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Tüketici Davranışı Bağlamında "Bales'in Etkileşim Süreci Analizi" Yaklaşımının Uygulanabilirliğine İlişkin Bir Ön Çalışma

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Özet: Bu çalışmanın amacı, aile içi (karı-koca) satın alma kararlarında "Bales' in Etkileşim Süreci Analizi" nin uygulanabilirliğini test etmektir. "Bales' in Etkileşim Süreci Analizi" yönteminin etkililiğinin incelenmesi sırasında kullanılan araç, yine Bales' gözlemleri aracılığıyla geliştirilmiş olan bir dizi hipotezdir. Araştırmada 15 çift (karı-koca) yer almıştır. Çiftlerden beklenen bir katalogdan yararlanarak stereo müzik seti satın alma kararı vermeleridir. 15 çiftten 5'ine "düşük" ürün bilgisi, 5'ine "orta" ürün bilgisi, ve 5'ine de "yüksek" ürün bilgisi verilmiştir. Uygulamalar doğallığı sağlamak amacıyla deneklerin evlerinde, yani kendi doğal ortamlarında gerçekleştirilmiş, uygulamalar Panasonic HC-V700EG-K ile kaydedilmiştir. Deneklerin etkileşimleri "Bales' in Etkileşim Süreci Analizi" yaklaşımı kullanılarak kategorize edilmiştir. "Bales'in Etkileşim Süreci Analizi" yaklaşımı kullanılarak elde edilmiş olan veri, "Bales'in Etkileşim Süreci Analizi" yaklaşımının tüketici aile içi karar verme davranışlarını incelemede etkili bir araç olduğunu ortaya koymuştur.
Anahtar Sözcükler: Karı-koca satın alma kararı davranışı, Etkileşim Süreç Analizi, Ürün Bilgisi

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An Exploratory Investigation of Bales' Interaction Process Analysis as it to Consumer Behavior

Abstract*:* The purpose of this study to establish the feasibility of Bales' system of Interaction Process Analysis in the study of a husband-wife purchase decision. The vehicle for the exploration of this method was the development and testing of specific hypotheses using Bales' system of observation. Fifteen couples were exposed to a situation in which they were asked to select for themselves a portable stereo phonograph from a catalog. Five couples received small "pieces" of product information, five couples received medium "pieces" of product information, and five couples received large "pieces" of product information. Each couple was observed in their home and their respective interaction was later categorized from a tape (Panasonic HC-V700EG-K) made in the couple' s home. The couple' s interaction was categorized using Bales' system of Interaction Process Analysis. From the data produced by the system, we have concluded that Bales's system of Interaction Process Analysis is sensitive enough to use in the study of consumer behavior, but mainly as an evidence gathering tool.
Keywords*: Husband-wife purchase decision, Interaction Process Analysis, Product Information*

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1. Introduction

In an attempt to beter understand consumer behavior, students of marketing are increasingly turning to other disciplines. An attempt is being made to bring the findings and methodology of psychology, sociology, antrophology, management and other disciplines to bear on the study of consumer behavior. The borrowing from other disciplines is being done to find new tools and to gain a more objective insight into consumer behavior. (Cheng et al., 2013; Jones et al., 2011: Bales, 2000) However, in very few instances can we borrow directly from another discipline. Students of marketing can apply and evaluate the findings and methodology of the other disciplines to our own background and understanding only by actually doing work in these related fields (Peräkylä, 2004; Keyton et al., 2009: Schaumberg et al., 2012; Bales, 2000; Chapman et al., 2010)

Robert F. Bales, a sociologist, has developed an objective method fort he study of small group behavior. It is the purpose of this research to establish the feasibility of Bales' system of Interaction Process Analysis in the study of a husband-wife purchase decision. A second, and related purpose, is to test specific hypotheses about the characteristics, or ways in which, a husband-wife purchase decision is carried to completion

1.1 Bales' System of Interaction Process Analysis

Briefly, Bales' system is composed of twelve interaction categories into which all coceivable types of overt behavior which can be assigned meaning can be placed by an observer. Six of the categories are for behavior that relates to tas kor problem solving. The other six categories ar efor social-emotional behavior that is positive or negative in nature. The system is designed to give an objective account of quantitative and qualitative characteristics of small group.

