

ciation, licensure, and a defined scope of practice, the dental hygienist is responsible for the patient's oral health care as it relates to dental hygiene practice and is capable of providing dental hygiene services without supervision.

The ADHA supports the continual review and exploration of all forms of delivery of oral health services to the public, and is dedicated to the pursuit of those avenues which will ultimately lead to an improvement in the oral health status of the public. ADHA recognizes that the potential exists to enhance the public's access to oral health care through a variety of modalities. ADHA acknowledges its right and obligation to pursue the feasibility and ultimate viability of these options in an attempt to provide the public with quality oral health care in an accessible and cost-effective manner.

It is the position of the ADHA that it is cost-effective for dental hygienists to provide oral care without dental supervision, particularly to that 50 percent of the U.S. population that does not receive regular dental care. ADHA is convinced that there is no danger to the public if the dental hygienist provides care with or without the supervision of the dentist. There is no evidence to the contrary. Due to organized dentistry's attempts to prevent investigation and research into this issue, we have been unable to show that independent practice saves the consumer money.

Dental hygienists often cannot obtain third-party reimbursement directly for dental hygiene services, due to dentistry's opposition to designation of dental hygienists as primary health care providers. Dental hygienists must receive compensation from insurance companies for care in order to practice independently. Third-party payors must include preventive oral health services for reimbursement. Prevention procedures such as placing sealants are not often covered by insurance plans.

It is vital that consumer groups voice their objections to dentistry's self-serving attempts to block the expansion of oral hygiene care by dental hygienists.

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FTC ACTIVITIES IN STRUCTURAL HEALTH CARE REGULATION

Matthew Daynard, Federal Trade Commission¹

This paper briefly outlines FTC activities in the field of "structural health care regulation"—public and private restraints on the circumstances under which professional health care services may be delivered to the public.

THE FTC ROLE

The Federal Trade Commission pursuant to its statutory mandate² has engaged, since 1975, in a program to identify and encourage the relaxation or removal of public and private restraints on the business practices of professionals that impede competition or increase costs without providing countervailing benefits to consumers. The program's goal is to facilitate consumer' access to less expensive, safe and reliable professional services that they desire through increased competition among providers and informed consumer choice.

As a part of these efforts, the Commission has challenged certain structural health care regulations as unfair methods of competition or as unfair acts or practices in adjudicative proceedings and in rulemaking.³ The following discussion highlights our two seminal law enforcement efforts in this area.

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² The FTC is an independent regulatory agency empowered by Congress to prevent unfair methods of competition and unfair or deceptive acts or practices in or affecting commerce. 15 U.S.C. Sec. 41 et seq.

³ The Commission staff, upon request, has also filed advocacy letters on the competitive and consumer effects of various restrictions on professional health care practices with numerous state legislatures, "sunset" commissions, and professional regulatory boards considering repeal or modification of those restraints.

THE AMA CASE

In the AMA case⁴, the Commission held that the AMA's ethical rules prohibiting most forms of non-deceptive physician advertising and solicitation unreasonably restrained competition and were unfair in violation of Section 5 of the FTC Act.⁵ The Commission also found that other ethical restraints imposed by the AMA on physician contract (as opposed to fee for service) practice were unfair methods of competition.

ACTIONS IN OPTOMETRY

In February, 1988, the Commission voted to issue a trade regulation rule that would remove four types of restraints on commercial practice by optometrists, one or more of which exist in 44 states. Based on two major Commission-sponsored economic studies and other record evidence, the Commission believes that these restrictions are unfair to consumers because

⁴ American Medical Ass'n, 94 F.T.C. 701 (1979), aff'd, 638 F.2d 443 (2nd Cir. 1980), aff'd mem. by an equally divided Court, 455 U.S. 676 (1982). The Commission has also challenged in adjudicative proceedings certain advertising restraints imposed on optometrists by a state licensing board. Massachusetts Board of Registration in Optometry, Docket No. 9195 (appeal to Commission pending).

