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TOYS AND THE CONSUMER
OPERANT MARKET SEGMENTATION

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TOYS AND THE CONSUMER:

OPERANT MARKET SEGMENTATION

By

Dana Gustavus

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ABSTRACT

TOYS AND THE CONSUMER:
OPERANT MARKET SEGMENTATION

By

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Noted educators and psychologists have determined that play is indispensible to a child's development and the tools of play, toys, are a thriving business. The purpose of this research is to attempt to understand some of the criteria which parents use in selecting toys and upcoming trends in public thought. This information can provide invaluable insights for creating products, marketing and advertising strategies to better fit the consumer's needs.

I am also interested in the social implications of some of the attitudes the toy buying public holds. Specifically, I evaluated the charge by feminists that parents perpetrate rigid sex role stereotypes through their toy choices. I am interested too in whether there is an educational toy boom resulting from the overemphasis on

accelerating a child's intellectual development, as many psychologists charge.

Q-technology is a useful tool for segmenting people according to their expressed attitudes. This research instrument operantly defines groups of consumers as they relate to a variety of toy buying experiences.

Subjects were chosen as they reflected a wide range of demographic variables and toy purchase experiences.

Two factors emerged to characterize the possible attitude segments. Included here for each is a descriptive shorthand term.

Factor I -- The Play Purist

Factor II -- The Eager Educationalist

The findings of this research proved that consumers could, indeed, be segmented according to their attitudes relative to a toy buying situation.

Application of the findings are provided in the final chapter that are suggestive of theoretical and practical implications. This includes social concerns, as well as specific manufacturing, marketing and communication strategies.

ACKNOWLEDGEMENTS

In grateful appreciation I would like to acknowledge Dr. Charles Mauldin's patient assistance and delightful example as well as the comfort of the warm support of my friends and family.

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CHAPTER I

INTRODUCTION

Toys are a child's first tools for exploring, communicating and learning about himself and the world around him. As most parents realize, play is a child's "work," the process through which he discovers who he is and who he can be. Choosing a toy should be "as simple as child's play," but as many parents find, it is not so simple after all.

Toy manufacturing is also big business. Every year some 900 toymakers compete for more than $4 billion in retail sales. Hence, an insight into the factors that influence a parent's choice of toys are of major interest to the toy industry.

As a matter of introduction, I will first determine if play, in the opinion of renowned psychologists, is indeed important to a child's well-being and why. Next, I will discuss two issues current in toyland; the charge by many feminists that parents are perpetrating rigid sex role stereotypes by giving toys to kids that telegraph their sexist prejudices and the claim of noted educators and psychologists that there is a boom in educational toys which is the result of an overemphasis on early stimulation of children. I will then explain the advantages and use of attitude segmentation followed with a description of Q-methodology, the technique I chose to segment people according to their expressed attitudes about toys. Finally, I will conclude this chapter with a formalized statement of purpose.

Of what value is play to the child? Noted child psychologists and educators agree that play is essential to a child's development. Swiss psychologist Jean Piaget, famous for his studies on the thought processes of children, holds that play is the basis of all later cognitive functioning and is therefore indispensible in the life of a child. According to Piaget, play is the medium by which the child expresses not only needs, but also an understanding of experiences. Play is also the primary vehicle for the expression of thought when the child is just learning the symbolic functions of language in the early stages of his life.[1]

In Intellectual Growth in Young Children, Susan Isaacs says:

> The ability to evoke the past in imaginative play seems to be very closely connected with the growth of the power to evoke the future in constructive hypotheses."[2]

Stated differently, the ability to make correct predictions grows out of a correct understanding of past events. But understanding and assimilation of past events is developed by the child through play. Thus,

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[1]Jean Piaget, Dreams and Imitation (New York, 1962).

[2]New York, 1966, p. 104

play is irreplaceable in the ability to formulate hypotheses. [3]

Erik H. Erikson maintains that the lifelong feeling of mastery of the environment must be established early in a child's life or probably not at all. Play represents a world in which a child can be a master of whatever environment he chooses. In his imagination physical objects can do whatever he desires, no matter how stubbornly they obey natural laws.[4]

Play is purported to be related to creativity. Problem-solving is an aspect of play, since some solutions are more creative than others. Creative people exhibit a strong need to manipulate the environment in search of solutions. They are independent and flexible, toying with ideas, however wild. They learn to harness these ideas with logic and reality. Above all, they have an attitude of problem-solving whose roots are found in play.[5]

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[3]Irene Athey, "Piaget, Play and Problem Solving," in Play as a Learning Medium, ed. Doris Sponseller (Washington, D.C., 1974), p. 42.

[4]Childhood and Society (New York, 1950), pp. 211-213.

[5]Athey, p. 48.

S. R. Slavson sees play as a necessary tension reliever for young children. He values its function as intensely cathartic and incorporates play to a considerable degree in his therapy recommendations for disturbed children.

> A child may use play to relax tension and anxiety. The service of play in finding permissible and acceptable outlets for primary impulses is of considerable value with which one must reckon."[6]

Finally, in an article entitled "Play is Valid" (1968), Lawrence Frank says that the exploratory activity in play is the basis of a rich sensory concept formation. With his sensory capacities, a child learns to listen, taste, smell, see, feel and grasp and master these experiences through continual play. Frank asserts that this is the most intensive and fruitful learning activity of a child's whole life.[7]

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[6] "Play Group Therapy for Young Children," The Nervous Child, VII (1948), 218-219.

[7] Childhood Education, XLIV (March 1968), 433-440.

Sexism in Toys

The American Toy Fair in New York was picketed on February 21, 1974, by activists and mothers with children in hand protesting "sexist" and "militarist" toys. Including some National Organization of Women members, the pickets claimed that toy manufacturers' products direct "militaristic" war toys and guns at boys and advertise toys and dolls for girls that encourage "narcissism and limited inspiration."[8]

From all appearances one would speculate that consumers everywhere were taking issue with the question of the inherent sexism of toys, in conjunction with the influence of the home in setting the stage for sex role stereotypes.

Letty Cottin Pogrebin charges that we telegraph our prejudices and preconceptions with our choice of toys for our children. Without words our toy selections relate a distinct message:

> Do-it-yourself crib games for boys. Delicate mobiles for girls. Later he gets baseballs, model ships, erector sets, chemistry kits. She gets Barbie Dolls, tea sets, nurse kits.

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[8]James P. Forkan, "Toy Execs See Unisex Trend; Cite 'Action Dolls' For Boys," Advertising Age, February 25, 1974, p. 2.

> And they both get the signal. That they are expected to be very different from one another. That he can experiment, solve problems, compete, take risks. That she is passive, domestic, cultured, and cautious."[9]

Moreover, the following observations cited from a 1972 study conducted by Louis Wolf Goodman and Janet Lever, Yale University sociologists, whose examination of sex-typing of children's toys seem to convict further the play of American children and the buying habits of their parents' of having a double standard. No single scientific toy was reported bought for a girl by any field worker during thirty hours Christmastime observation in a toy department. The observers also found that adults spent more time choosing toys for boys than they did choosing toys for girls.[10]

Most of us will agree that a great deal of toys are sexually anonymous. It is the way we present them to the child that reflects stereotypes and causes them to be perpetuated, say the advocates of toys for "free

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[9]"Down with Sexist Upbringing," in The First M.S. Reader, ed. Francine Klagsburn (New York, 1973), p. 164.

[10]Nancy Lyon, "Do Kids Need Toys Every December 25th? Do Kids Need Toys At All? Are Any Toys Worth This Shopping Ordeal?" M. S. Magazine, December 1972, p. 57.

children." The effects of the large environment upon a child's play interests need to be considered, they insist. Unless the adults in the home are committed to role flexibility, the child will ignore even the most appealing toys if they seem inappropriate.[11]

Supporting the view that toys follow the prevailing attitude of society, one columnist states, "Sexist toys will be with us until toymakers decide that there is no longer a market for them --- until our culture recognizes women in roles other than housekeeper, hostess, mother, and seductress."[12]

Whatever our good intentions, children will not be transformed by the nonsexist toys we give them, according to Ms. Pogrebin. She reflects that toys are not magic and can not do a vanishing act on the specter of sexism in a society obsessed with notions of "manliness" and "femininity."

> Perhaps the 20th century preoccupation with "normality" has lead us to discriminate so vigorously between the two sexes and to label everything each must do and become. Yet it could be otherwise. Without rigid guideposts for "normal feminine" and

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[11]Letty Cottin Pogrebin, "Toys For Free Children," in Sexism and Youth, ed. Diane Gersoni - Stavn. (New York, 1974), p. 408.

[12]Lyon, p. 59.

> "normal masculine" behavior, we would learn to cope with all the surprising shadings of diverse human behavior."[13]

In agreement with Ms. Pogrebin, Dr. Lee Salk, head of Pediatric Psychology at New York Hospital/Cornell Medical Center adds, "Toys are not the cause of sex roles but the result. Whether you give a child a woman-lawyer doll or a male-nurse doll, if its parents have inflexible attitudes about male and female roles, then the child will most likely grow up with those same fixed role ideas."[14]

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[13]Pogrebin, "Toys For Free Children," p. 415

[14]Lyon, p. 59.

An Educational Trend in Toys

Most modern parents are aware of the importance of the early years in child development and are concerned about providing a proper environment for their children. However, another aspect of the issue of toys, according to one researcher, is the latest irresistible trend to turn infants and preschoolers over to educational toys and let them do the teaching. She makes reference to those toys which prominent educators have "scientifically developed" (it may be more accurately said that they frequently sell their names for use in the product's advertising).[15]

After conducting studies with infants and preschoolers at Harvard, Dr. Richard Feinbloom, professor of pediatrics at Harvard Medical School concluded that there seemed to be a vague middle class belief that intellectual competition begins in the cradle or not at all. There is also a fear that infants will be intellectually stunted for life who aren't given early sensory stimulation.[16]

Dr. Feinbloom, as well as Dr. Peter H. Wolff of

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[15]Lyon, p. 98.

[16]Lyon, p. 98.

Harvard Medical Center addressed the subject further in the December 1969 issue of the professional journal Pediatrics:

> In a society such as ours which stresses the financial and social advantages of academic achievement, parents are likely to consider themselves negligent if they do not exploit every opportunity for increasing their children's intellectual performance."[17]

Recent behavioral studies which demonstrate that the human infant is much more organized at birth than psychologists once thought and the fact that the newborn infant's perceptual and motor systems are notably sophisticated mechanisms for coding and organizing information have fueled public interest in educational toys.[18]

In addition, beyond devising an enrichment program for "disadvantaged children," child psychologists are experimenting with the future of the enrichment of all children who have until now been judged as developing at a satisfactory rate.[19] In conjunction with this

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[17] "Critical Periods and Cognitive Development in the First 2 Years," XLIV, 999

[18] Wolff and Feinbloom, p. 999.

[19] R. H. Barsch, "The Infant Curriculum - A Concept for Tomorrow," The Exceptional Infant - The Normal Infant (1967), quoted in Wolff and Feinbloom, p. 999.

interest in early education, pre-schools for the well-to-do are fast becoming an established institution in suburbia. Their curricula which rely on toys as educational devices intend to teach infants specific skills and emphasize the acceleration of cognitive development.[20]

On the business end, toy manufacturers report a tremendous surge of growth in the sales of pre-school and educational toys in the June 5, 1970 issue of the trade magazine Toys:

> From 1965 to the present, pre-school toys have been the glamour category of the toy industry. Accounting for approximately 4 percent of the industry in 1965, this category has grown to a point where, for some retail outlets, it accounts for as much as 15 percent."[21]

Lending further support to the question of an"educational fad" in toys is an excerpt from the February 1972 issue of Fortune:

> Many toy companies that have ignored the pre-school market are now scrambling into it, and that is a market where it is often more important to win the mother's favor than the child's....It appears that

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[20]"Social Intervention and the Malleability of the Child," The Disadvantaged Child, ed. M. Deutch and associates (1967), quoted in Wolff and Feinbloom, p. 1002.

[21]Quoted in H. Robert Quilitch, "Can Toys Really Teach?" Saturday Review, November 16, 1974, p. 60.

some toy companies intend to capitalize on mothers' naiveté. Parents have in the last few years exhibited a preference for toys that appear to be "educational." ...Toys that purport to teach such things as object permanence (the ability to remember the existence of something even if it is out of sight) are being marketed for children under a year old."[22]

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[22]Quilitch, p. 60.

