the community in the acceptance of new products or ideas. The results of Barron's (1953) study indicate a relationship between creativity and independence of an individual. Barron (1957) also studied relationships between originality and personality characteristics and found the original person to be more complex, have greater scope, to be more impulsive and more daring, characteristics which also describe the innovator. According to Back (1958) creativity is a significant factor in that it is a personal characteristic that is positively associated with modernism.

**Recommendations**

Further study is recommended which will add additional insight into diffusion and the characteristics of consumers which cause them to purchase as they do. It is suggested that in additional study, if
possible, a larger sample be used, and diffusion of another product or idea be studied so as to broaden the research of innovators and non-innovators.
BIBLIOGRAPHY


Expandables and inflatables: a great look in furniture that's proud to be plastic. 1969. Architectural Record 146:1454.


As a graduate student at Oregon State University in the Department of Clothing, Textiles, and Related Arts, I am conducting research on the characteristics of purchasers of various types of furniture.

You have been selected from a group of furniture purchasers to become a part of my study. Since my research depends upon you and your response, I would appreciate it so much if you would take a few moments of your time to consider the enclosed questionnaire. All of the information will, of course, be kept confidential.

When you have completed the questionnaire, would you please fold it along the dotted lines on the back of the last page, tape it closed, and return it to us.

Thank you so much for your cooperation and assistance in my research.

Sincerely yours,

Kathy Zwahlen
Department of Clothing, Textiles and Related Arts

Ruth Gates, Adviser, Associate Professor, Department of Clothing, Textiles and Related Arts
APPENDIX B

1. Please check Male__________ Female__________

2. Please check the age group in which you belong:

- Under 25 years
- 25-35 years
- 36-45 years
- 46-55 years
- 56-65 years
- Over 65

3. What is your occupation?__________________________
Describe briefly what you do________________________

4. Please circle the highest level of education you have completed:

- Grade School
- High School
- College
- Professional or Graduate School

Describe briefly the type of education beyond high school:____

5. Please answer the following questions either True or False, using T for True and F for False.

- I would rather be a senator than a philosopher.
- I would rather be an efficiency expert than a musician.
- I would rather be a research engineer than an industrial engineer.
- In writing a report or paper, I find the searching for ideas the most distasteful process.
- I rarely come up with novel ideas.
- I would rather be a business promoter than a psychologist.
- I would rather be an engineer than an artist.
- I am occasionally taken in by new books and ideas.
- I often daydream about unsolved problems.
- I enjoy daydreaming about future projects, activities, or problems.
- I would rather be a research scientist than a scientific administrator.
I get my best ideas by daydreaming rather than relying on books, well-established authorities, or other people. If I had the talent, I would enjoy being a composer.

I would rather edit than write a book.

I would rather be a leader than an inventor.

I often try to be alone so I can think things through.

I am regarded as a person of many ideas.

I would prefer living a life like that of Thomas Edison rather than that of Sigmund Freud.

Daydreaming is a poor way to solve problems.

I am interested in psychology and psychiatry.

I would rather be an influential public figure than a creative artist.

I am quiet rather than an expressive person.

I prefer teachers who give well-organized courses and clear assignments to those who require independent reports and papers.

I have to learn things in my own way rather than accepting ideas or relationships suggested in textbooks, etc.

The way to solve difficult problems is by thorough planning and good organization of your time.

I often make judgments by my first impressions and feelings rather than by a careful thinking through of the situation.

I would like to be an inventor.

I solve intellectual problems by careful, logical thinking.

I would rather be an experimental than a clinical psychologist.

If I had the necessary talent, I would enjoy being a sculptor.

I enjoy problems for which you can obtain precise answers.

I would rather be a writer than a banker.

I think I am a practical rather than an imaginative person.

My friends think of me as an objective rather than an imaginative person.

I begin projects by daydreaming about how they might be done.

My friends regard me as somewhat absent-minded.

I am more of a realist than an idealist.

I often act without thinking.

6. On the average, how many hours a week do you watch television? Please check.

____ Less than 6 hours

____ 6 but less than 11

____ 11 but less than 16

____ 16 but less than 21

____ 21 but less than 26

____ 26 or more
7. What is the number of magazines in each of the following categories that come into your home regularly?

- Home and Garden
- General Magazines
- News and Business
- Sports and Men's
- Hobby
- Fashion
- Fiction
- Buying Guides
- Literary
- Other

8. Please complete the following questions, listing the names of organizations to which you belong, and then checking whether or not you are a member, you attend, you contribute financially, you are a member of a committee, and you have held an office.

An organization means some active and organized grouping, usually but not necessarily in the community or neighborhood of residence, such as club, lodge, business or political or professional or religious organization, labor union.

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*By the name of the organization, please place an L if it is local and an N if it is a national organization. Place an L and an N if it is both.

In the following questions, please circle the number next to the response that you select.
9. The job that you would consider ideal for you, would be one where the way you work
   1. is always the same
   2. changes very little
   3. changes somewhat
   4. changes quite a bit
   5. changes a great deal

10. If I could do as I pleased, I'd change the kind of work I do every few months.
    1. strongly agree
    2. agree a little
    3. neither
    4. disagree a little
    5. strongly disagree

11. The trouble with most jobs is that you just get used to doing things in one way and then they want you to do them differently.
    1. strongly agree
    2. agree a little
    3. neither
    4. disagree a little
    5. strongly disagree

12. I would prefer to stay with a job that I know I could handle, than to change where things are new to me.
    1. strongly agree
    2. agree a little
    3. neither
    4. disagree a little
    5. strongly disagree

13. The trouble with most people is that when they find a job they can do well, they don't stick with it.
    1. strongly agree
    2. agree a little
    3. neither
    4. disagree a little
    5. strongly disagree

14. I like a job where I know I will be doing my work the same from one week to the next.
    1. strongly agree
    2. agree a little
    3. neither
    4. disagree a little
    5. strongly disagree

15. One can never feel at ease in a job when the way of doing things is always being changed.
    1. strongly agree
    2. agree a little
    3. neither
    4. disagree a little
    5. strongly disagree

16. When I get used to doing things one way, it is disturbing to have to change to a new method.
    1. strongly agree
    2. agree a little
    3. neither
    4. disagree a little
    5. strongly disagree
17. It would take a sizeable raise in pay to get me to change to another job.
   1. strongly agree
   2. agree a little
   3. neither
   4. disagree a little
   5. strongly disagree