⁵ The thrust of the AMA decision—"that broad bans on advertising and soliciting are inconsistent with our nation's public policy" (94 F.T.C. 701, 1011)—is consistent with the reasoning of recent Supreme Court decisions involving professional regulations. See, e.g., Zauderer v. Office of Disciplinary Counsel, 471 U.S. 626 (1985) (holding that an attorney may not be disciplined for soliciting legal business through printed advertising containing truthful and non-deceptive information and advice regarding the legal rights of potential clients or for using non-deceptive illustrations or pictures); Bates v. State Bar of Arizona, 433 U.S. 350 (1977) (holding a state supreme court prohibition on advertising invalid under the First Amendment and according great importance to the role of advertising in the efficient functioning of the market for professional services); Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, 425 U.S. 748 (1976) (holding a Virginia prohibition on price advertising by pharmacists invalid).

they raise prices for ophthalmic goods and services and reduce consumers' access to optometric care without enhancing the quality of care they receive. The challenged state laws prohibit optometrists from: (1) working for or otherwise affiliating with lay entities, such as drug stores or optical chains; (2) operating more than one or two branch offices; (3) practicing in mercantile locations, such as shopping centers; and (4) using non-deceptive trade names. The Rule, like the Commission's professions program in general, would not interfere with the states' efforts to regulate quality of care, or to set standards for licensure, education and training, or practice requirements.

OLDER CONSUMERS AND STRUCTURAL REGULATION IN HEALTH CARE

Dr. Patricia Powers, American Association of Retired Persons¹

This paper looks at the concept of structural regulation from different perspectives. It discusses the interests of older persons in a range of structural and other regulation issues and describes various writing, analysis and lobbying activities by their advocates. Hearing health care is used as the primary example.

VARIOUS INTERPRETATIONS OF STRUCTURAL REGULATION

When we consider the term "structural regulation," we may think either of the structure of the regulatory system affecting the quality and delivery of health care or of the regulations governing the structure of any given health related occupation or profession.² An example of the former would be a state nursing home regulatory structure that relies on nursing home closures when violations become too numerous and uncorrected versus a regulatory structure that utilizes an ongoing fining and citation system. Legislation and implementing regulations that structure the inspection and enforcement system will shape the health care options of consumers. However, in this discussion, we are looking less at how the regulatory oversight system is structured and more at legal requirements placed on the conditions under which care is delivered, ostensibly to protect patients, customers and consumers.

Writing about medical care appraisal, Avedis Donabedian lists evaluation of structure as one of the major approaches to evaluation of quality. Structure in Donabedian's conceptual framework includes facilities, equipment, administrative organization and qualifications of health professionals. The assumption is that with "good" structural elements, "good care is more likely (though not certain) to occur." Donabedian goes on to note that devices like "license, certification of facilities, and accreditation are based largely on this assumption" (Donabedian, 1978).

An example may help illustrate Donabedian's model. After decades of struggle, consumer organizations have succeeded in getting the Health Care Financing Administration to require surveyors (inspectors) to look beyond bricks and mortar or even staffing levels--first to adequate written policies/procedures and record keeping and more recently to direct interviews by surveyors with facility residents and to observation of the

effects of care in meeting resident needs. Donabedian might describe this as a shift of emphasis from structure to process to outcomes.

The Federal Trade Commission (FTC) has approached structural regulation from a restraint of trade or practice perspective. Similarly, the American Association of Retired Persons (AARP) explores the requirements placed on the conditions under which care is delivered in a monograph entitled "Unreasonable Regulation=Unreasonable Prices: A Report on the Effect of Certain State Occupational Licensing Regulations on Consumers." The report examines optometry (eye care), dentistry (dental care) and hearing aid dispensing (hearing health care). The report analyzes the licensing process of regulating the person and the profession and focuses on business practice and marketing restrictions (AARP, 1986).

We can compare and contrast these three interpretations by looking at one particular area of health care. In the hearing health care field, if we are examining the structure of regulation, consumers are concerned about such issues as which agencies have regulatory jurisdiction and what is the composition of the membership of a state hearing aid dispenser licensing board. Advocates are often concerned whether there is a gap in the structure of regulation that allows abuse of hearing aid wearers. If we are examining structure in Donabedian's terms (facilities, equipment, etc.), consumers are concerned about such issues as whether tests are conducted in a soundproof booth or in a consumer's noisy living room. Consumers are also concerned about the credentials of providers who often compete with each other (hearing aid dealers, audiologists, physicians). If we are examining structural regulation in terms of legal requirements such as licensure, supervision and the conditions under which care is given, consumers are concerned about who is allowed to check the physical condition of the ear, to conduct hearing tests, or to sell aids, as well as about which service providers are required to provide a trial period for hearing aids.