Attitude Segmentation

As we are all aware, today's economy encourages greater floods of new products every year to vie for the attention of the buyer. It has long been recognized that to deal with consumers as an undifferentiated "one-size-fits-all" mass is most often an inferior communication strategy. Quips Russell Haley, "The so-called average consumer existed only in the minds of some marketing people."[23]

Furthermore, most marketers and educators are well acquainted with the value of developing products and images to appeal to homogeneous clusters of people. "In today's economy, each brand appears to sell effectively only to certain segments of any market and not the whole market," noted Daniel Yankelovich.[24]

Stephen Geyser reiterates:

> Advertisers will ordinarily be ill-advised to design general-purpose messages for most products, or to judge the success of these messages as though it were possible to reach all

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[23] "Benefit Segmentation: A Decision-oriented Research Tool," Journal of Marketing, XXXII (July, 1968), 35.

[24] "New Criteria for Market Segmentation," Harvard Business Review, XLII (March - April 1964), 89.

> of the people all of the time. They need much more accurate specification of advertising objectives, more refined knowledge of the potential audiences, and more precise tailoring of messages and media to specific segments of the population."[25]

Looking further, Harry Heller of the Gruden/Appel Research Corporation, comments, "Attitudes cause purchases in obvious ways. Before most products are bought, attitudes that are congruent with the purchase are held by the person."[26]

Attitudes perform certain general functions according to Katz. They (a) help the individual cope with a complex world resultant from an individual's tendency to maximize rewards from the external environment and (b) provide a channel of expression for his fundamental values.[27]

Thus, one might logically conclude that attitudes provide insights into a buyer's behavior. Moreover, as Richard Halpern observes, if attitudes and behavior are

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[25]Bauer, Raymond and Stephen Greyser, What Americans Think of Advertising (1969), quoted in Russell I. Haley, "Beyond Benefit Segmentation," Journal of Advertising Research, II (August 1971), 8.

[26]"Defining Target Markets by Their Attitude Profiles," in Attitude Research on the Rocks, ed. Lee Adler and Irving Crespi (American Marketing Association, 1968), p. 45.

[27]Harry C. Triandis, Attitude and Attitude Change (New York, 1971), pp. 5 - 6.

related we could predict the latter if we could only measure the former.[28]

One might surmise that segmenting groups on the basis of attitudes is tantamount to providing motivational segmentation. Indeed, Yankelovich perceived the economy of scrutinizing differences between buyer attitudes when he commented, "By segmenting markets on the basis of the values, purposes, needs and attitudes relevant to the product being studied...we avoid misleading information derived from attempts to divide people into types."[29]

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[28]"Some Observations About Attitude Measurement and Behavior," in Attitude Research on the Rocks, ed. Lee Adler and Irving Crespi (American Marketing Association, 1968), p. 38.

[29]Yankelovich, p. 90.

The Research Instrument

Q-methodology has often been used to segment people according to their expressed attitudes. The creator of Q-methodology, William Stephenson, holds that a Q-sort (ranking of statements of opinion by individuals in order of preference) is a replica or model of an overall attitude about a matter, which an individual holds.[30]

An illustration of this technique is William Stephenson's study of the use of tuna fish by housewives:

> In a study on the promotion of tuna fish, one begins by interviewing housewives to elicit from them their opinions about it --- how they use it, what they prefer, what others say about it. From the protocol it is a simple matter to collect statements of opinion, as distinct from fact, about tuna fish. To say "I like white flesh only" is an opinion; to say that "the last can I bought was 58 cents" is a matter of fact. Our concern systematically is always with opinion...From the Q-population (of statements of opinion) a Q-sample is drawn; Q-sorts performed by housewives bring two different factors into focus. One, when the factors are examined, indicates that the women of that "group" are interested in tuna fish largely as a "filler" for a staple meal --- to give flavor to a casserole of macaroni or rice; the others use it as a snack only, for a dainty weight-watching lunch or the like.

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[30] "The Contributions of Q to Attitude Research," in Attitude Research on the Rocks, ed. Lee Adler and Irving Crespi (American Marketing Association, 1968), p. 162.

> Obviously different social factors are involved --- women with low incomes and many mouths to feed are less likely to use it for a "snack."[31]

A vast array of products and their publics have been examined via Q-technique including men's toiletries,[32] automobiles,[33] magazines[34] and toothpaste.[35] Haley's study of toothpaste users identified four segments --- one concerned with decay prevention which Haley labeled "The Worriers," one with brightness of teeth, "The Sociables," one with the flavor and appearance of the product, "The Sensory Segment," and one with price, "The Independents."[36] Haley noted that each consumer segment,

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[31]Unpublished paper expounding methodological and theoretical foundations in application of Q-methodology in advertising (Columbia, Missouri, 1967), pp. 9-10.

[32]Ricky H. McCarty, "Packaging and Advertising of Men's Toiletries: An Intensive Analysis of a Pure Type" (unpublished University of Missouri Master of Arts thesis, 1972).

[33]Eric D. Fischer, "The Automobile and the Consumer: Operant Market Segmentation" (unpublished Michigan State University Master of Arts thesis, 1973).

[34]Laurel Booth, "An Image Study of McCall's Magazine" (unpublished University of Missouri Master of Arts thesis, 1968).

[35]Haley, "A Decision-oriented Research Tool," pp. 30-35.

[36]Haley, "A Decision-oriented Research Tool," p. 31.

"represents a potentially productive focal point for marketing efforts."[37]

Q-technique has been used to assess public opinion of certain concepts[38, 39] as well as such services as automated teller banking systems,[40] libraries,[41]

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[37]Haley, "Beyond Benefit Segmentation," p. 3-8.

[38]Gerald F. King, "Sex Education for the Mentally Impaired: An Attitude Segmentation Study" (unpublished Michigan State University research report, 1974).

[39]Charles R. Mauldin and Janeen A. Mauldin, "Institutional Employee Attitudes About the Retarded" (unpublished University of Missouri research report, 1971).

[40]Charles R. Mauldin, John C. Sutherland and John F. Hofmeister, "The Use of Attitude Segmentation in Selecting Market Targets and Choosing a New Product Name: Application to an Automated Teller System" (unpublished research report presented to the Advertising Division of the Association for Education in Journalism, Lansing, 1977).

[41]William Stephenson, "An Image for Missouri's Public Libraries" (unpublished University of Missouri research report, 1962).

small colleges,[42] dentistry,[43] utilities[44] and universities.[45]

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[42]Phillip Ganz, "The Student and the Small College: Operant Market Segmentation" (unpublished Michigan State University Master of Arts thesis, 1973).

[43]Nancy Lois Tschirhart, "Life Styles vs. Behavior Segments: A Study of Dental Health Consumers" (unpublished Michigan State University Master of Arts thesis, 1974).

[44]William Stephenson, "Public Images of Public Utilities," Journal of Advertising Research, (1963).

[45]Steven Shinn, "An Image Study of the University of Missouri, Columbia" (unpublished University of Missouri Master of Arts thesis, 1971).

THE PROPOSED STUDY

I have already determined that play is indispensible to a child's healthy development and that the tools of play, toys, are a thriving business. Hence, it is the purpose of this study to utilize Q-methodology as an instrument for identifying attitude segments as they relate to toys to learn ways the industry might tailor manufacturing, marketing and communication to each segment.

I will evaluate the data in light of certain social implications and discuss my findings in the concluding chapter. Specifically, I am interested in whether parents do perpetrate rigid sex role stereotypes through their toy choices, as many feminists charge. I am also interested in defining what criteria adults use in selecting toys and how they differ among adults. Toward that end, this study asks adults to indicate criteria for selecting toys -- for a male child and for a female child. Details of the methodology are explained in the next chapter.

The usefulness of the methodology in generating suggestions for manufacturing and marketing strategy, themes and specific copy ideas will be examined. As well as helping to better accommodate the needs of

specific segments, the data should facilitate the improvement of communication with the groups designated as target markets. Russel Haley has remarked that the real payoff of segmentation research "has to do with copy efficiencies."[46] Understanding the criteria which parents use in selecting toys and upcoming trends in public thought are invaluable insights for creating products and themes to capture the attention of specific segments.

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[46]Haley, "Beyond Benefit Segmentation," p. 3.

CHAPTER II

METHODOLOGY

The rationale for using Q-technique to identify behavior segments was stated in Chapter I. To repeat, Q-technique was chosen because of its successful use in consumer behavior research and because it provides a basis for operantly identifying attitude segments. The term "operant" refers to the fact that the subjects themselves define the segments, first by providing the opinion statements that comprise the instrument and then by performing the operations. Finally, factor analysis of the data provides groupings of like sorts which are independent of arbitrary decisions and expectations of the researcher.

Selection of the Q-Sample

Subjects were chosen for in-depth interviews to reflect a wide range of opinions about toys. They were chosen on the basis of sex, age, marital status, occupation, number and ages of children and religion. Included were

persons who were married with children, married and childless, divorced with children and single with no children. There were additional criteria for selection that were significantly important in that they reflected a range of toy purchase frequency and preference, from single individuals who may only enter the toy market once yearly to married persons with large families who regularly spend a considerable amount on toys. Subjects gave estimates of the number of toys purchased per child for Christmas, birthdays, other special occasions and non-special occasions during the year.

The interview schedule was arranged to elicit the widest range of opinions from respondents. Subject matter included an evaluation of what the individual considered important in the toys he bought. The characteristics that his or her child (when appropriate) valued in a toy were also discussed. The method, places, frequency, price range and times of year which the individual purchases toys was discussed. Also considered was the amount of enjoyment the person derived from buying toys and the major influences on the person's buying decisions as well as the preferences of his or her child (when appropriate). Questions concerning agreement with

spouse on selection criteria, familiarity with toy manufacturers and television viewing habits of his or her child (when appropriate) were asked. Finally, the individual was asked to compare his childhood toy experiences with those of his or her child (when appropriate). Non-directive interviewing techniques were used. The questions were asked neutrally with considerable prompting. The object of each interview was to exhaust the respondent's opinions about toys.

From a theoretically limitless number of statements of opinion about toys, several hundred opinion statements were gathered from about twenty-four interviews. No more than twenty-four interviews were conducted, because the interviews extracted no "new" opinions from the last interview, that is, with wording exceptions, the opinions duplicated those in previous interviews.

The several hundred statements were reduced to fifty-six, eliminating idiosyncratic statements and duplication. The final fifty-six statements were selected on the basis of self-reference, that is they allowed respondents to protect their own interpretation upon them. The Q-sample can be categorized into statements dealing with the reasons why toys are bought (to show love, rewarding behavior,

pampering an ill child, for fun, to encourage creativity, to develop a sense of achievement, concentration, perseverance, to help cope with competition, etc.), the attributes of a toy (color, durability, age considerations, price, safety, research pedigree, degree of difficulty, brand name manufacturer, or discarded household items such as cans and boxes), the environment in which toys are used (unsupervised, family participation, organized, loose, etc.), the factors of influence in toy selection (advertising, child's preference, agreement with spouse, etc.), as well as other issues such as the advantages and disadvantages of encouraging fantasy, the use of scary toys and toys which promote violence. It was thought that such a combination would reflect an individual's feelings toward toys, hence aiding in the interpretation of attitude segments (see statement set in Appendix B).

The Q-sample was pretested by several persons of various ages and toy purchasing experiences. After reviewing the Q-sample with these people, the wording of several statements was changed to clarify their meanings.

Selection of Respondents

Quota control sampling was used in selecting the

respondents, the P-sample. The P-sample was classified into selected categories thought to be relevant to differences in feelings about toys. The P-sample comprised the same variables as the subjects in the depth interviews. Restated, they were: sex, age, marital status, occupation, number and ages of children and religion, in addition to toy purchase frequency and preferences.

Administration of the Q-Sample

The Q-sample was administered to fifty-six persons. Each subject was asked to perform a Q-sort (a ranking of the statements) to describe what seemed to him to be important or significant.

To address the issue of whether people use different criteria to select toys for children of different sexes, thirty-six of the respondents were asked to perform double Q-sorts. They were requested to rank one set of statements with a girl child in mind and another set with respect to a boy child.