1.2. Rationale of Bales' Method

Bales' method is applicable to action groups primarily concerned about solving problems. The method is limited to the study of "small groups" which would range in number of persons involved from two to around twenty. These persons must be engaged in interaction with each other in a face-to-face meeting. Rather than a series of special lists of categories, each fitted for a particular kind of group or a particular hypothesis. Bales has developed a general-purpose, standart set of categories for observation and analysis. The categories are based on the haypothesis that for small groups of any kind , all of their overt actions fall into several general categories.

"*The set of categories as it now stands is a kind of practical compromise between the demands of theoretical adequacy, the curbs introduced by the number and kinds of distinctions moderately trained observers can make in*

actual scoring situations, and the demand for a reasonable simplicity in the processing of data and the interpretation of results to subjects for feedback and training purposes (Bales, 1950)"

The categories are concerned with interaction content or process content as opposed to being concerned with topical content. The possibility of a generalized set of categories rests on two assumptions. The first assumption is: " *All small groups are similar in that they involve a plurality of a persons who have certain common task problems arising out of their relation to an outer situation, and certain problems of social and emotional relationship arising out of their contact with each other. Each act of each individual in the group can be analyzed with regard to its bearing on these problems. This kind of abstract analysis we call interaction process analysis. The present set of categories is an attempt to provide a systematic frameeork in terms of which this kind of analysis can be made* (Bales, 1950)"

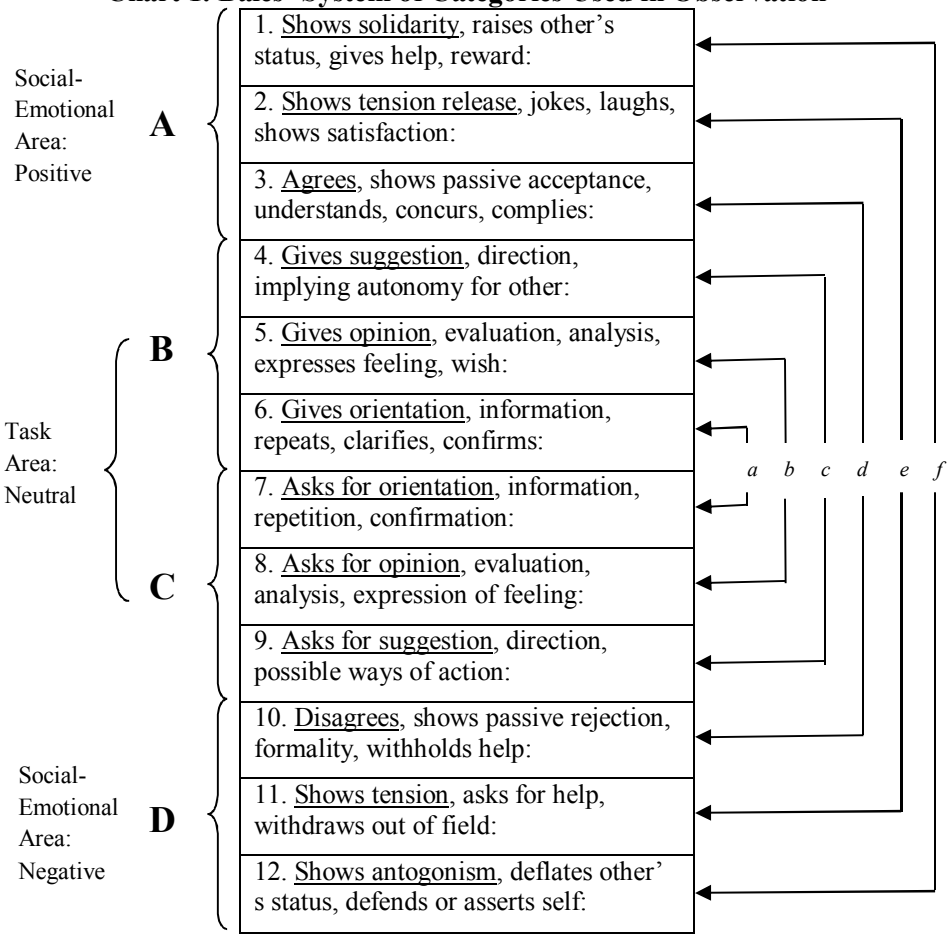
The second assumption is that the method of analysis is inclusive in that every act that can be identified can be classified into only one category. There are no catch-all categories. The method is also continuous in that each overt act is recorded in sequence. No observed acts are omitted except by error. It is assumed that each act of communication or expression accounts for essentially equal time.