APPROPRIATE REGULATION

As the largest organization of older consumers in the nation, AARP is interested in consumer benefits and consumer protections. Many members join AARP to obtain discounts, a type of consumer benefit. But the political activists among our volunteers are more likely to worry about telemarketing fraud, medical malpractice and other problems requiring consumer protection. As the leading federal consumer protection agency, FTC has concerns about both anti-competitive activities and consumer rip-offs. Similarly AARP releases studies both on how older people are hurt by unnecessary regulations and are helped by

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²This paper amplifies and expands upon informal remarks given during the panel presentation in Chicago. It employs terminology used by Dr. John Kushman, who structured and moderated the panel.

needed regulations. AARP and FTC have prepared consumer education materials jointly to guide older Americans. AARP has commended FTC's efforts to encourage competition in the eye wear field.

Building on FTC research, the Regulatory Alternatives Development Corporation surveyed a number of states and used a case-method approach to assist AARP in analyzing the types of business practice and marketing restrictions that can limit access or choice or even savings. Necessary regulations can save lives and prevent consumer financial losses, but unnecessary regulations may merely line the pockets of providers. AARP's report suggests that millions of dollars in saved costs are at stake for consumers if we can rid the occupational licensing system of unneeded regulations. Some occupational regulations are self-serving and take valuable time away from more important protections. For example, the California Auditor General complained that the California Board of Optometry suspended investigative and disciplinary activities on consumer complaints between 1983 and 1985 because the board overspent on a case against a large corporation violating business practice restrictions. Business practice restrictions may involve restrictions on location or the use of a trade name, in contrast to regulations that would protect the public from incompetent or impaired practitioners.

The Association also puts out reports on needed regulations, such as "Effective Physician Oversight: Prescription for Medical Licensing Board Reform" which analyzes the licensing process of certifying competence and policing doctors once licensed. The report provides consumers with 40 questions they can ask to evaluate a board's ability to protect the public (AARP, 1987). Furthermore, AARP conducts informal inquiries on a regular basis to see if needed regulations are enforced, if remedies are legally available, and if redress is easily obtainable.

AARP studies--some of which call for more regulation and some for less--suggest how difficult it is to make generalizations about whether regulations are beneficial or harmful to consumers at large and to older consumers. Our research findings indicate that: too many occupational licensing boards misdirect their efforts; too few systematically analyze and organize their complaints; too many are understaffed and underfunded; too few take disciplinary actions; and hardly any systematically attempt to assess whether their rules have a beneficial effect on consumers. In general, the most beneficial regulations appear to be those that involve protection from deceptive or anti-competitive practices and those that enhance quality, competence, health, safety, information disclosure and consumer convenience.

AARP tries to avoid "turf battles" between pharmacists and doctors, audiologists and hearing aid dealers, dentists and denturists and so on. The agenda instead is to protect older people as a consumer cohort with unique needs. The frail elderly living alone and the institutionalized elderly may be in particular need of the special

protections that are possible through the structural regulation of health care. They may be less able to shop around, evaluate options themselves, check out credentials, or shift health care providers. But not all structural regulations make sense. Indeed, restrictions on advertising may be most detrimental to the homebound who have fewer avenues for information gathering.

REGULATORY PHILOSOPHY AND ACTIVITY

Older consumers have been urging federal and state regulators to put their attention on prevention of injury (physical or financial), quality and competence enhancement, health and safety protections, and on ridding occupations and professions of repeat offenders, "bad eggs", such as the so-called "killer docs."

Models that attempt in the abstract to determine whether a particular regulation fits the above criteria and actually addresses real consumer problems or fits any other criterion such as the appropriate level of regulation, can be hard to reconcile with the practical regulatory conflicts that confront advocates in the political world. AARP's State Legislative Committees frequently ask for guidance as they are pulled between competing regulation/deregulation philosophies. For instance, do registration and licensure offer false reassurance and misleading or empty consumer protection, or do they serve as vehicles for addressing particular consumer needs and problems? Who is seeking the licensure and why?