All the respondents placed the statements on a value scale according to their projected interpretation of them. First, an individual in the P-sample was asked to sort the statements into three piles. One pile contained those

statements with which he agreed (+), another pile those statements with which he disagreed (-), and a third those statements about which he was neutral or could not make up his mind (0). Using the Q-matrix as a guide (see Appendix C), the respondents were asked to pick two statements with which they most agreed, and the interviewer entered the statement numbers in the Q-matrix under (+6) "most agree." Subjects continued filling in the diagram with "agree" statements until these statements were exhausted. In the same manner the placement of the statements in the "disagree" pile was completed.

Finally respondents were asked to choose those statements from the "neutral" pile with which they most agreed and to fill in the rest of the Q-matrix until all statements were exhausted.

The sorted statements satisfied the following frequency distribution:

N=56	Most Disagree											Most Agree
Value:	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6
Number of Statement:	2	3	4	5	5	6	7	6	5	5	4	3	2

Respondents were asked to comment on their reasons for

placing particular statements at the -6 and +6 ends of the continuum on the back of the questionnaire.

Analysis of the Data

The ninety-two completed Q-sorts were processed by the Michigan State University CDC 6500 computer using the SPSS factor analysis subprogram and using the wrap phase of the QUANAL program developed at the University of Iowa by N. Van Tubergen. The respondents' sorts were intercorrelated to provide a correlation-matrix, which the computer then factored using the principle-axes method. Factors are thus obtained, made up of groups of individuals who have sorted the statements in a similar manner. The factors are then rotated orthogonally through a varimax solution, to obtain mathematically a maximum number of "pure" loadings (significant loadings[1] on one and only one factor).

The Spearman weighting formula[2] was then applied to

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[1] Significant factor loadings are determined by computing the standard error for a zero correlation coefficient; SE = 1/n, where n = number of statements. In this case, SE = $1/\sqrt{56}$ = .13. Thus loadings greater than .325 (2 1/2 SE) are significant beyond p .01.

[2] Weighting is by means of Spearman's formula: $\frac{1}{1-r}$ 2. Charles Spearman, The Abilities of Man (New York, 1972), Appendix XIX.

the factor loadings. Individual sorts for each factor were weighted according to the factor loadings. Then the computer added the weighted rankings across each statement, producing an "average" sort for each factor. After converting the arrays to z-scores, the computer arranged statements on a "most agree-most disagree" continuum for each factor. The array for each factor provided the basis for interpretation of the factor.

The factor analysis yielded two factors judged "interpretable," based on two criteria. One interprets only those factors with at least a minimum number of persons with significant "pure" loadings. The number chosen for this study was four. A third and fourth factor was generated but did not have enough persons to be interpretable (Factor III consisted of one person and Factor IV consisted of two persons). The second criterion is amount of variance accounted for, judged on the basis of eigenvalues. Using eigenvalues it is possible to reject a factor when the amount of variance accounted for is less than a minimum specified amount, as represented by a designated eigenvalue. It is common for factors with eigenvalues less than 1.000 to be judged uninterpretable and that was the criterion used in this study. The two

factor solution included as "pure" loadings, the sorts of eighty-two of the ninety-two subjects. The interpretation of the factors was based on the statement arrays for each factor, a result reported in the following chapter.

CHAPTER III

INTERPRETATION

Introduction

In Q-technique, respondents sort statements into a quasi-normal, forced-choice distribution. The scores for each sort are correlated with all other sorts, and the resulting correlation matrix is subjected to Q-factor analysis. The factor analysis provides evidence used in defining groups of persons, each group having sorted the statements in a similar way. For each group (factor), an array of statements is calculated using products of weighted factor loadings and raw scores; the resulting array of statements, a statistical representation of the group position, is statistically compared with other arrays to define consensus items and statistically contrasted with other arrays to define discriminating items, those items that differentiate a factor array from other factor arrays.

As reported previously, two interpretable factors were generated and examined. An "if-then" approach was used in

interpreting the factors; combinations of statements were examined and the apparent position was summarized. Individual statements, groups of statements, combinations of comparisons were studied and conclusions reached. Admittedly, seeking these conclusions is subjective but the interpretation must be based on the operant evidence; that is, the explanation offered must fit the data. It is the usual procedure in Q-studies to qualify the interpretation in this manner: the reader is encouraged to formulate his own conclusions from the data given in the appendices.

Those statements upon which all factors basically agree, called consensus items, received initial attention.[1] Inter-factor agreement upon opinion statements can be of great importance in improving communication with toy consumers.

The interpretation for each factor is presented in three forms: (1) a two word label which provides a convenient means of referring to the factor, (2) a brief sketch describing each factor, and (3) an extended sketch, with evidence, furnishing a more detailed explanation and

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[1]A consensus item is defined as a statement where the factor scores differ by less than .700 standard score across the two factors.

discussion of the factor. (The comments the respondents were asked to make on the back of the questionnaire about their reasons for placing particular statements on the extreme (-6 and +6) ends of the continuum will be included here.) The factor is referred to in third person because the sort for each factor represents a sort "typical" of the group, a sort that could have been done by a single individual.

Finally, the results of the double sorts will be acknowledged. To review, thirty-six of the fifty-six respondents were asked to perform double Q-sorts to determine if people did indeed use different criteria to select toys for children of different sexes. They were requested to rank one set of statements with a girl child in mind and another set with respect to a boy child.

Brief Sketches

As noted, the factor analysis yielded two interpretable factors. The brief descriptions that follow are intended to acquaint the reader with the factors before offering a more detailed analysis.

Factor I, The Play Purist

Populating Factor I are those persons best typified

as Play Purists. They appear to collectively view play as an activity carried on in the spirit of sheer exuberance and pleasure with no apparent utilitarian objective. They are concerned that in the anxiety to push children forward, the joy of childhood may be destroyed. The fact that play affords intense delight should be significant justification in itself to participate in that behavior, they believe.

Factor II, The Eager Educationalist

Eager educationalists are individuals who generally feel that play contributes much more than pleasure to a child's life. It creates the perfect learning situation and it is indispensible to the growth and development of every child. Thus, it is the responsibility of every parent to seize all opportunities to equip the child in the best possible way to cope with the problems they will face in the future. This objective can be initiated through play.

Consensus Items

Consensus items, or those statements about which all the factors agree, are very important in a Q-study. These statements can provide the basis for communication with

otherwise diverse groups. Of most importance are those statements scored highly positive; these statements are not only matters of consensus, but are of high value to the respondents. Consensus items which are scored highly negative are also important and indicate matters to be avoided or emphasized in communication strategy. Those items surrounding the neutral point offer least in terms of communication opportunity. The study yielded thirty-two consensus items and this section examines those items.

More than one half of the statements (i.e., 32 out of 56) were held in similar regard by both factors. Six statements were highly positive, seven slightly positive, seven essentially neutral, eight slightly negative and four highly negative.

The highest positive "agree" statements reflect attitudes shared by most parents universally.

Respondents indicated that, broadly, care of the toys was a child's responsibility (27).

(27) A child should have to take care of his toys. It teaches him responsibility.

Factor I	Factor II
1.607	1.484

It appears to me that the respondents recognize that

a child's first possessions are his toys. Practicing care and respect in this area will extend to other values in his life. Early neglectful and thoughtless behavior not discouraged by parents can result in a socially irresponsible orientation which may last a child's lifetime.

Age was rated overwhelmingly as the most important criterion in the selection of toys as agreed on by both factors (9).

(9) It's so important to consider a child's age in selecting toys.

Factor I	Factor II
.854	1.548

One 40 year old educational administrator and father of six commented, "Toys, like books and educational curriculum are most effective when the level of complexity corresponds to the child's mental and chronological age. Surely a lack of interest results if the toy is either too difficult or simple." (Note: As a reminder, all comments made by the respondents like the one above were found on the back of the questionnaires. Participants were asked to give reasons for placing particular statements on the extreme ends of the continuum (-6 and +6).

The next consensus item acknowledges that children are generally unpredictable at times, and their preference in

playthings will often mystify parents (12).

(12) Finally, you never really know what toy a kid will like. A little child will sometimes ignore a new toy to play with a baking soda can.

Factor I	Factor II
1.302	.940

Apparently, more parents agree that despite the control they may attempt to exercise over a child's leisure, it is difficult to anticipate his whims.

The following two consensus items reflect underlying values which are universally applauded. There was concurrment among all respondents that parents should not be overly generous with toys, thus teaching the child to be satisfied with what he has (15).

(15) You can buy a child too many toys. It's important to learn to be happy with what you have.

Factor I	Factor II
1.389	.798

Responses indicate that these persons wish to de-emphasize materialism in their children's lives. Overwhelming a child with toys encourages the beginning of greed and discontent. Moreover, if a child learns to expect an abundance of toys, he may project these

expectations in the future to other areas of his life.

"Kids can be given too many toys to the point that the values of happiness and enjoyability become secondary to possession and quantity," remarked a 27-year-old television and radio broadcaster and father of one.

It appears that cooperation with others is another virtue which all respondents strongly favored. They agreed that toys for two or more children which teach the ability to get along well with others were of benefit (44).

(44) Games and toys for two or more children are good; they teach kids to get along well with others.

Factor I	Factor II
.921	1.152

I have drawn the conclusion that it is the commonly held opinion that unless a child has some interaction and shares his toys he may tend to become overly possessive and competitive.

The highest positive agree statement concerns the notion that children should have a voice in toy purchase decisions (25).

(25) Kids should have some say so in the types of toys his parents buy for him.

Factor I	Factor II
1.269	.758

Said a father of a 6 year old in elaboration, "A child is an individual with his own preferences. A parent can only attempt to guide or suggest; the final decision belongs to the child."

Slightly positive regard was indicated for games which assist the parent in developing a good relationship with their child (26) and board games which promote family participation (51).

(26) I like games that allow you to build a good relationship with your child.

Factor I	Factor II
.820	1.072

(51) Board games are a family affair. We can all sit down and have fun together.

Factor I	Factor II
.409	.277

Apparently, all respondents believe that shared experiences in entertainment can nurture strong attachments. Leisure activities engender pleasant memories and those associated with the family help provide the child with an important base of trust and security.

"It is important for a child to identify positively

with the parents and games allow that identification to occur," observed a 25-year-old secretary.

As stated earlier all respondents concurred that the child's preference should be taken into account when making toy selections (25). Conversely, parents also believe the toy must meet the parent's own criteria of acceptability too (46).

(46) I buy toys that my child likes, but they also must meet my own criteria of acceptability.

Factor I	Factor II
.836	.868

This suggests that respondents view toy buying as a joint decision between parent and child. An adult's guidance is often necessary to assess the safety and durability of the item, while the child may contribute to the choice of the general toy category.

In line with this, parents look for durability and breakage resistance in a toy (48).

(48) I look for durability in a toy. If it isn't sturdy, it will get torn up in a hurry.

Factor I	Factor II
.542	.665

It is apparent that today's soaring prices have forced consumers to be value conscious.

Commented a 27-year-old professor and father of two,

"Toys are becoming a larger investment than ever, and on my salary, durability is a must."

Novelty and creativity were broadly acknowledged as favorable toy attributes (24).

(24) I like a toy that is a novel creative idea.

Factor I	Factor II
.663	.858

It is my opinion that respondents feel that novelty provokes curiosity and stimulates the imagination.

In conjunction with the preceding statement, respondents wanted a toy that maintains a child's interest because most children tire of a toy before it has lost its usefulness (20).

(20) It would be nice to have toys that kids continue to have fun with. Usually, children get tired of toys long before they wear out.

Factor I	Factor II
.704	.533

Parents are concerned that many serviceable toys are neglected because the child has become indifferent to them. Thus, the greater the novelty and creative impact the toy has on the child initially, the greater the likelihood of prolonging his interest in the toy.

The last of the mildly positive statements concerns avoidance of high violence toys with the reasoning that there is enough violence in the world without encouraging violent play (43).

(43) I avoid toy guns and other toys with a high violence potential. We have enough violence in the world without encouraging children to play violence.

Factor I	Factor II
.699	.528

I speculate that respondents feel that their children are exposed to too much violence in the media. Toys which promote potentially violent play teach a child to believe that this type of behavior is acceptable in other interactions.

A 24-year-old woman school teacher asserted, "Kids should learn to express themselves in a non-violent way, particularly in the case of a boy who is usually expected to be very physical and aggressive."