"*The unit to be scored is the smallest discriminable segment of verbal or nonverbal behavior to which the observer can assign a classification under conditions of continuous serial scoring* (Bales, 1950)"

Complex sentences receive more than one score. Interaction also includes non-verbal activity such as facial expressions, gestures, and other expressive actions directed to other members of the group or the group as a whole. It is interesting to note that a given statement may be scored in a different manner depending on the context in which the statement or act occurs. Every act is tied to what has gone before and will come in future acts. "*The idea that an act is a part of an interaction system which is distributed both in time and between members is a fundamental idea and must be accepted as axiomatic* (Bales, 1950)"

Chart 1shows Bales' system of categories used in observationsand their major relations. The small letters on the right show how the interaction is distributed over time, moving from problems of **communication**, to problems of **evaluation**, to problems of **control**, to problems of **decision**, and finally to problems of **tension reduction**. Each pair of categories should be regarded as concerned with one particular phase of the complete problem-solving process. To view one interaction without viewing its relationship to others would be misleading.

Chart 1. Bales' System of Categories Used in Observation



a Problems of Communication — A Positive Reactions

b Problems of Evaluation — B Attempted Answers

c Problems of Control — C Questions

d Problems of Decision — D Negative Reactions

e Problems of Tension Reduction

f Problems of Reintegration

The capital letters on the left side of Chart 1 indicate the major areas of interaction covered by Bales' system. The **task area** is concerned with getting the job accomplished and is composed of attempted answers and questions. The **social-emotional area** is composed of positive and negative reactions not directly related to getting the job accomplished but which must be handled by the group to facilitate its problem-solving attempts. Ideally, interaction should alternate between the task area and the social-emotional area. Strains build up while attention is being devoted to the task area. These must be reduced by attention to the social-emotional area before the problem-solving process can go on.

1.3. Relevant Research

Bales has attempted to develop a general-purpose system of observation that is applicable to the observation of many varying kinds and types of small groups. He has provided the backround and methodology for others to apply to their specific problems. A brief discussion of some of the applications of Bales' system will help clarify the method. In all these applications, the dependent variable is the group or individual interaction measures (Keyton et al., 2009: Jones et al., 2011: Schaumberg et al., 2012; Bales, 2000; Chapman et al., 2010).

In an attempt to set some base lines with which to judge further research, Bales has conducted several studies (Bales, 1950). He has observed married couples' discussions of other couples whom they know. He has observed academic discussions of thesis plans and he has observed two and four-person chess playing groups. In addition, he has observed groups as they solved human-relations problems. Here he found that there was differences in interaction between groups that were satisfied with their decisions and groups that dissatisfied with their decisions (Bales, 1961)

Perry developed a hypothesis which is essentially that if a counselor takes a non-directive role, a student in a counseling situation soon will undertake initiative and responsibility himself. Perry has conducted interviews with this hypothesis in mind and has used Bales' system to check his own role as well as the role of the student in the counseling situation. His experimental variable was the introduction of a non-directive counselor. (Bales,1950)

Kenkel has used Bales' system for research on the role of behavior of spouses when jointly engaged in decision making. He has used the system to determine how well a couple could predict their own performance, how well they played traditional roles of husband and wife, and the dominance of a particular partner depending on the sex of the observer. His findings are not conclusive, but they do give him an objective basis for observing behavior. (Kenkel at all, 1956; Kenkel, 1961) One of Kenkel' s more interesting

findings is the introduction of the sex of the experimenter as the independent variable. He found that the sex of the experimenter influences which partner would be dominant. The dominant partner is generally of the same sex as the experimenter. (Kenkel, 1961)