AARP analysts note whether proposed regulations reflect self-protection for the regulated or true consumer protection, whether they reflect a struggle between large chains or corporations and small businesses or individuals, whether they are dealing with a quality concern versus an outright hazard or fraud protection. Once the purpose is clearer, older consumers can tell if the battle is someone else's to fight or something they should tackle. The prospects for effective implementation of the proposed regulations are also analyzed.

Advocates for older consumers respond pragmatically to the abstract question posed to our panel: Under what general conditions would we expect structural regulations to protect consumers from poor choices they would otherwise make? A few "rules of thumb" would be situations where:

- o seeing a professional is actively discouraged by the party to be regulated;
- o services/products are expensive;
- o purchase may be useless without prior screening;
- o physical harm may result from inappropriate treatment;
- o the provider deals directly with the consumer (versus through referrals and guided professional involvement.)

When do we leave consumers alone and when do we protect them? "Buyer beware" and free market principles can suffice in many cases but not all. Buying reading glasses at a dime store or drug store may be inexpensive and harmless, while buying a hearing aid when the hearing loss could be a result of a tumor can be a costly or even fatal mistake. Inhalation therapists do not usually solicit customers; another professional has screened those who come to them--a very different scenario from the hearing health care consumer seeking assistance through the yellow pages.

Another question posed was: If we have structural regulations that are supposed to be protecting consumers from poor choices of caregivers, how can we determine whether they really are having a beneficial effect? Monitoring before and after implementation may give clues:

- o there's evidence that the oversight body, the regulatory entity, is doing more than going through the motions because there are sanctions;
- o statistics show a reduction in the problem, injuries, deaths or reveal more competition and lower prices.

But quality and effectiveness are notoriously hard to measure. Do we have adequate outcome measures for effective regulation?

Clearly who writes and enforces rules will influence their appropriateness, reasonableness, and nature. Legislative oversight committees have an important role to play. AARP has a program to identify and train public members for state licensing boards who can represent the interests of older consumers. Many occupational licensing boards are dominated by the occupation itself and members do not sanction many of their peers or hold themselves out to consumers as complaint resolvers; instead they frequently deal with the complaints of one competitor against another.

TRADE OFFS

Often there are urgent needs in the health care field that can be thwarted if too many structural regulations are put in place; yet without them, quality can suffer and consumers can be continually duped. As the home health care field grew, consumers were demanding this new option and wanting access to the service before there were enough qualified providers. Credentialing of aides quickly became an issue, just as the credentialing of nursing home aides has been an ongoing debate.

It is argued that dental, vision, and hearing screening can be done more inexpensively and efficiently by paraprofessionals. However, where should cost saving stop? (The Wall Street Journal discovered that medical technicians were performing pap smears at home.) Is there a difference if the free screening service is an end in itself as opposed to a "come on" with an economic not a service motive?

Should consumers be given a choice of trade-offs, for example between cost and quality? What about between costs and the risk that a health problem will be missed? Should people be forced to go to professionals for their own good?

Can alternative protections be substituted for structural regulations such as credentialing? For example, can a 30-60 day trial period for hearing aids be an adequate safeguard against an incompetent dispenser? a dishonest one?

CONSUMER ADVOCACY ROLE

AARP is not alone in wanting to expand some types of regulation while eliminating others. Ralph Nader and his associates fought against restrictions on a lawyer's right to advertise that resulted in a high court victory. They defended a paralegal sued by a local bar in Florida for practicing law without a license; she had filled out paperwork for a modest fee and thus made uncontested divorces cheaper. They have supported economic deregulation in the transportation industry. But Nader has not focused on unnecessary and restrictive regulations as part of an anti-regulation philosophy. He has continued to pound away at the need for health and safety and consumer protection regulation. Whereas, in recent years, the FTC has been more motivated, it seems, to relax or remove public and private restraints and to challenge related state laws than to develop new federal regulations or to initiate industry-wide rulemaking procedures. We need to be cognizant of the fact that the debate over structural regulation in health care and other fields often occurs within a larger context of professional turf battles, political ideologies, and contested regulatory philosophies.