Reflecting a basically neutral stance is the notion that respondents buy toys for their children that they would like if they were a child (14).

(14) I buy toys for my children that I'd like if I were a child.

Factor I	Factor II
.671	-.001

Relative to other issues, the statement concerning the need to exercise caution because some toymakers try to make a sale regardless of safety, did not command much interest (31).

(31) You have to be careful buying toys. Many toy makers will produce anything that will sell regardless of safety and potential harmful uses.

Factor I	Factor II
.111	.457

It appears that respondents feel that enough reputable toymakers offer quality products to generate little attention for those who don't.

A 25-year-old beautician and mother of a 2 year old elaborated, "There are many products available by reputable manufacturers, i.e., Fisher Price, so that I can avoid unsafe products."

The statement dealing with the value of toys which get children outside (42) elicited a relatively neutral response.

(42) I like toys that get children out-of-doors.

Factor I	Factor II
.389	-.016

I surmise that respondents believe toys for the out-of-doors are beneficial for the fresh air and exercise

they provide but they are reluctant to endorse these toys completely because the opportunity to share in the child's leisure is lacking.

Respondents expressed indifference to the matter of purchasing toys with working parts so that the child must think a little (55).

(55) I like to buy toys that have working parts so the child has to think a little.

Factor I	Factor II
-.095	.425

This suggests a rivalry of thought to me creditable to the availability of some toys with working parts that do stimulate the child's interest versus others that may be so highly mechanized that they leave little to the child's imagination.

The issue of both parents agreeing on the proper criteria in toy selection received a neutral reaction (32).

(32) Both parents should agree on the right criteria for selecting toys for their children.

Factor I	Factor II
-.063	.314

Respondents may feel that though consistency is important in a child's life in general, consistency in

toybuying criteria does not merit undue concern.

Respondents neither agreed nor disagreed that they prefer toys which are useful at keeping children entertained and "out of adult hair" (40).

(40) Toys serve the useful purpose sometimes of keeping kids entertained and out of adult hair.

Factor I	Factor II
-.101	-.067

Apparently, they are lukewarm to the idea of using toys as pacifiers.

Indifference was demonstrated for the idea that it is nice to give a child a toy when he was ill (28).

(28) It's nice to buy a toy for a child when he is ill.

Factor I	Factor II
-.338	.108

Respondents may feel that this sort of practice is bordering on using toys as a system of rewards and punishments for good and poor conduct. However,illness cannot be defined as a behavior chosen by the child, hence, the less than completely negative reaction.

The last neutral statement proposed that toys should be bright and colorful (36).

(36) Toys should be bright and colorful.

Factor I	Factor II
-.328	.047

I suspect that respondents may believe that any one toy attribute generalized to be included in all toys can not guarantee the child's enjoyment.

"Of primary importance is that toys should be useful to a child. It might be pretty but if he can't use it, it's not valuable," asserted a 28-year-old teacher and father of two.

Respondents disagreed with statement (5). This statement dealt with the idea that toys should promote competition with other children for the purpose of developing coping skills to survive competition in the future.

(5) There should be competition with other children. Competition is important. Children have to learn to cope with it to survive later.

Factor I	Factor II
-.686	-.601

Again, it appears to me that all respondents are in favor of fostering cooperation as opposed to competition.

Supporting this argument, a 37-year-old professor and father of three stated, "There is entirely too much

competition and not enough team work. This applies to both individuals and nations."

Moreover, a 30-year-old manager of a business and father of two said, "Competition is stressed too heavily in a children's world as it is. They have to battle it out academically and athletically already."

The negative consensus about toys that can be used without parental participation (16) relates to the two earlier statements of positive agreement about toys which promote family-centered activities (26), (51).

(16) I prefer toys my child can play without my help or participation.

Factor I	Factor II
-.475	-.671

Again, I believe that all respondents feel that shared recreation engenders family unity.

A 27-year-old student and father of two remarked, "An opportunity to strengthen the parent-child relationship is lost. I also want to partly control what my child learns."

General disagreement was indicated for the viewpoint that advertising has such an impact that parents usually end up satisfying the want it creates (23).

(23) Advertising is the big thing. If ads create a big enough want in children, the parents usually end up satisfying that want.

Factor I	Factor II
-.916	-.311

I speculate that respondents protest the suggestion that advertisements actually dictate toy purchase choices. Though media have some influence in this area, the respondent would like to feel that he has made his decisions based on his own judgement.

A 27-year-old engineer with no children observed, "Advertising may or may not create the want. The parents, however, pay for the toy; therefore, they will decide what toy will be bought."

Purchasing only toys the parent thinks his child would like (19) elicited a negative reaction.

(19) The parent should buy only toys that he thinks his child would like.

Factor I	Factor II
-.771	-.783

The disagreement suggests that people believe they should sometimes give a child a toy he/she doesn't like, presumably, a toy to serve another purpose. A toy could be used to introduce a child to a new experience he has never tried but thought he didn't like; for instance,

cooking for boys.

General disagreement was indicated for the statement that a toy should be simple and uncomplicated (49).

(49) A toy should be simple and uncomplicated.

Factor I	Factor II
-.686	-.601

Examination of this statement in the context of the others in the array and the corresponding statement elaborations has lead me to believe that respondents beg to differ with the use of the words "simple and uncomplicated."

Simplicity and lack of complication does not necessarily guarantee a good toy and statement (49) extends this generalization to all toys. Also it is not uncommon for a child to lose interest in a toy if it does not challenge him sufficiently.

"For an 8-year-old child, a toy should be stimulating. That's not to say that it has to be complicated, of course, but the phrase 'simple and uncomplicated' makes me think of a shoelace," said a 23-year-old unmarried kindergarten teacher.

The statement dealing with the view that there are no safe toys and, even though a ball is not generally

thought of as dangerous, it can be unsafe if lying on the stairway (38), was met with opposition.

(38) There is no such thing as a safe toy. A ball lying on stairway is unsafe, but it is not a 'dangerous' toy.

Factor I	Factor II
-.881	-.472

It appears to me that respondents may be rejecting this statement because of its blind generalization that all toys are unsafe. If we were to be completely correct, it would be more appropriate to observe that although many objects may not appear potentially dangerous, any object can be termed 'unsafe' is misused, as would be the case for any toy.

Consensus disagreement was expressed with the notion of using price as an important value in toy purchase decisions (22).

(22) Price plays an important role in the choice of toys for my children.

Factor I	Factor II
-.771	-.783

I suspect that respondents disregard price as a measure of the child's enjoyment and the utility of the toy.

A 28-year-old teacher and father of a 3-year-old and

6-year-old commented, "It really doesn't matter what the price is as long as my child is entertained and enjoys the toy. I get a great deal of satisfaction seeing my child play with a toy that he likes."

Respondents strongly contested the statement dealing with toys that have batteries and move (8).

(8) I like toys with batteries. They move. They do something.

Factor I	Factor II
-1.539	-1.223

It is my opinion that the subjects believe that a mechanized toy only allows observation and not self expression through manipulation.

Another explanation for the apparent reluctance to purchase toys with batteries may be because batteries soon run down and the time required for maintenance, though minimal, may not be worthwhile to the parent.

A 24-year-old secretary and mother of a 4-year-old asserted, "A toy that does everything leaves nothing to the imagination."

In the same vein, an unmarried 20-year-old female cashier remarked, "A child should animate the toy himself, not artificially. Then too, batteries usually run down

and the toy is forgotten."

A firm consensus of disagreement was voiced for the idea that giving toys was nothing more than a way of showing love and affection (1).

(1) Giving toys is nothing more than a way of showing love and affection.

Factor I	Factor II
-1.708	-1.437

With reflection upon other statements in the array and the accompanying remarks, it is my conclusion that respondents feel that toys as gifts are much more than a display of love and affection. Toys are a major part of a child's early years. A body of parents believe toys are instrumental in aiding children with the development of mental and mechanical skills. Beyond its simple value as a gift, a toy stimulates a child's imagination and indoctrinates him into functioning within a social system when he must share his playthings with others.

In a different vein some respondents apparently feel that use of any inanimate object only to demonstrate love is artificial and distant. A 30-year-old student and mother of a 7-year-old girl said, "Giving toys only to show love is a bit narrow and signifies to me that there

is a lack of communication between parent and child."

A 32-year-old housewife and mother of 3 added, "Sometimes giving toys is a compensation for the lack of showing love and affection."

"It's a lot more than showing the kid I love him. I do it out of love, not just to show him," concluded a 23-year-old law student and father of a 3-year-old.

The next strongly negative consensus statement takes argument with the notion of being against organized or structured play (2).

(2) I'm not against organized or structured play.

Factor I	Factor II
-1.431	-1.813

It appears that respondents may believe that life's situations have an inherent rule structure and to function satisfactorily within that system one must adhere to some minimal form of organization or chaos will result. Cooperation is an essential coping skill today and structured play fosters development of that skill. Some degree of organization does not stifle creativity but directs it.

A 31-year-old high school teacher and mother of two offered, "I'm not against structure per se. It's not bad because all play has structure. I'd be against restraints."

The final statement receiving a reaction of strong

disagreement concerned the necessity for children to differentiate between reality and fantasy when playing (3).

(3) When playing, a child should have to differentiate between real life and what is fun or silly.

Factor I	Factor II
-2.024	-1.469

I will venture to guess that respondents may feel that childhood is brief enough without imposing maturity upon the child too soon. Children learn to differentiate between reality and fantasy readily enough without forcing it prematurely.

"They will have enough time to learn about the real world. Kids should enjoy childhood because it doesn't last forever," comments a 37-year-old professor and father of three.

Factor I, The Play Purist

Evidence for Sketch

Factor I, the Play Purist, is comprised of eight individuals, including six women (three single and three married), and two men (two married). Ages of the respondents ranged from 22 to 32 years, the average age being 26.0 years.

The average number of children of Factor I (determined

by taking the average number of children of all married couples) is 2.5. The ages of the married respondent's children ranged from 15 to 6 with the average age calculated at 10.3 years.

Occupations included three clerk/cashiers, two teachers, two college students, and one production control supervisor.

Religious affiliations included four Catholics, two Protestants, one atheist and one "no response."

Toy selection data and background data indicated that respondents constituting Factor I purchase an average of 3 toys for Christmas, 1 toy for birthdays, no toys for special occasions and 1 toy for non-special occasions.

Following is a detailed analysis of the discriminating statement array as generated by members of the Play Purist factor based upon the value they placed on certain items in the Q-sort. Included are those statements with which they agreed more than any other factor agreed, (i.e., positive discriminating items) and those statements with which they disagreed, (i.e., negative discriminating items). In addition, supporting comments made by factor members concerning statements of particular interest to them are offered where appropriate.

The statement which Factor I reacted to most strongly concerns the notion that a toy's primary value lies in its ability to provide fun and laughter for his or her child (33).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(33) The main purpose of a toy or game is to help my child have fun and to laugh.	1.417	-.183	1.600

With investigation of other statements in the array and their elaborating comments, it is my conclusion that Play Purists feel entertainment and enjoyment are playtime's fundamental purposes. Learning and education, of course, have their utility but their importance in play is secondary to fun and amusement.

The statement these respondents most firmly stand in opposition to deals with the belief that it is necessary for a child to differentiate between reality and fantasy in playtime (3).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(3) When playing, a child should have to differentiate between what is real life and what is fun or silly.	-2.024	-1.469	-.556

It is my opinion that this response is further indicative of the Play Purist's position on the purpose of play. Children grow up soon enough and they should be free to enjoy childhood for as long as they are able. The ability to perceive differences between fantasy and reality occurs readily without forcing it prematurely.

A 26-year-old married man employed as a television and radio sportscaster commented, "Part of the joy of childhood is not having to deal with this differentiation all the time."

The statement which dealt with fantasy as very healthy and worthy of encouragement (4) elicited a strong positive reaction from Factor I.

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(4) A child needs a certain amount of make-believe, and fantasy play should be encouraged.	1.938	.880	1.058

I think respondents may feel that make-believe fosters mental growth and creativity. Further, pretending develops a child's imagination and personality. In role playing, a child can experience alternative careers and lifestyles and discover which ones appeal to him as an individual.

"Fantasy is essential," said a 25-year-old teacher with no children. "Too often, male children feel pressured to fit into the stereotyped masculine role and repress expression. Make-believe allows release."