Using the Interaction Process Analysis system, Bales et al., (1951) have traced a consistent shift of emphasis in the course of typical problem-solving discussion as groups move through time. They found that by dividing sessions into three equal parts, the problem-solving process tended to move from a relative emphasis on problems of orientation, to problems of evaluation, and finally to problems of control. At the same time, they found the relative frequencies of both negative and positive reactions tend to increase as groups move through a problem-solving process. This is referred to as the phase hypothesis. This illustrates how a problem-oriented group attacks a problem. The introduction of a problem to be solved served as the independent variable in this series of studies. Bales et al., (1961) have used the Interaction Process Analysis system to observe the effects of group size on interactions. Group size varied from two to seven members for a discussion of a human-relations problem. The independent variable used was group size. Generally, they found that interaction changes quantitatively and qualitatively with group size and the leadership pattern changes measures of interaction. Bales and Borgatt have also used the system in several other situations. They have observed subjects as they are rotated through a series of groups. Evidence seems to suggest that the type of interaction can be attributed to the type of task and background of the members. (Borgatt et al., 1953a,b) They have also examined the interaction distribution in relationship to sociometric status patterns. (Borgatt et al., 1956) One of their most interesting studies was to determine if observer reliability is high and if the subjects are consistent in their behavior. They found evidence that observer reliability and subject consistency are sufficient to give reliable results using Bales' system. (Borgatt et al., 1953c)

The research discussed above seems to indicate that the method is valid at least in the situations in which it has been used. The research also gives some base lines from which further research can be carried on and interpreted.

1.4. Hypothesis

To establish the feasibilty of a method of observation for a specific application, it seems necessary to test certain specific hypotheses relating to the application being explored. Personal experience in the retail field generated several hypotheses on how the consumer handled product information. The observation was made that the consumer would do a more

satisfactory job of shopping and be more satisfied with his purchase if more product information was available to him.

The problem is then to find out what the consumer does with various pieces of product information when it is made available to him and how it affects his behavior. Specific hypotheses concerning husband and wife purchase decisions were formulated and Bales' Interaction Process Analysis system of observation was used to explore the hypotheses.

This type of study is still in the realm of an art as opposed to a science. Fort his reason, the hypotheses have limitations. As we shall show later, the hypotheses hold only under certain conditionsand onl to a certain point. Also, as in any study of this type, for the hypotheses to hold, certain conditions must be under control, both prior to and during the purchases decision process.

In the light of the limitations discussed, we have explored the following hypotheses: The term increase as used here implies moving from small to large "pieces" of product information.

1. As the "pieces" of product information increase, time required for the decision decrease.
2. As the "pieces" of product information increase, satisfaction with the decision increases.
3. As the "pieces" of product information increase, the importance of the role of the wife in the decision process increases.
4. As the "pieces" of product information increase, total interaction decreases.
5. As the "pieces" of product information increase, time per unit of interaction decreases.
6. the "pieces" of product information increase, requests for additional information decreases.
7. As the "pieces" of product information increase, problems of orientation will decrease in the first one-third of the interaction, problems of evaluation will decrease in the second one-third of the interaction, and problems of control will decrease in the last one-third of the interaction.
8. As the "pieces" of product information increase, positive acts will increase.

2. Method

2.1. Research Design

The Bales' system of Interaction Process Analysis was used to record and analyze the behavior of the husband and wives during the purchase decision process. Ideally, the interaction should be scored by two observers as it takes place. However, due to problems of training and financing another observer, only one observer was used. The scoring of the interaction was made at a later date from tape recordings because of the inconvenience of the observation in the subjects' home. However, the experimenter observed the actual problem solving discussion and made notes as to general behavior and impressions.

2.2 Definition of Product Information

The independent variable used in this study was "pieces" of product information offered to the husband and wife in a purchase decision situation. The "pieces" of product information offered in the independent variable were determined informally. The informal determination was based on conception of the product information actually or potentially available to husbands and wives as consumers. "Pieces" of product information are not meant to be used in the rigid sense of a mathematical equation. This is so because of the definition of "pieces" of product information that is used in this study. "Pieces" of product information is the sum of both the quantitative and qualitative aspects of product information offered. For the purposes of the study, three "pieces" of product information were defined: small, medium, and large. Small "pieces of product information: (1) name of the product, (2) picture of the product, (3) price. Medium "pieces of the product information: (1) name of the product, (2) manufacturer' s brochure with picture, (3) price. Large "pieces" of product information: (1) name of product, (2) manufacturer' s brochure with picture, (3) product evaluation similar to Consumer Reports, (4) price.