AARP wants older people to have the benefits of competition and the protections of targeted and sensible government oversight. Staff members work on health care cost containment and health care options (HMOs, home health care), on quality issues, on liability and malpractice issues, and on consumer protection and redress issues. In all these areas, as an Association with a diverse membership, we grapple with many of the creative tensions outlined above.

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QUALITATIVE RESEARCH: ITS CONTRIBUTIONS, DATA COLLECTION METHODS, AND CONTINUING CONTROVERSIES

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Qualitative research can provide insights into consumer activities and other marketplace phenomena which would not be possible with a quantitative investigation. Common concerns that surround qualitative research include small, nonrepresentative samples, unstructured data collection methods, difficulty in the replication and validation of results, and inconsistent data analysis techniques. Despite these limitations, qualitative research is a necessary tool for the creation and advancement of certain types of knowledge.

In many environs, scientific research is associated with quantitative models and numeric analysis. The notion of qualitative research is frequently viewed as making less of a contribution to knowledge than investigations associated with statistical documentation. But certain aspects of our existence are not conducive to numeric scrutiny. These areas include the evaluation of political theories, sociological phenomena, and literary criticism (Bartos, 1986). In an effort to appreciate the contribution of subjective evaluation, this paper will address the following aspects of qualitative research:

- conflicting perceptions of quantitative and qualitative research,
- the nature of qualitative research,
- qualitative investigate approaches, including research designs and data collection methods, and
- concerns that can limit the value of qualitative data.

CONFLICTING VIEWS OF RESEARCH

While quantitative and qualitative are viewed by some as mutually exclusive processes, this view is not present in all fields. In chemistry, qualitative analysis identifies what kinds of elements exist in a substance. Quantitative analysis attempts to determine how much of each element exists (Stewart, 1982). From a marketing perspective, the numeric data provide knowledge as to the frequency of a behavior while qualitative investigations may reveal motivation for the action. But too often, as Lynch (1983) observes, in social science research the labels are used to distinguish between the degree of manipulation in a research effort. Qualitative has become associated with observational studies in a naturalistic setting; while quantitative efforts imply manipulated variables with an experimental research design.

Some individuals view quantitative research as more objective than its counterpart, but obviously this is not always true when one considers the subjective decisions associated with hypothesis creation, sample selection, and data interpretation. Table 1 suggests some of the common perceptions held about each approach. Please note these are beliefs held by select individuals, and do not represent the reality of either technique. Both research methods can make contributions to consumer researchers and decision makers. Quantitative studies may have limited capacity to provide insights on a phenomenon, while qualitative data lack certain properties that allow it to be tabulated. As technological advances have made numeric studies faster and easier to implement, increased demands are heard from policy makers and others to explain the numbers.

TABLE 1. Common Perceptions (and Misconceptions?) of Quantitative and Qualitative Research

Quantitative Research	Qualitative Research
• utilizes numeric quantities, greater and lesser values are clear	• involves descriptions of attitudes, feelings, and impressions; degree of differences and comparative worth is very subjective
• involves large representative samples projecting to a population	• involves small, frequently, judgmental samples with limited generalizability
• highly structured data collection	• unstructured data collection
• can provide conclusive, definitive results	• usually provides exploratory data and insights into a situation
• limited number of research designs available; ease of replication	• many variations of research designs may be adapted to different situations
• deals with objective, measurable behavior	• deals with emotional and textual aspects of behavior and attitudes
• data results require analysis	• some feedback is immediate with research design adaptations possible
• generally expensive, time consuming	• relatively inexpensive, requiring less time
• analysis involves pre-specified rules for data reduction	• analysis involves less structured approach
• researcher requires statistical training	• researcher training emphasizes human relation skills

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TABLE 1...continued

<u>Quantitative</u>	<u>Qualitative</u>
<ul style="list-style-type: none"> • minimal interviewer skills required • researcher is external to process • presupposed cause-effect relationship • has reputation of tables of figures 	<ul style="list-style-type: none"> • high level of interviewing skills are required • researcher may be involved in process • seeks cause-effect relationship • has connotation of descriptive reports

THE NATURE OF QUALITATIVE RESEARCH

We make constant use of intuitive skills with regard to the arts and human relationships. No need exists to quantify these aspects of our existence. Subjective judgments are also vital in the consumer decision-making process, making qualitative research methods a valuable investigative device.