A 27-year-old sportscaster and father of one speculated, "The wandering, free thinking young of today may be the geniuses of tomorrow."

The Play Purist indicated a favorable attitude toward the view that children learn from every situation whether structured or make-believe (50).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(50) Kids learn from almost everything. It doesn't matter that much whether the game is structured or make-believe.	2.490	.570	1.919

I speculate that Factor I has very definite ideas about the process of learning and the function of structure in playtime. Children are very impressionable and most experiences can be expected to have some impact on them. Moreover, learning and laughter are not incongruent. Some of the most effective lessons are taught with some degree of humor and fantasy.

A 37-year-old professor and father of three remarked, "My little ones take great pleasure in playing imaginatively with pots and pans while becoming familiar with the concepts of size and shape."

A strong opposition was raised to the suggestion of the introduction of structure to a child's environment before the child is 5 (17).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(17) I don't like structured learning for kids under 5 years. The child gets enough of that when he starts school.	-.234	-1.541	1.307

It is my estimation that Factor I may believe that too soon schools and other institutions put limits on a child's creativity. Children under 5 years old should have the freedom to indulge in any form of play. Structure sometimes inhibits imagination, so fantasy should be unrestrained at this early age.

The Play Purist firmly rejected the view that the best toys are constructed to foster concentration and perseverance (54). Further defining their standards for choosing toys, the Play Purist expressed the sentiment

that a toy beyond a child's ability was not challenging but frustrating (52).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(54) A good toy can give a child a sense of achievement and develop concentration and perseverance.	-.068	1.701	-1.769
(52) A toy should provide a challenge to the child's intelligence.	-.287	1.157	-1.443

It appears to me that Factor I may feel strongly that playtime is not meant to be an effort but a pleasure. Thus, the amount of entertainment a toy may generate is the true assessment of its value.

A 26-year-old married childless woman student commented, "Children should be able to enjoy their toys and not have to work at play."

In further support of this notion is the strongly positive reaction elicited by statement (34) dealing with the view that it is important that a child's toys should not be too difficult so he can experience success easily.

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(34) It's important for kids to experience success. Therefore toys should not be too difficult for the child.	1.135	.320	.815

I assume that respondents believe that a healthy self concept is essential to a child's emotional development. Toys which engender the satisfaction of accomplishment can especially enhance the growth of a child's positive attitude toward himself.

"Andrea is not as bright as some children her age. She needs to be encouraged and is easily defeated. If I were buying for her, making sure the toy was not too difficult would be extremely important. It makes her so happy when she succeeds," offers a 22-year-old unmarried student in reference to her 6-year-old niece.

Play Purists favored the statement which suggested that the child's use of manufactured toys be limited so he learns to create with his natural environment (7).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(7) The child shouldn't have many manufactured toys so that he learns to create out of his natural surroundings.	1.348	-.187	1.534

I think that Play Purists feel that manufactured toys have no inherent creativity. When the child can not contribute changes to suit his own ideas, the possibility for self expression is lacking.

In the same vein, Factor I has agreed that manufactured toys backed by research (in respect to safety considerations and the child's needs) can not be labeled ultimately as best toys (47).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(47) A good toy is backed up by research as to what children need and what is safe for them.	-1.054	.938	-1.992

It is my opinion that Play Purists believe that because a toy has been tested in a laboratory setting, this does not guarantee that it will appeal to a child in real life.

Reported a 37-year-old professor and father of three, "My own experience has shown that most often my son is more interested in the wrapping paper at Christmas than the toys he gets."

Factor I expressed an adverse reaction to toys that are mechanized and move or walk (35)

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(35) I prefer to give my children toys that do something-that move or walk or something.	-1.867	-1.014	-.883

I will venture to guess that it is a commonly held opinion that a toy which performs everything leaves little to the child's imagination; that it's better to allow the child to manipulate the toy himself than to simply observe.

Play Purists voiced strong opposition to the notions of toys which required construction (21) and toys which have many parts to put together (41).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(21) I like toys that children construct. They can be proud of it as a finished product.	-.006	1.264	-1.270
(41) I like to buy toys that have parts to put together.	-.871	.366	-1.237

I suspect that the general feeling present here is that such toys most often necessitate parental supervision and when an adult is not present the child can not enjoy

the toy. Many instructions may be beyond the child's comprehension. A child will become impatient or ignore the directions entirely and put aside the toy out of discouragement.

Factor I indicated agreement with the statement concerning the fact that the day of the dollar gift is gone and it is relatively easy to spend two dollars on a toy purchase today (30).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(30) Anybody will spend $2.00 for a toy these days. The day of the dollar gift is gone.	-.057	-1.474	1.037

It appears to me that the Play Purists may be dissatisfied that playtime has become so commercialized. Inexpensive gifts such as balls and blocks can no longer be bought for under $2.00. Instead, highly advertised elaborate constructions are popular today. They may lay the blame for high prices at the feet of big name manufacturers who only have an interest in making a profit.

Commented a 37-year-old professor and father of three, "This has been my experience with American industry-- toy-makers or otherwise. Making a profit is the prime motive."

Play Purists heartily agreed with avoiding toys with a high violence potential (43).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(43) I avoid toy guns and other toys with high violence potential. We have enough violence in the world without encouraging children to play violence.	.699	.528	.171

It is my guess that Factor I believes that playtime should be a pleasurable departure from reality's cares without contaminating it with violence.

A 25-year-old woman third grade teacher remarked, "Kids should learn to express themselves in a non-violent manner with particular attention to male children who are expected to be physical and aggressive."

"Many adults never grew up beyond associating violence with play and do not fully understand the seriousness of the disorder they perpetrate," asserted a 37-year-old professor and father of three.

Factor I strongly disagreed with the idea of rewarding a child when he behaves (29).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(29) I sometimes reward my child with a toy when he behaves.	-2.364	-.786	-1.578

I will speculate that Factor I may feel that a child should learn to control his behavior because he realizes that poor conduct is inappropriate, not because he expects a gift. Further, it seems to be the general sentiment that persons who practice this type of conditioning are shirking their responsibility as parents to properly discipline the child.

"Rewarding a child with a toy when he behaves shows a child that 'behaving' is extraordinary' when in reality it should be ordinary," commented a 23-year-old production control supervisor with no children.

A 22-year-old unmarried woman student added, "I think rewarding a child with a toy for being good is an easy out for the parent."

Strong agreement was voiced for the statement dealing with allowing children to participate in toy purchase decisions (25).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(25) Kids should have some say-so in the types of toys his parents buy for him.	-1.269	.758	.510

It seems reasonable to suggest that respondents feel simply that children are individuals and entitled to cultivate their own tastes and opinions.

Factor II, The Eager Educationalist

Evidence for Sketch

Factor II, the Eager Educationalist, is comprised of seventy-four individuals including fifty-five women (ten single, forty-one married, three divorced and one "no response") and nineteen men (two single, sixteen married and one "no response"). Ages of the respondents ranged from 20 to 75 years, the average age being 27.7 years.

The average number of children of Factor II (determined by taking the average number of children of all married and divorced persons) is 2.5. The ages of the married and divorced respondent's children ranged from two months to twenty-three years with the average age calculated at two years and eight months.

Occupations included sixteen housewives, thirteen students, twelve teachers, five secretaries, four newscasters, two professors, two engineers, two beauticians, two public information analysts, two speech therapists, two computer operators, two business managers, two registered nurses, two educational administrators, one cashier, one bank clerk, one retiree, one production control supervisor, and two "no responses."

Religious affiliations constituted twenty Catholics, sixteen Protestants, fifteen Atheists, four Methodists, four Lutherans, three Presbyterians, two Greek Orthodox, two agnostics, two Episcopalians, two Christians, one Mormon, one Jew and one Moslem.

Toy selection and consumption behavioral background data revealed that respondents composing Factor II purchase an average of four toys for Christmas, two for birthdays, one toy for special occasions and three toys for non-special occasions.

The following is a detailed analysis of the discriminating statements array based upon the values Eager Educationalists placed on certain items in the Q-sort. Included are those statements with which they agreed on more than any other factor agreed (i.e., positive

discriminating items) and those statements with which they disagreed (i.e., negative discriminating items). In addition, supporting comments made by factor members concerning statements of particular interest to them are offered when appropriate.

Factor II most strongly agrees with the statement that a child's playtime is a valuable opportunity to encourage thinking and should not be wasted on meaningless activity (56).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(56) I want my child to have toys that will help him think constructively, not just pass time.	-.018	1.499	-1.517

It is my impression that the Eager Educationalist entertains the attitude that a child is never too young to learn. The impressionable years of childhood would be squandered if parents were not alert to occasions when knowledge could be introduced to their son or daughter. Enjoyment may be a pleasurable by-product of the toy but its ability to develop a child's mental or physical dexterity is a toy's primary function.

A 27-year-old father commented, "A child's mind is

very bright and inquisitive. They are constantly groping for stimulation. My 4-year-old daughter can learn many mechanical skills used in dressing when she plays with a doll that has buttons, zippers, snaps, ties and buckles."

Conversely, the statement the Eager Educationalist most strongly agreed with, dealt again with this factor's concept of play. They heartily defend the notion of structured or organized play (2).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(2) I'm against organized or structured kinds of play.	-1.431	-1.813	.382

After examination of a number of comments concerning this notion, I conclude that these persons in general believe that all play must be organized. Organization fosters cooperation and without this element chaos ensues. Successful adjustment is based on one's ability to adapt to the structure of the circumstance. Some internalization of discipline prepares the child for the future.

"The real world is structured. Without previous structure in his environment the transition to structure could be disturbing for a child," said a 23-year-old mother

of one.

Thus, it seems apparent that Factor II holds that play-time should have a purpose. Further demonstrating this theme are the statements the Eager Educationalist favored strongly in defining criteria for a good toy. Toys which provided a challenge to a child's intelligence (52) and encouraged a sense of achievement, concentration and perseverance (54) were most highly regarded.

Statements	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(52) A toy should provide a challenge to the child's intelligence.	-.287	1.157	-1.443
(54) A good toy can give a child a sense of achievement and develop concentration and perseverence.	-.068	1.701	-1.769

It is my opinion that Factor II subscribes to the notion that toys can effectively contribute to a child's healthy self concept. A challenging toy promotes experience in problem-solving and imparts a spirit of accomplishment when the activity is successful.

"It is important to me that my child experiences gratification in a play situation. A good toy offers

a constructive endeavor which yields a sense of pride when completed," said a father of one in response to statements (52) and (54).

In line with challenging a child's intelligence, it appears that Factor II believes that novelty and creativity in a toy is beneficial (24).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(24) I like a toy that's a novel, creative idea.	.663	.858	-.194

I think that the Eager Educationalist views novelty as stimulating to the imagination and an encouragement to creative thought.

Statements which dealt with toy safety also elicited a strong reaction from the Eager Educationalist. Good toys were further defined as those backed by research regarding the child's needs and safety (47). In addition, it was inferred that safety was one of the single most important criteria in this factor's toy purchase decisions (37).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(47) A good toy is backed by research as to what children need and what is safe for them.	-1.054	.938	-1.992

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(37) Most toys are safe enough, and that usually isn't an important part of my buying decision.	-.596	-2.009	1.413

After investigating the explanations that accompanied these statements it is my observation that those individuals which comprise Factor II check their child's environment carefully for any safety hazards. Children, particularly the very young, cannot readily recognize danger. A toy is manipulated by a child in every way and the consequences of it being broken must be assessed. Moreover, it appears that Factor II places confidence, for the most part, in the results of toy research. Research is responsible for safety attributes such as flame retardance, electric shock resistance, fireproofing, shatter-proofing and a host of other factors. The Eager Educationalist may regret that he is not always available to supervise his child's playtime and thus seeks toys for which he can be assured that all precautions have been taken to prevent injury.

It appears that this factor also expresses trust in research's ability to match their child's needs with an appropriate toy. Said a 27-year-old father of two, ages 4½ and 2, "I am a firm believer in behavioral science research."

In conjunction with Factor II's opinion on the validity of

research in toy manufacturing, is their apparent support of age consideration in selecting toys (9).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(9) It's so important to consider a child's age in selecting toys.	.854	1.548	-.693

I have gathered from the evidence that Factor II feels strongly that the degree of difficulty of a toy must correspond with a child's age and ability. If the child's mental or chronological age is not appropriate to the complexity of the toy, it will be abandoned out of boredom or frustration.