2.3. Sample Selection

The pilot study in which problems of procedure were worked out was conducted on nine, three-number groups of college students. Because of changes in procedure, it is difficult to reach any conclusions about these groups, except to say that they behaved too well. Most of college students seemed most anxious to please the experimenter. The main reason, however, for not continuing to use college students in the main part of the study, is that they do not have their relationships established as do a husband and wife who have worked out many problems in their day to day existance and planning for the future. Husband and wives should have a more realistic view of purchasing. On the other hand, moving out of the laboratory into the

home, subjects become quite expensive in terms of time and effort involved reaching them in their own homes. For this reason, the number of subjects observed is smaller then would have been ideal. However, much procedural information and inferences about the process may be gained, even from this small sample. Five couples were used in each of the three situations. A total of sixteen couples participated, but one observation could not be used because of mechanical problems with the tape recorder. To gain some control over the sample, the couples were selected to fall within some predetermined limits. All the couples were between 25 and 35 years of age, all had children, all owned their own homes, and had incomes between $5000 and $8000.

2.4. Description of the Problem

Bales suggests that to gain proper insight into a problem a group is going to solve while under observation, the problem should be a "full-fledged" problem (Bales, 1961). For a problem to be a full-fledged problem, the problems of orientation, evaluation, and control must be basically unsolved at the beginning of the observation. With regard to orientation, husbands and wives should have some degree of ignorance and uncertainty about the relevant facts of the problem. With regard to evaluation, husbands and wives should have somewhat different values or interests to bring to bear on the problem. With regard to control, there should be a moderately strong pressure to reach a decision between husband and wife. In addition to being full-fledged problem, the problem must be realistic to the husband and wife and be within their actual or potential experience. To produce involvement, there should be actual decision to make. Couples probably cannot get involved when the criteria is merely the lowest price for a uniform product. Along with involvement, it is important that the problem is interesting and relevant to the couple. Purchasing behavior seems to be represented by a continuum, with habitual and impulsive behavior at the one end, and problem-solving behavior requiring the weighing of the situations and alternatives at the other end. The choice of a problem for couples to solve should be a consumer product rather than an artifical problem that would lose some of its meaning in the translation to consumer behavior. The product used in the problem should be a consumer product which is not purchased often by the average couple. Such a purchase is less likely to be towards the habit end of the purchasing continuum and, hence, require more overt problem-solving activity that can be observed by an observer.

2.5. Description of the Task

The task for the husband and wife is the selection of one portable stereo phonograph from seven which are presented to them in catalog form with the

lowest priced set first, moving to the highest price set last. Three different types of catalogs are used, but only one for an individual couple. Each catalog represents either small, medium, or large "pieces" of product information as discussed earlier. After the tape recorder is set up, the couple is asked to sit down with the experimenter, preferably around a table. The experimenter then introduces the couple to the task in uniform manner.

3. Results

This section is a report of findings with respect to the relationship between the "pieces" of product information offered to couples and the resultant interaction. This study is meant to be illustrative of a research procedure. It will be considered useful if it points up the type of data that such a study can generate and how such data might be interpreted. Therefore, the interpretation of the findings will not be rigit. Each hypothesis will be explored from the point of view of what this type of information generated from Bales' system can tell us.

It appears that there are two types of measures that can be studied. There are those that are directly concerned with interaction and then those side measures such as satisfaction and time spent on the decision process. However, it is reasoned that all the measures are related to interaction and can be interpreted in terms of interaction. This sheds a somewhat different light on the subject than if analyzed separately.

Tha data, as interpreted here, are necessarily not discussed in rigorous terms. However, even with the small sample size used, it is interesting to see the trends that are pointed up using Bales' system of observation.

3.1. Total Interaction

It was hypothesized that as the "pieces" of product information went from small to large, the total number of actions would decrease. The total action measure is simply a summation of the actions classified in the various Bales' categories. The reasoning behind this assumption was that more information should be supplied by the couple when information is lacking than when it is available in larger "pieces". Also it was thought that because of the lack of information, more emphasis would be placed on emotions which would take more acts to resolve differences. Then as the "pieces" of product information went from small to large, there would be fewer emotions to deal with and more information on which to make a decision. Empirically, it was felt that dealing with emotions in place of information would take more acts than dealing with information and fewer emotions.

The results of the study are somewhat inconsistent with the hypothesis. We find the mean number of acts in relation to the "pieces" of product information offered is as follows:

"Pieces" of product information	#
Small	104
Medium	63
Large	161

Using the null hypothesis to test the data, no real significante is found. However, assuming a causal relationship between the number of acts and total time, a possible trend is observed showing that there is more total interactions as the "pieces" of product information increase.