A Definitional Overview

Patton (1980) provides a foundation for qualitative research and insights into the process:

Qualitative data consist of detailed descriptions of situations, events, people, interactions, and observed behaviors; direct quotations from people about their experiences, attitudes, beliefs, and thoughts; and excerpts or entire passages from documents, correspondence, records, and case histories. The detailed descriptions, direct quotations, and case documentation of qualitative measurement are raw data from the empirical world. The data are collected as open-ended narrative without attempting to fit program activities or peoples' experiences into predetermined, standardized categories such as the response choices that comprise typical questionnaires or tests.

Research Applications

Qualitative research is viewed as making the greatest contributions in the areas of

- generating hypotheses for further testing
- developing research strategies to be used when gathering data
- exploring new fields and concepts related to consumer decisions and purchasing patterns
- interpreting results obtained from quantitative research.

Positive Aspects of Qualitative Research

Qualitative research can provide the following benefits:

- insights into consumer behavior and attitudes not possible with quantitative research
- a synergism and snowballing of ideas and information with certain data collection

methods (Hess, 1968)

- a two-way interaction with research subjects which can serve as a self-correction feature during the process (May, 1978)
- attractive results for top-level decision makers who desire a complete, humanistic view of a situation rather than "cold" data.

Common Criticisms and Drawbacks

In contrast, frequently cited limitations of qualitative research include:

- small samples may not be representative of a population, thus limited the generalizability of results
- an interactive environment (focus groups, in-depth interviews) can bias respondents and influence individual behavior by creating unintended or unwanted effects (Fern, 1982)
- the interpretation of results and analysis of data can be biased by personal preferences of the researcher.

THE QUALITATIVE RESEARCH PROCESS

When designing and implementing qualitative studies, the factors to consider are similar to those in other investigate approaches.

Research Designs

Miln (1979) suggested a qualitative research design similar to other types of studies. The components would include problem definition, selection of research methodology, sampling procedures, collection of data, data analysis, data interpretation, and development of conclusions and recommendations. In a more specific context, Calder (1977) identified three major approaches for qualitative research:

- exploratory designs attempt to generate or select theoretical ideas and hypotheses which can be viewed as prescientific knowledge
- clinical designs seek psychological and sociological explanations for attitudes and behavior, and are referred to as quasiscientific knowledge
- phenomenological designs have respondents describe in detail their behavior and reasons for attitudes, with this data categorized as everyday knowledge.

Each design has a distinct purpose with regard to the type of knowledge desired and the research problems for which it can be used. These approaches can serve as a framework for the planning and implementing qualitative research studies.

Data Collection Methods

The range of unstructured data collection methods is wide (see Table 2), with each providing unique characteristics.

TABLE 2. Qualitative Data Collection Methods

Technique	Major Research Use
• observation	• to record overt consumer behavior and market-place activities
• focus group	• to generate ideas and to obtain information on existing and proposed practices
• in-depth interview	• to obtain insights regarding motivations related to specific behaviors
• projective techniques	• to determine underlying beliefs and attitudes related to consumer behavior
• panels	• to collect qualitative data with the use of an on-going group of respondents

Observations. McKinlay (1975) documented the approaches, data collection techniques, and statistical methods available for use in observational studies. A debate exists as to whether observations are quantitative or qualitative research models. While numeric values are frequently used, a great deal of subjectivity is involved when deciding what and how to record certain behaviors. In addition, the interpretation of the behavior requires a qualitative approach. Observational studies can range from the viewing of an interpersonal relationship between parent and child in a supermarket (Atkin, 1978) to building statistical models regarding product consumption patterns based on garbage analysis (Rathje, Hughes, and Jerighan, 1976).