Several respondents expressed appreciation for toy manufacturers who label their products according to age differentiation. A 23-year-old law student and father of a 3-year-old commented, "I enjoy reading the information on toy packages which are suitable for Sammie's age."

Members of Factor II defended the ability of educational toys to stimulate creativity beyond its original purpose (10).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(10) Most educational toys are good for a single purpose. Consequently, they stifle a child's creativity.	-.658	-1.829	1.172

In my assessment, the Eager Educationalist believes that although an educational toy is usually designed to develop a particular skill, a child's creativity is still stimulated with any new experience.

A 25-year-old third grade woman teacher offers, "Fisher Price has a work bench and tool toy to pound stakes through to develop dexterity. But a child can also imagine she is someone else (such as a worker) while she is using it."

The Eager Educationalist appeared to trust the toy industry in general. There was consensus disagreement with the statements that good toys were difficult to locate (11) and that toy advertisements played no part in their purchase decisions (18). Further, their orientation to toy manufacturers contrasted with the statement that a child should have few manufactured toys and instead should be encouraged to create with his natural environment (7).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(11) It's hard for me to find good toys for my children.	.048	-1.531	1.579

(18) When it comes to toys, I am immune to advertising.	-.437	-1.474	1.037
(7) The child shouldn't have many manufactured toys so he can learn to create out of his natural surroundings.	1.348	-.187	1.534

I have concluded that Factor II feels comfortable that highly advertised brands offer greater assurance of quality and durability. A reputable manufacturer must stand behind his product or he will soon lose public confidence. Manufactured toys also advertise discoveries of new concepts which open up avenues that 'natural' toys could not hope to tap.

"I am always receptive to toy ads. It is my responsibility as a parent to be alert to every opportunity to advance which I can give my child," commented a 25-year-old housewife and mother of one.

Broadly, the toy purchase decision of Factor II individuals reflects the judgement of the adult, although the child's preference does not go without consideration (46).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(46) I buy toys that my child likes but they must also meet my own criteria of acceptability.	.836	.868	-.032

The Eager Educationalist believes that although a child is entitled to his own tastes, a parent's guidance is necessary. Many youngsters cannot assess a toy's relative quality and safety.

Factor II expressed disagreement with the statement that toys with numerous parts are an annoyance for the parent because they require picking up after the child (39).

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(39) A toy that has too many pieces can turn into a pain in the neck for the parent, especially when it comes to 'pick-up' time.	.211	-.935	1.146

Apparently, Factor II views some picking up after the child as simply one aspect of being a parent. Additionally, a child will often be fascinated by a toy with many pieces and a gradual assignment of toy maintenance to the

child can foster a sense of responsibility.

General disagreement was indicated for the notion that people who do not buy 'scary' toys forget that it is fun to be frightened when not really in danger.

Statement	Factor I Z-Score	Factor II Z-Score	Difference (Z-Z)
(45) People who won't buy their child a scary toy forget how much fun it is to be scared- when you know you're not really in danger.	-.192	-1.439	1.248

Judging from numerous comments, Factor II holds that small children cannot differentiate between pleasurable fear and danger. At an age when insecurity is a common emotion, fear is not entertainment for a child.

One 30-year-old man, a business manager and father of two, said, "Not only is fear not enjoyable, but children should learn that scaring others is not a desirable behavior."

The Double Q-Sorts

The results of the double Q-Sorts (thirty-six of the fifty-six respondents were asked to perform double sorts to determine if people did indeed use different criteria

to select toys for children of different sexes) are as follows: a total of three persons were found to subscribe to the conditions of Factor I in selecting toys for girl children and simultaneously the conditions of Factor II for selecting toys for boy children. One individual reacted in the opposite manner. The implications of this information will be dealt with in the next chapter.

CHAPTER IV

CONCLUSIONS

Theoretical Implications

This study sought to divide toy consumers into segments on the basis of attitudes. It was found that when confronted with a toy purchase decision, consumers reacted differently. Two segments were differentiated on the basis of attitudes. Of course, while there could be more than two such groups, the number of these attitude segments is not unlimited.

The identification of these attitude segments was the first objective of this study, the second being to analyze the usefulness of the information in terms of theoretical and practical implications. Implications for the theory cover broad areas of application, while practical implications have specific application to the attitude segments.

As cited in the previous chapter, a total of three persons were found to subscribe to the conditions Factor I used in selecting toys for girl children and simultaneously the conditions Factor II used for selecting toys for boy children. One individual reacted in the opposite

manner. There were a possible thirty-six persons who each completed one sort while having a girl child in mind and one sort specific to a boy child. These four irregularities suggest a conspicuous lack of evidence to support the charges made by feminists that parents perpetrate sex role stereotyping and telegraph their prejudices and preconceptions with their toy selections.

Pogrebin makes reference to the "20th century preoccupation with normality" as responsible for the vigorous discrimination between the two sexes and the necessity to label what each must do and become.[1] Further, she points to the common notion that girls receive aesthetically oriented toys such as dolls, paints and jewelry for gifts and boys receive gifts of a more educational nature such as chemistry kits and erector sets.[2]

Contrary to these assumptions, the majority of the double sorts (respondents sorted one set of statements specific to a girl child and one set specific to a boy child) were clustered on Factor II, the educational segment. Thus, minimal differentiation was detected in

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[1] "Toys For Free Children," p. 415

[2] "Down With Sexist Upbringing," p. 164.

selecting toys for both sexes. For the most part, individuals chose toys of an educational orientation for both boy and girl children.

However, before drawing the conclusion that no sexism in toy purchasing exists in the population in general, one must note that the design of the study prevents such generalization. Quota control sampling was used in selecting the respondents, the P-sample. The P-sample was classified into selected categories thought to be relevant to differences in feelings about toys. Participants all resided in the university town of East Lansing. Hence, a considerable number of the respondents had some direct (student or professor) or indirect contact (spouse of student or faculty member) with the university. The average age of the respondents was young in comparison with the general population. These two variables, youth and exposure to a university atmosphere, may account for some degree of "enlightenment" among respondents in sex role stereotyping in toys for children.

Second, it is interesting to note that out of a possible eighty-two sorts (ranking of statements), seventy-four of those were clustered on Factor II, the educationally

oriented segment. It was concluded that these individuals generally feel that play creates the perfect learning situation and it is indispensible to the growth and development of every child. They believe play can teach a child how to cope with the problems he will face in the future and it is the responsibility of the parent to exploit every opportunity to do so.

Hence, this evidence does lend support to the claim made by Dr. R. Feinbloom and Dr. P. Wolff that parents are likely to consider themselves negligent if they do not take every possible advantage in increasing their child's intellect.[3] In further agreement with Dr. Feinbloom, if these results are generalizable to the population, it is apparent that our society places considerable value on academic achievement in light of its financial and social rewards. Moreover, many persons seem to be in favor of encouraging intellectual competition as early in the child's life as possible.

Again, a qualification must be noted here in reference to the design of the study. As stated previously, quota control sampling was used in selecting the respondents and all participants resided in the university town of East Lansing. Thus, a great majority of the P-sample had direct

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[3]Wolff and Feinbloom, p. 999.

or indirect exposure to the university atmosphere, which may account to some minor degree for the concern with early intellectual development.

Practical Implications

From the interpretation of the factors practical implications may be drawn. Certainly one of the most important implications of this research is that it gives the toy industry a new manner in which to look at consumers. Toy manufacturers should be able to better understand their customers and their needs beyond viewing them as a faceless mass of parents and children. They will, perhaps, be able to see how consumers relate to variables which influence their toy selection, their beliefs about the purposes of toys, the environment in which the toy is used and the attributes of the toy itself.

Consensus Items

"No brand can expect to appeal to all consumers. The very act of attracting one segment may automatically alienate others," said Haley (1968).[4] In respect to this approach, no single communication format will attract and motivate all toy

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[4]"Benefit Segmentation: A Decision-oriented Research Tool," p. 34.

consumers. As demonstrated by the two segments generated, care must be taken in communicating with various attitude segments. All consumers do not entertain identical conceptions about toys. However, this study does provide ideas for general communication, manufacturing and marketing strategies and strategies for specific segments.

Those items held in consensus by both segments can be used as a basis for communication in mass media, as well as for manufacturing and marketing policies. Using two highly valued consensus items as an example, one can see how message strategies can be adapted for both the groups.

One important positive consensus item deals with games for two or more children which help teach them to get along well with others. While important to both groups, evidence suggests that the "games for two or more children" which the attitude segments have in mind, may differ. A message could be designed to reach the two groups by attending to the needs of both at once. Another strategy would be to design two or three messages with each one covering two or three of the needs of both groups. Finally, two separate messages could be prepared, each one focusing on one need of one group.

A message for the Play Purist based upon this consensus

item might emphasize the sheer pleasure of joining in a "make-believe" game with good friends. The Eager Educationalist would appreciate knowing how a game which involves group activity would prepare his child for future social interaction.

Another important consensus item deals with the value of allowing the child to, at least partially, take part in the toy buying decisions. The child's preference is important to both behavior segments but reviewing the evidence for each sketch, one can see how each segment's motives might differ. The Play Purist would like to know what his child takes delight in to buy toys simply to service the sake of enjoyment. The Eager Educationalist would like to buy toys that suit his child's interests because children are more apt to learn when the subject matter appeals to them.

Individual Implications for Factor I

The interpretation of each factor vividly points out areas of interest for that segment and this information suggests numerous individual manufacturing, marketing and advertising strategies for each factor.

"...Toys are most prized and best loved if they have one simple quality: fun," says one noted author and toy

researcher.[5] Factor I, the Play Purist, demands the element of "fun" in all the toys he chooses. Of course, the quality of "fun" is of a rather subjective nature. But, using the other information generated from the interpretation of the factor, a line of toys could be developed that would satisfy the Play Purist's other stipulations for an ideal toy. Hopefully then, one would be closer to approximating the Play Purist's concept of "fun."

Factor I most strongly favors the exercise of a child's imaginative capacities. Toys which encourage fantasizing would be of particular value to the Play Purist. A few examples of some possibilities might be a wooden assortment of international homes--an igloo, a Spanish hacienda, Oriental or African houses--to transport the child's mind to cultures around the world; in its simplest form a lifestyle can be tried on with just a change of clothes--a collection of hats denoting different professions: a baker, an engineer, a professor, a rabbi, a coal miner, a jockey; nothing is more fascinating than a face in a looking glass and hand puppets or dolls with unbreakable mirror faces would permit the child to experiment

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[5] Pogrebin, "Toys For Free Children," p. 408.

with the idea of himself in different roles; felt figures which adhere to a board would allow the child to create jungle, sports or storyland scenes; for a glorious symphony or solo, a set of rhythm instruments such as a tambourine, triangle and cymbals or an array of hand bells to experiment with musical tones would bring out the performer in a child.

Factor I supports unstructured play which requires maximum operation of a child's creativity. Wind-up and battery-operated toys are of course frowned upon because the child is left to passively observe their activity. Dr. Lee Salk, head of Pediatric Psychology at New York Hospital/ Cornell Medical Center echoes this sentiment with, "A good toy does only ten percent of the playing and the child ninety percent."[6]

Dr. Benjamin Spock points out:

> The toy with which there is only one possible type of play because the toy is so highly structured may fascinate the parent, and it may fascinate the child for a few minutes or perhaps an hour or two. But it usually peters out as far as interest is concerned in no time at all and has no constructive, character-building or maturing functions for the child."[7]

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[6]Lyon, "Do Kids Need Toys Every December 25th?" p. 55.

[7]Claire Safron, "Sorting It Out," Redbook, p. 98.

Hence, some examples of toys which would satisfy these conditions would be a paper bag sculpture kit; thick texture paints to squeeze from tubes into designs which harden to an indestructible finish; candle sculpture kits to create elaborate candles; wire art kits to make designs with wires stretched on nails; a battery-operated projector, with slides kids can make from cutting up magazines pictures; foam rubber in many pieces shapes and colors to make designs; spool shaped blocks with holes to thread together with a giant wooden "needle"; a large assortment of tracks and chutes to construct runways down which wooden balls careen; weaving looms or needlework kits for older children; collage kits with colored yarn, beads, sequins, buttons, appliques, trim and braiding in separate packages and picture frames to display the masterpieces; a linoleum printing kit with textile inks and various fabrics to decorate clubhouses or to use as gifts; that old favorite--clay--a material that is as malleable as a child's dreams; a birdhouse kit to build and lure bluebirds and woodpeckers; or for the older beginning artist a motorized potter's wheel with paints and glaze to make ceramics.