Fort his particular study of husband and wives, it is believed that the likes and dislikes of the husband and wife are fairly well known to each other. For this reason very little effort was found within a couple to solve gross differences of opinion. The opinions given relate to the products involved and their respective characteristics. Hence, the more information available, the more product orientated interactions. It is the conclusion that total interaction in this study is probably affected by the "pieces" of product information offered to the couple.

No further comments will be made about the group profiles for several reasons. One of the major reasons is that it does not show how interaction changes over time. For instanc, at approximately what point in the decision process do we find the most emphasis on the negative types of acts and is the sequence of negative acts the sam efor each of the groups of couples? Another reason for not spending more time on the group profile is that we miss the individual' s contribution. For instance, in what area did the wife make most of her contributions and how did they differ from those of her husband? Also, did the role of the wife change as the "pieces" of product information changed? However, for quick, gross comparisons, the profiles are useful as we have seen in the previous paragraph.

3.2. Total Time

For much the same reasons as advanced in relation to total interaction, it was hypothesized that time spent in the decision process would decrease as more "pieces" of product information were used. Time should decrease with more information because we are dealing with facts rather than emotions. This is based on the assumption that couples offered smaller "pieces" of product information will base their decision process on cojecture due to a lack of

factual information. When product information "pieces" go from small to large, it is believed that there will be less conjecture in the decision process due to additional information. The literature is limited in the area of the relationship between time spent in the decision process depending on whether we are dealing with opinions or factual information. Intuitively, it is believed that more time would be spent in the decision process with smaller "pieces" due to necessity of formulating individual hypotheses by each spouse and reaching a common ground of understanding. However, it is also believed that with larger "pieces" of product information, there will be less individual interpretation of the facts, less cojecture, less defining the limits of the problem, and hence a quicker decision. The mean time for completion of the purchase decision problem in this study was as follows:

"Pieces" of product information	Time
Small	6 min. 19 sec.
Medium	5 min. 59 sec.
Large	11 min. 59 sec.

The data go opposite the hypothesized direction. By observation, there appears to be no difference between those couples offered small and medium "pieces" of product information. However, there does appear to be a difference between the small and medium groups versus the groups offered large "pieces" of product information. Using the null hypothesis, this observation is supported. The difference between the medium and large groups is significant at the two per cent level. However, there is no significant difference between the small and medium groups.

Part of this difference between groups could be accounted for by time spent in reading the increasing "pieces" of product information. However, because the experimenter read over the information available to each experimental group before the time measure began, reading time is not tought to be a major factor in the time difference. It is not to be altogether discounted, however.

Again, this measure is not consistent with the hypothesis, but for much the same reasons as stated in the discussion of total interaction. As larger "pieces" of product information are introduced, they are discussed by the couple, hence consuming moretime than if there had been smaller "pieces" of product information. This also tends to support the observation that total interaction increases as "pieces" of product information are increased from small to large.

3.3. Time Per Unit of Interaction

It was felt that as large "pieces of product information were used, the time per unit of interaction would decrease. The thinking behind this hypothesis was based on the assumption that with larger "pieces" of product information, more acts and comments per unit of time would be made by the couples. The thinking on this hypothesis closely parallels that in total interaction and total time. As larger "pieces" of product information are offered, each act should require less time because of less cojecture on the relevant facts. The mean time per unit of interaction is as follows:

"Pieces" of product information	Time
Small	4.2 sec.
Medium	4.5 sec.
Large	5.2 sec.

The hypothesis is not supported with any degree of significance using the null hypothesis. However, empirically, it appears that a trend does exist. For this trend to be meaningful, it would have to be supported by a much larger sample size. Therefore, the conclusion is made that the mean time per unit of interaction is approximately equal for all sizes of "pieces" of product information.

From this data it is predicted that only in an isolated case would you find the mean time per act of interaction significantly varying from one treatment to another. Even if there are pauses in the vocal interaction, the observer should be scoring overt behavior such as frowns, surprised looks and similar non-verbal behavior. An overt action appears to be about equal in length to a verbal action. Even when the observer is not present at the actual problem-solving session, he should score pauses of more than one minute in the appropriate category. This does not rule out a change in the time per act of interaction in various phases of problem-solving session. To gain this information would require more elaborate scoring devices than used for this study.