Focus Groups. Groups interviews are currently being used to obtain hidden thought and attitudes toward such items as the working environment in an organization, company policies, and work quotas. In addition, newspaper editors use focus groups to assess new features, plan graphic changes, and measure columnist appeal. Lawyers use the method to test arguments before presenting them in court. And, universities stage focus groups to plan recruiting and fund raising campaigns (Bennett, 1986). In this group discussion atmosphere, a researcher hopes to gather insights into behavior and thinking. "Rather than using a structured question-and-answer methodology, the procedure is to encourage a group to discuss feelings, attitudes, and perceptions about the topic being discussed" (Bellenger, Bernhardt, and Goldstrucker, 1976).

The value of focus group data is the result of effective leadership and group interaction. Successful moderators possess the personal qualities of flexibility, compassion, empathy, kindness with firmness, encouragement, and sensitivity (Goldman, 1962; Levy, 1979). Regarding group interaction, Quiriconi and Dorgan (1985) identified three major personality types

involved in focus groups--unconventional types, conventional types, and altruistic types. An awareness of individual behavior related to personality can help in selecting focus group participants, and can assist a moderator in encouraging and controlling certain respondents.

In-depth Interviews. Sokolow (1985) identified the following advantages of the personal depth interview over the focus group:

- eliminates group influence bias
- provides "thoroughness of self-disclosure"
- research subject has constant attention of interviewer
- allows informational probing in depth which increases the quality of content obtained.

As with other qualitative data collection methods, Berent (1966) suggests that the depth interview can be the basis for planning a quantitative survey or for obtaining insights into survey results. Berent cautions in using results of depth interviews without testing the findings with quantitative research.

Projective Techniques. Haire (1950) found projective research methods useful for revealing motives below levels of verbalization. Klopfer and Taulkee (1976) suggested that projective techniques identify creative capacities, hidden human resources, and potentialities currently not in use. Lindzay (1959) offered a typology of projective techniques consisting of five categories:

- associative techniques in which subjects respond to some stimulus presented to them
- construction techniques have subjects creating a product in an art form such as a story or picture
- completion techniques present subjects with some type of incomplete product
- choice or ordering techniques involve the selection of an item or creation of an arrangement based on a specified criterion
- expressive techniques are designed to reveal and express the manner and style of a process rather than the end product.

While a major controversy surrounding projective research methods is the lack of consistent analysis, Kassarjian (1974) reported highly correlated interpretations among experienced researchers.

Panels. While the focus group is usually a single data-gathering effort, Fuller (1984) suggested on-going qualitative panels. The Delphi panel (Cassino, 1984), created by the Rand Corporation after World War II, was used to predict the consequences of nuclear war and other future episodes. The Delphi method is a consensus-building model for short-term decision making and conflict resolution. Current uses of the technique range from predicting product success to forecasting future social conditions.

Members of a Delphi panel do not know the others

involved in the process. A series of questionnaires are circulated with panel members viewing the responses of others on a topic. Usually after two or three rounds, consensus is achieved since the emphasis is on "listening" to the views of others without distractions of personal contact (Hartman, 1981). This technique has many variations and is called the "key-informant" or "expert-opinion" survey by some (Parasuraman, 1986).

CONTINUING CONCERNS

To improve the value of qualitative research, three potential problem areas should be addressed. These concerns relate to research subjects, reliability and validity, and data analysis.

Respondent Selection

Judgment samples are most frequently used in qualitative studies. This decision is usually made to obtain respondents who are knowledgeable in the area being investigated (Bellenger, Bernhardt, and Goldstrucker, 1976). While this research design component can result in non-representative participants, May (1978) suggests a value and procedure in using judgment samples. The sampling error frequently associated with qualitative studies may be a valid tradeoff for a relatively low nonsampling error which can provide increased confidence of the findings. The use of many qualitative studies involving large numbers of subjects can help to minimize the criticism of small, nonrepresentative samples while taking advantage of the benefits provided by qualitative research methods.

Reliability and Validity

The difficulty associated with replication of most qualitative studies is another concern (Kover, 1983). This problem results from the flexibility associated with qualitative research methods. Frequently, procedures are adapted while in process due to the nature of the research problem, characteristics of research subjects, or changing social and economic environments. Kover (1983) further suggests that qualitative research may in fact possess greater objectivity than quantitative studies since participants are allowed to express their beliefs, attitudes, and insights on a topic rather than being limited to the parameters set by the researcher.