Other suggestions to take into consideration would be to avoid developing toys with a high violence potential and

to steer clear of excessively high pricing. These are but a few possibilities for the use of the information produced by the factor interpretation. Closer examination will no doubt provide limitless ideas for the creation of toys to accommodate the Play Purist.

Individual Implications for Factor II

Individual practical implications borne out of the interpretation of Factor II are a horse of a surprisingly different color. As noted previously, seventy-four of the eighty-two sorts were loaded in this educationally oriented segment. The evidence is overwhelming that there is indeed a boom in educational toys. However, according to prominent authorities in the area of child psychology, parental zeal in the push for early intellectual development may be somewhat misguided. And, it appears that some toy manufacturers may be capitalizing on this trend. Literature laden with quasi-scientific pronouncements and endorsed by prominent educators is being produced not by developmental specialists or educators, but by toy manufacturers. The prose in a Childcraft promotional pamphlet, Toys That Teach, is typical:

> Childhood is a never-again-moment. Once it is lived, it is gone. And if it is not lived in its fullest

> measure, it may seriously limit the extent and self-fulfilled adult....Nowadays, it is well known that the richness of a child's environment has a profound effect on his later life. Recent research has shown that as much as 80 percent of a child's intelligence is developed before the age of six--thus making the early years the most critical period of his life."[8]

H. Robert Quilitch, director of the Department of Psychology at the Nevada Mental Health Institute, observes that the reference to "80 percent of a child's intelligence" is made by many toy companies is almost certainly an indirect reference made to the research reported in Dr. Benjamin S. Bloom's book, Stability and Change in Human Characteristics (Wiley and Sons, 1964). It was demonstrated that children raised in extremely and profoundly deprived environments might have their I.Q.'s affected by as much as 20 points. The deprivation that Dr. Bloom points to would be found in custodial institutions and places where children are seldom talked to and have no access to television, radio, books and newspapers; it refers to environments with deprivation much greater than that suffered even by poor ghetto children. Dr. Bloom never mentions the importance of educational toys when discussing important aspects of the ideal and deprived environment.[9]

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[8]Quilitch, p. 61

[9]Quilitch, p. 61

A "critical period" is a time in a child's mental development during which he must receive adequate stimulation or possibly accrue some degree of retardation for the rest of his life, it is claimed. The phrase "a never-again-moment" is an oblique reference to this notion of the "critical period."[10] As in earnest as the idea sounds, many scientists find it less useful than do toy manufacturers.

Beseiged by requests from worried parents who were frantic to ensure the proper mental development of their child, Dr. Feinbloom and Dr. Wolff of the Harvard Medical School, looked into the matter and drew these conclusions:

> There is no evidence at present to support the assertion that biologically fixed critical periods control the sequence of cognitive development, no evidence that scientifically designed toys are in any way superior to the usual household items available to most infants, no evidence that the systematic application of such toys accelerates intellectual development, and no persuasive evidence that acceleration of specific skills during the sensory motor phase of development, even if possible, has any lasting effects on intellectual competence. ....Certainly, it is not the toys which are a potential source of harm to the child but the atmosphere of urgency surrounding infant enrichment programs. If we have set up toys unjustly as straw men in this review, it was to point concretely to a trend in early education which may become a well established practice, and in which we foresee a potential danger

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Quilitch, p. 61.

to the healthy development of children."[11]

In the same vein, the affective relationship of the parent and child in the first two years is apparently essential for later academic achievement. In their efforts to train their children in the first two years, parents may pay a personal price.[12]

However, H. Robert Quilitch is careful to qualify his criticisms of the educational toy boom. He does not claim that educational toys do not exist. "Rather it seems reasonable to assume that in certain cases children do learn from their play with toys." He suggests instead a revamping of the educational toy industry and their standards.[13]

In agreement with this suggestion, I believe this study points to social implications which cannot be ignored. No one will deny that toys are important. They are a child's first tools for exploring, communicating and learning about himself and the world around him. But the Eager Educationalist

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[11]Wolff and Feinbloom, p. 1001.

[12]N. E. Freeberg and D. T. Pyne, "Parental Influence on Cognitive Development in Early Childhood: A Review," Childhood Development (1967), quoted in Wolff and Feinbloom, p. 1003.

[13]Quilitch, p. 62.

and others like him need to be made aware to what extent toys can be relied on for early intellectual development and the dangers of their misuse, through a program of public education. I recommend further that new industry guidelines be imposed on the educational toy manufacturers and their promotion. In accordance with the interests of Factor II, I have made the following proposals.

Most educational toys today are described by a wide variety of vague terms such as "developmental," helping to provide an "enriched environment," helping the child reach his "full potential," etc. As shown earlier the popular literature dealing with toys is being produced by the manufacturers themselves and is unsupported by developmental specialists or educators. The only consistent characteristics of most modern educational toys is that their goals are stated too vaguely to defy evaluation.

The Eager Educationalist places a high value on toys that are "backed by research." But instead of settling with advertising claims, it is clear that the toy-buying public needs objective information about these toys based on scientific assessments of their educational value and a reliable measure of value needs to be devised. However, before a toy's educational value can be assessed, just

what it is supposed to teach must be specified.

H. R. Quilitch reiterates:

> It is important to remember that if a toy's educational goals are not clearly spelled out, it can never be tested. A research scientist, asked whether a particular toy would enable a child to "master himself and his problems," would throw up his hands in despair."[14]

Also toys on the market that are "scientifically developed" and endorsed by professionals seldom mention what research was carried out with the toys and never include the results of that research in the advertisements.[15]

I advocate that if a manufacturer boasts of the "educational value" of his toys then parents have every right to expect that the skills that the toys intend to teach are clearly specified, the toy has been tested by a reliable measure in a play situation with children, and the results of the first hand observation of the testing be documented in detail on the package or label. Endorsements made by professionals must be dealt with in the same manner.

Before they wonder if a toy will do their children any good, parents want to be certain it won't do them any harm and safety is a prime consideration for the Eager Educational-

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[14]Quilitch, p. 62.

[15]Lyon, p. 98

ist. The toy industry's Ralph Nader, Edward M. Schwartz, catalogued horror stories of children being burned, poisoned, electrocuted, blinded, strangled and killed by accidents with toys.[16] As a result of such pressures, the Federal Government has proposed two important new safety regulations. If the toy had parts that were small enough to be swallowed it would be labeled unsafe for a child under three by one of the new regulations. If it can pass through a test cylinder that measures, roughly, one and 1/4-inches by two and 1/2-inches, a toy piece is considered "small enough."[17]

Toys will be required to pass a special "drop test" by the second regulation. The test is not designed to guarantee that toys won't break, but to make sure they don't present such dangers as sharp edges or too-small pieces if they do break. For a child under 18 months, the toy will be dropped on a tile-over-concrete surface ten times from a height of four-and-a-half feet, simulating its being thrown from a high chair or out of a crib. For a child over two, the toy would be dropped four times on the same surface from a height of 3-feet, simulating its being dropped from a

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[16]Lyon, pp. 55-56.

[17]Safron, p. 99.

regular chair.[18]

Using these guidelines, I recommend that manufacturers label toys according to the ages for which they would be considered safe.

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[18]Safron, p. 99

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APPENDICES

APPENDIX A

FOCUS INTERVIEW SCHEDULE

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FOCUS INTERVIEW SCHEDULE

Focus Interview Schedule: Toys

I'd like to talk to you about children's toys, to get a feel for what toys your children like and how you go about choosing them.

1. How many children do you have? What are their names and ages?

2. Recall the last time you bought a toy or toys. What were the circumstances?

3. For each of your children, tell me what kinds of toys do they like? (Ask: "How do you know when the child likes that toy?" Learn how the parent judges a successful toy: length of time played with, amount of excitement shown, etc.).

4. What kinds of toy does each child dislike?

5. For each child, what kinds of toys do you like them to have? (Why? What do you want toys to do for the child? For you?)

6. For each child, what kinds of toys do you avoid?

7. Do you and your (spouse) choose the same kinds of toys for your children? (Discover if using different choice criteria and why).

8. When do you buy toys for your children? (Answers may be special occasions or not.) Do you buy toys differently at different occasions? (How? Why? Christmas? Birthdays? Shopping trips? Etc.)

9. How do you buy toys? (Stores - what kinds? Catalogues?)

10. Do you like to shop for toys? Why?/Why not?

11. Describe the best place to get toys. (Why is it the best?)

12. What are your children's favorite tv programs? Stories? Toys? Games?

13. Can you name any toy companies?
(List them, then for each, ask:
What do you think of _____(company)?)

14. What do you think are the major influences on your decision to buy toys for your children? (How do you feel about each influence?)

15. What do you think are the major influences on your children's toy purchases?

16. What do you think are appropriate price ranges for toys that you buy?

17. What do you think about the number of toys your children have?

18. Do you think that your children have different experiences with toys than you did as a child?
In what ways?
What do you think about the differences?

APPENDIX B

STATEMENTS IN THE Q-SAMPLE

APPENDIX B

STATEMENTS IN THE Q-SAMPLE

1. Giving toys is nothing more than a way of showing love and affection.

2. I'm against organized or structured kinds of play.

3. When playing, a child should have to differentiate between what is real life and what is fun or silly.

4. A child needs a certain amount of make-believe, and fantasy play should be encouraged.

5. There should be competition with other children. Competition is important. Children have to learn to cope with it to survive later.

6. A toy should require the child to be creative in playing with it.

7. The child shouldn't have many manufactured toys so that he learns to create out of his natural surroundings.

8. I like toys with batteries. They move. They <u>do</u> something.

9. It's so important to consider a child's age in selecting toys.

10. Most educational toys are good for a single purpose. Consequently, they can stifle a child's creativity.

11. It's hard for me to find good toys for my children.

12. Finally, you never really know what toy a kid will like. A little child will sometimes ignore a new toy to play with a baking soda can.

13. Toys are good if they help teach a child the importance of following instructions.

14. I buy toys for my children that I'd like if I were a child.

15. You can buy a child too many toys. It's important to learn to be happy with what you have.

16. I prefer toys that my child can play with without my help or participation.

17. I don't like structured learning for kids under five years. The child gets enough of that when he starts school.

18. When it comes to toys, I am immune to advertising.

19. The parent should buy only toys that he thinks his child would like.

20. It would be nice to have toys that kids continue to have fun with. Usually, children get tired of toys long before they wear out.

21. I like toys that children construct. They can be proud of it as a finished product.

22. Price plays an important role in my choice of toys for my children.

23. Advertising is the big thing. If ads create a big enough want in children, the parents usually end up satisfying the want.

24. I like a toy that is a novel, creative idea.

25. Kids should have some say so in the types of toys his parents buy for him.

26. I like games that allow you to build a good relationship with your child.

27. A child should have to take care of his toys. It teaches him responsibility.

28. It's nice to buy a toy for a child when he is ill.

29. I sometimes reward my child with a toy when he behaves.

30. Anybody will spend $2.00 for a toy these days. The day of the dollar gift is gone.

31. You have to be careful buying toys. Many toy makers will produce anything that will sell -- regardless of safety or potential harmful uses.

32. Both parents should agree on the right criteria for selecting toys for their children.

33. The main purpose of a toy or a game is to help my child have fun and to laugh.

34. It's important for kids to experience success. Therefore, toys should not be too difficult for the child.

35. I prefer to give my children toys that do something -- that move or walk or something.

36. Toys should be bright and colorful.

37. Most toys are safe enough, and that usually isn't an important part of my buying decision.

38. There is no such thing as a safe toy. A ball lying on a stairway is unsafe, but is not a "dangerous" toy.

39. A toy that has too many pieces can turn into a pain in the neck for the parent, especially when it comes to "pick up" time.

40. Toys serve the useful purpose at times of keeping kids entertained and out of adult hair.

41. I like to buy toys that have parts to put together.

42. I like toys that get children out of doors.

43. I avoid toy guns and other toys with high violence potential. We have enough violence in the world without encouraging children to "play" violence.