3.4. Role of the Wife

Interpreting the traditional role of the wife in the decision process, the assumption was made that when information was lacking the wife would have very few chances to participate in the decision process. It was expected that the husband would do more talking when the "pieces" of information were smaller. When the "pieces" of product information are larger, the wife should assert a more "modern" role and participate more in the decision

process. When product characteristics enter in as the "pieces" of product information are larger, the wife should participate more in the decision process as the husband seeks help in the handling of more variables. Hence, it was predicted that the proportion of the acts contributed by the wife would increase as "pieces" of product information go from small to large. This measure is a simple summation of the actions performed by each mate classified in the various Bales' categories.

In terms of the number of acts per one-hundred contributed by the wife, the results were as follows:

"Pieces" of product information	#
Small	40
Medium	43
Large	39

Using the null hypothesis, no significant difference is found ithe proportion of wives' acts as the "pieces" of product information go from small to large. This appears to be a result of the sample selection and the type of problem given to the couple. Results might be different if different economic and age groups were employed or the education level was different. Also, if the problem had been of the nature of a family vacation, or what play to attend, the results of the wives' contribution of the proportion of acts might be different.

3.5. Phase Hypothesis

One of the common criticism of any mean figure to describe a group is that you often miss the variation that occurs within that mean figure. Statistically, you can measure variation but in the case of interaction, this gives no measure of when the acts took place in relation to the total number of acts. The group profile shows the proportion of total acts falling in each category. It, however, tells nothing about whether all the acts in a given category were originated in the first part of the session, the last part, or distributed equally over the entire session. Based on Bales' and Strodtbecks' findings, it was hypothesized that relative emphasis would move from problems of orientation, to problems of evaluation, to problems of control. Specifically, it was hypothesized that larger "pieces" of product information should make the decision easier, because of less emphasis on opinions. Therefore, the relative emphasis would still move from problems of orientation, to evaluation, to control. However, it was felt that in each case, the relative

emphasis would be less as larger "pieces" of product information were introduced.

3.6. Positive Reactions

The phase hypothesis also tells us that we should expect both the positive and negative social-emotional areas to increase proportionately as couples move through the problem-solving situations. This is anticipated because each of the sub-problems becomes more demanding than the last one. These more demanding sub-problems should be more of a threat to the solidarity of the group and, hence, take more social-emotional acts to restore balance so that the group can proceed with the task at hand. Based on this assumption, it was hypothesized that as the "pieces" of product information go from small to large, so also would positive acts increase in relative number in each phase. The data support this hypothesis fort he groupsgiven medium and large "pieces" of product information. If a total of all the social-emotional categories is used, which appears to be consistent with the phase hypothesis, than the groups given small "pieces" of product information also are consistent with the hypothesis.

If the data did not support this hypothesis, doubt would have been cast on the otherdata generated by the study. These data, supported by the data in the previous section, seem to show that there is a full-fledged problem and that the couples were actually involved in the solution of the purchase-decision problem.

3.7. Satisfaction

By empirical observation it was felt that when a couple had larger "pieces" of product information, they would be more satisfied with the purchase decision they had made. They would, in a sense, be more sure that they had made the correct decision. In this type of study, there appears to be only one means of determining satisfaction with the purchase decision. At first consideration, some measure of the social-emotional areas might seem to give some measure of satisfaction. But, because this area is only an aid to facilitate the task oriented area, it is difficult to measure any type of satisfaction. An agreement with an opinion or a statement of fact would both be recorded in the same manner and neither would give any indication of satisfaction.

To test the hypothesis that as the "pieces" of product information go from small to large, the couples as individuals will be more satisfied with their purchase decision, a "0-100 thermometer scale" was used. This scale and the instructions were designed to make it as easy to use as possible and also to get a fairly accurate measure of a somewhat ambiguous quality. One problem with this type of scale is that the individual has no objective criteria

upon which to base his answers. However, if it is realized that a very complex quality is being measured and that the responses are going to be taken at face value without interpretation, this scale does give us an indication of the relative values of this complex satisfaction. The statement, "Remeber that very few people are ever 100% satisfied with a purchase, was inserted to force the answers down the scale for a more accurate comparison. The statements to the right of the scale were designed to give the individual several points of referance on which to make his judgement. In the pilot study, a similar scale was used without the points of referance or the above statement. It gave no conclusive answers. The outcome of the measurement of the satisfaction with the purchase decision is as follows:

"Pieces" of product information	#
Small	57
Medium	81
Large	77

These data basically support the hypothesis. The difference between small and medium "pieces" of product information is significant at the two per cent level using the null hypothesis. The difference between medium and large "pieces" of information appears to be very small. Therefore, we would conclude that those couples with small "pieces" of product information are less satisfied with their purchase decision than those couples receiving larger "pieces" of product information. From this we would also conclude that the extra "pieces" of product information introduced in the large independent variable have little effect on satisfaction in comparison with those "pieces" introduced in the medium independent variable. This lack of difference could be the result of no real difference between medium and large "pieces" of product information; or if there is a difference, it is not important in determining satisfaction in this structured situation. The lack of difference could also be due to chance. However, empirically, it is believed that the ack of difference is due to the particular artificial situation. A similar measure given after an actual commitment might be quite different, especially if the additional "pieces" of product information were used by the couples to reduce dissonance after the actual purchase.

3.8. Request for Information

It was apparent that some couples felt that they should have had larger "pieces" of information and others on the surface ignored the larger "pieces" when they were given to them. In the case where more information was

requested, the instructions pertaining to the quantity of information available were reread to the couple by the experimenter. No apparent difference was noted in behavior after interaction started in couples who either requested more information or used less than was available. It was the observation of the experimenter that the extra information was of some influence to those outwardly ignoring it, however.

4. Discussion

This study has attempted to show two things. First, Bales' Interaction Process Analysis system of small groups was examined. Second, Bales' system of observation was used to study a specific consumer situation. For this purpose, several hypoteses were developed to guide the investigation. These two parts of the study were intended to establish the feasibility of the Bales' system of observation in the study of a husband-wife purchase decision.

This study is meant to be illustrative of a research procedure. The samples utilized in this study were small and were not randomly drawn. Accordingly, the interpretation of the findings was not dwelled upon. However, it is surprising how much information and guidence is available from this sample.

The hypotheses were not supported in all cases by the datagenerated by the system of observation. It was found that total time for completion of the purchase decision tended to increase as "pieces" of product information went from small to large. The opposite was hypothesized. No clear findings on total interaction were found. It was found that time per unit of interaction is approximately equal in all situations. It was hypothesized that there would be a decrease as "pieces"of product information went from small to large. It was found that the total proportions of act contributed by the wife was approximately equal in all situations. It was hypothesized that there would be an increase in the proportion of her acts as "pieces" of product information went from small to large. However, it was found that her role did change qualitatively as the "pieces" of product information increased. It was found that the phase hypotheses was supported in some cases, including positive but not negative reactions. Problems of control was the only major area not supported. Satisfaction with the purchase decision was found to increase as the "pieces" of product information went from small to large, but not a perfect relationship. This was in the hypothesized direction. Finally, the system itself could provide no information on the use of the product information by couples.

There were several explanations of this deviation from the hypotheses. First, the hypotheses could have been ill conceived. Second, there may have been serious errors in the scoring and tabulating of the interaction due to experimental bias or the use of a tape recorder and categorization at a later date versus the actual categorization during the interaction using an Interaction Recorder. Third, the problem could be something less than a full-fledged problem. Fourth, the experimenter could have introduced bias into the situation. Fifth, the couples may behave in a different manner than predicted because of their mutual experiences. Finally, the sample itself may have been badly biased.

Any, or all, of these problems could have played a part in this study. It is believed that if this study was replicated, that very similar results would be obtained. This is probably true because of the lack of actual commitment on the part of the couples. If in some manner an actual situation could be studied instead of a simulated one, the results conceivably could be different. On the other hand, the observations of the experimenter lead him to believe that this is a fairly accurate Picture of how people would behave in a similar actual situation.

The conclusions or implications that can be drawn from a study of this nature are not clear cut. General conclusions can be drawn on what will happen under certain conditions, but this does not give direct information on what we should do to influence consumer behavior. However, this type of study can aid in the understanding of the consumer and provide building blocks on which some day, hopefully, can be built some theory of consumer behavior, at least as far as purchase decision of consumers.

In general, it was found that the quality of overt interaction between husbands and wives was influenced to some extent by the introduction of an independent variable. Also, Bales' system of observation is sensitive enough to pick up some of these changes in behavior as they are influenced by a variable.

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