44. Games and toys for two or more children are good; they teach kids to get along with others.

45. People who won't buy their child a "scary" toy forget how much fun it is to be scared -- when you know you're not really in danger.

46. I buy toys that my child likes, but they <u>also</u> must meet my own criteria of acceptability.

47. A good toy is backed up by research as to what children need and what is safe for them.

48. I look for durability in a toy. If it isn't sturdy, it will get torn up in a hurry.

49. A toy should be simple and uncomplicated.

50. Kids learn from almost everything. It doesn't matter that much whether the game is structured or make-believe.

51. Board games are a family affair. We can all sit down and have fun together.

52. A toy should provide a challenge to the child's intelligence.

53. The right kind of toys are useful in teaching manipulative skills.

54. A good toy can give a child a sense of achievement and develop concentration and perseverance.

55. I like to buy toys that have working parts so the child has to think a little.

56. I want my child to have toys that will help him think constructively, not just pass time.

APPENDIX C

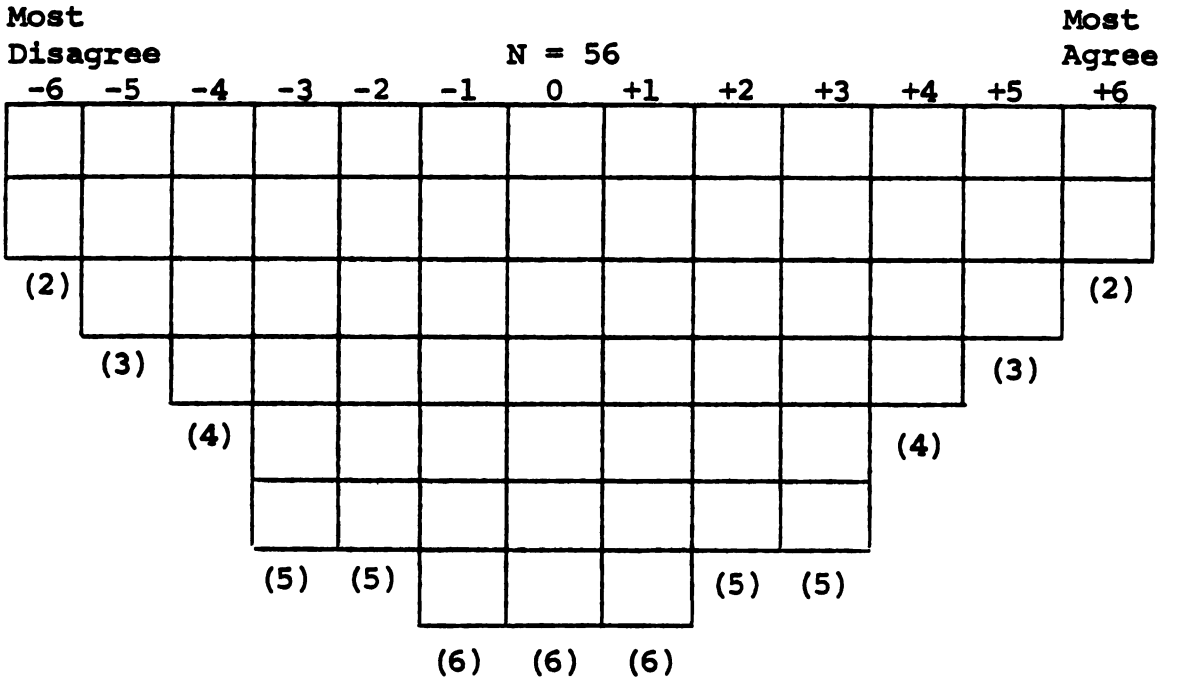
Q-MATRIX
AND
QUESTIONNAIRE

APPENDIX C

Q-MATRIX
AND
QUESTIONNAIRE

TOY STUDY
1973

Subject #_____



INTERVIEWER: _____

SUBJECT: _____

AGE: _____SEX: _____OCCUPATION: _____

MARRIED: _____NUMBER OF CHILDREN: _____

AGES OF CHILDREN: _____,_____,_____,_____,_____,_____

RELIGION: _____

(1.) Estimate, as an average, how many toys you purchase per child for:

Christmas_____
Birthday_____
Other Special Occasions_____
Non-Special Occasion Per Year_____

(2.) Describe your favorite toy for children_____
_____
_____
_____

(3.) On the back of this page, please explain why you agree with the +6 statements and why you disagree with the -6 statements.

APPENDIX D

DEMOGRAPHIC DATA

Table D-1.--Factor I, Demographic Data.

Respondent	Sex	Age	Marital Status	Number of Children	Ages	Religion	Occupation
22	M	28	M	2	3, 6	-	Teacher
44	F	32	M	3	15, 12, 11	Protestant	Clerk
45	F	32	M	3	15, 12, 11	Protestant	Clerk
54	F	22	S	0	0	-	Student
57	F	31	M	2	10, 8	Catholic	Teacher
61	F	20	S	0	0	Catholic	Student
62	M	23	M	0	0	Catholic	Supervisor
67	F	20	S	0	0	Catholic	Cashier

Table D-2.--Factor II, Demographic Data.

Respondent	Sex	Age	Marital Status	Number of Children	Ages	Religion	Occupation
1	F	25	M	1	2	Lutheran	Beautician
2	F	25	M	1	2	Lutheran	Beautician
4	M	27	M	2	5, 4	Atheist	Professor
6	M	27	M	0	0	Catholic	Engineer
7	M	27	M	0	0	Catholic	Engineer
8	M	26	S	0	0	Agnostic	Newscaster
9	M	26	S	0	0	Agnostic	Newscaster
11	M	37	M	3	7, 3, 1	Catholic	Professor
12	F	22	S	0	0	Episcopalian	Public Info. Analyst
13	F	22	S	0	0	Episcopalian	Public Info. Analyst
14	F	26	M	0	0	Catholic	Student
15	F	26	M	0	0	Catholic	Student
16	F	25	M	0	0	Protestant	Secretary
17	F	25	M	0	0	Protestant	Secretary
18	F	28	M	0	0	Lutheran	Teacher
19	F	28	M	0	0	Lutheran	Teacher
20	F	24	M	1	18 mth.	Protestant	Therapist
21	F	24	M	1	18 mth.	Protestant	Therapist
24	M	23	M	1	4	Atheist	Computer Operator
25	M	23	M	1	4	Atheist	Computer Operator

Table D-2.--Continued

Respondent	Sex	Age	Marital Status	Number of Children	Ages	Religion	Occupation
26	M	30	M	2	7, 5	Catholic	Business Manager
27	M	30	M	2	7, 5	Catholic	Business Manager
28	F	30	M	1	7	Greek Orthodox	Student
29	F	30	M	1	7	Greek Orthodox	Student
30	F	25	M	0	0	Protestant	Teacher
31	F	25	M	0	0	Protestant	Teacher
32	M	28	M	0	0	Christian	Student
33	M	28	M	0	0	Christian	Student
34	F	25	M	0	0	Presbyterian	Teacher
35	F	25	M	0	0	Presbyterian	Teacher
36	F	27	M	1	5	Catholic	Housewife
37	F	27	M	1	5	Catholic	Housewife
40	F	24	M	0	0	Protestant	Teacher
41	F	24	M	0	0	Protestant	Teacher
42	F	25	M	1	1	Atheist	Housewife
43	F	25	M	1	1	Atheist	Housewife
46	F	24	S	0	0	Catholic	Student
47	F	24	S	0	0	Catholic	Student
48	F	26	M	2	6, 3	Methodist	Nurse
49	F	26	M	2	6, 3	Methodist	Nurse

Table D-2.--Continued

Respondent	Sex	Age	Marital Status	Number of Children	Ages	Religion	Occupation
50	F	24	M	1	4	Atheist	Secretary
51	F	24	M	1	4	Atheist	Secretary
52	F	30	D	2	8, 5	Atheist	Student
53	F	30	D	2	8, 5	Atheist	Student
55	F	22	S	0	0	Atheist	Student
56	F	31	M	2	10, 7	Catholic	Teacher
58	F	32	M	3	8, 5, 3	Protestant	Housewife
59	F	32	M	3	8, 5, 3	Protestant	Housewife
63	M	23	M	0	0	Catholic	Supervisor
64	M	27	M	1	6	Atheist	Radio Announcer
65	M	27	M	1	6	Atheist	Radio Announcer
66	F	20	S	0	0	Catholic	Cashier
68	F	27	M	1	3	Protestant	Housewife
69	F	27	M	1	3	Protestant	Housewife
70	F	23	S	0	0	Catholic	Teacher
71	F	23	S	0	0	Catholic	Teacher
72	F	26	M	2	5, 10	Catholic	Housewife
73	F	26	M	2	5, 10	Catholic	Housewife
74	F	26	M	1	3 mths.	Protestant	Housewife
75	F	32	D	2	9, 12	Atheist	Student
76	F	23	M	1	2 mths.	Mormon	Housewife

Table D-2.--Continued

Respondent	Sex	Age	Marital Status	Number of Children	Ages	Religion	Occupation
77	F	45	M	4	23, 16, 10, 6	Protestant	Housewife
78	F	75	S	0	0	Atheist	Retired
79	F	48	M	3	No Answer	Protestant	Housewife
80	F	26	M	3	6, 4, 1	Islam	Housewife
81	M	40	M	6	11, 9, 7, 5, 3, 2	Islam	Administrator
82	M	29	M	1	2	Methodist	Teacher
83	M	23	M	1	3	Jewish	Law Student
84	F	25	M	2	4, 2	Atheist	Secretary
85	F	23	S	0	0	Presbyterian	Bank Teller
87	F	No response	No response	No response	No response	Catholic	No response
88	M	No response	No response	No response	No response	Catholic	No response
90	F	32	M	3	10, 8, 5	Protestant	Housewife
91	F	31	M	2	6, 4	Methodist	Administrator

APPENDIX E

UNROTATED FACTOR LOADINGS

Table E-1.--Unrotated Factor Loadings

Respondent	Factor I	Factor II
1.	.542	-.089
2.	.536	-.088
3.	.291	-.254
4.	.497	-.074
5.	.395	-.164
6.	.697	.454
7.	.640	.458
8.	.589	.032
9.	.588	.044
10.	.341	-.316
11.	.656	-.077
12.	.503	.086
13.	.610	-.060
14.	.659	-.038
15.	.743	.083
16.	.728	.133
17.	.641	.184
18.	.616	.401
19.	.616	.440
20.	.737	-.063
21.	.747	-.053
22.	.202	-.401
23.	.224	-.331
24.	.451	-.160
25.	.492	.091
26.	.650	.027
27.	.597	.046
28.	.498	-.034
29.	.456	-.062
30.	.634	-.101
31.	.661	-.165
32.	.362	.107
33.	.382	-.092
34.	.772	.420
35.	.771	.360
36.	.541	.468
37.	.390	.560
38.	.230	-.055

Table E-1.--Continued

Respondent	Factor I	Factor II
39.	.337	.074
40.	.573	-.136
41.	.635	-.304
42.	.555	-.043
43.	.590	-.114
44.	.333	-.439
45.	.470	-.525
46.	.743	.037
47.	.692	.047
48.	.648	.154
49.	.578	.053
50.	.676	-.178
51.	.616	-.269
52.	.532	-.063
53.	.573	-.175
54.	.461	-.345
55.	.481	-.150
56.	.512	-.227
57.	.497	-.414
58.	.673	-.206
59.	.705	.024
60.	.336	-.149
61.	.467	-.365
62.	.513	-.287
63.	.493	-.202
64.	.562	-.171
65.	.603	-.108
66.	.630	-.272
67.	.630	-.314
68.	.604	-.294
69.	.520	.013
70.	.641	.127
71.	.544	.238
72.	.605	.229
73.	.672	.089
74.	.667	-.231
75.	.500	-.019
76.	.755	-.124
77.	.783	.260

Table E-1.--Continued

Respondent	Factor I	Factor II
78.	.640	-.124
79.	.490	.210
80.	.415	.140
81.	.478	.243
82.	.659	.128
83.	.774	.138
84.	.662	.233
85.	.686	.058
86.	.169	-.268
87.	.692	.252
88.	.650	.306
89.	-.165	.163
90.	.566	-.100
91.	.496	.127
92.	.208	-.280