Evidence exists that qualitative research can provide consistent and useful results. Reynolds and Johnson (1978) reported that focus groups revealed the same results as a quantitative survey of shopping attitudes and habits on all issues except one. Sales data later revealed that the qualitative research finding was a more accurate reading of the market than the quantitative investigation for the item with differing results.

Data Analysis

With words being the main component of qualitative data, reduction and analysis of data is difficult. Miln (1979) suggests that findings should be quantified whenever possible, but also points out that numeric measurement may not always be possible or desirable.

The use of content analysis techniques is commonly associated with qualitative data, especially when generating hypotheses or developing conclusions (May, 1978). Bellenger, Bernhardt, and Goldstrucker (1976) suggest a seven-step process for content analysis: (1) specificity needed data, (2) map out plans for tabulation, (3) lay out a skeleton of the outline, (4) fill in categories for each variable, (5) establish procedures for unitizing the material, (6) try out the analysis outline and unitizing procedure, and (7) use the analysis outline and interpret the results. This is based on two inferences. First, that responses are indicative of the participants' attitudes, opinions, and beliefs. And second, the sample data obtained, and analysis that follows, provide insight into the behavior of larger groups of people.

Another framework for data analysis is advocated by Miles and Huberman (1984). This process consists of three phases:

- data reduction involves selecting, focusing, simplifying, abstracting, and transforming concepts and content
- data display is "an organized assembly of information that permits conclusion drawing and action taking" usually in the form of a narrative text
- conclusion drawing/verification involves adding meaning to the text by noting regularities, patterns, explanations, possible configurations, causal flows, and propositions, while developing consensus to replicate findings with other data.

Grunert (1986) takes the content analysis process one step further with the use of computer-assisted procedures. This technique creates associated links of cognitive behaviors based on word frequency and proximity.

CONCLUDING COMMENTS

Research to create meaningful and useful information must be conducted with a scientific rigor that results in the advancement or creation of documented knowledge. Lynch (1983) suggests that the decision to follow either a quantitative or qualitative methodology will depend on the nature of the inquiry, the type of data to be collected, and the data collection method. For qualitative research to best serve the needs of policy and decision makers, the following guidelines are offered:

1. make use of both quantitative and qualitative research methods to gain complete insight into a topic; conduct cross validation studies

between the two inquiry methods as done by Greenway and de Groot (1983) and Reynolds and Johnson (1978).

2. structure qualitative research designs for consistency of implementation and to allow replications to be conducted.
3. present qualitative data for analysis and interpretation by more than one person to avoid biased research results.
4. use respondent selection methods that are representative of larger populations.

Since certain types of information may only be obtained with qualitative research methods, this investigative approach is a necessity for various studies. Well formulated qualitative investigations can be as information as quantitative studies for bridging gaps in knowledge while also adding depth and insights into consumer activities.

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QUALITATIVE RESEARCH DESIGNS AND ISSUES:
ALTERNATIVE METHODOLOGIES FOR CONSUMER RESEARCH

ANALYSIS TECHNIQUES FOR QUALITATIVE DATA

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Problems facing qualitative methods in consumer research are discussed. Programs for computer-assisted data analysis are introduced. Optical Character Scanners are offered as hope for an underutilized approach to scholarly investigation in the consumer area.

When Les Dlabay proposed this session, he understood the need to stimulate an exchange of ideas about using qualitative methodologies in consumer research. Because I had become familiar with using some applications of content analysis in my research, Les contacted me to be a discussant for this panel presentation. In those early conversations we considered some of the basic issues which I will be addressing today.

One problem for qualitative research and researchers is the prevailing opinion that qualitative data present few problematic methodological issues (Miles, 1983). Qualitative studies are eyed with suspicion by academics who view this work as "quick and dirty" analysis with little to offer. It is my hope that our panel today will illustrate that nothing could be more distant from the truth.

Another focused problem for qualitative methods is the bundle of misconceptions that exists about this research approach. For example, most people believe that content analysis is a qualitative methodology. Yet, content analysts believe that their method is a quantitative analytical technique because by definition, it quantifies communication messages. Furthermore, studies with content analyses have used some of the most sophisticated quantitative statistical techniques available.

After examining a small sample of the literature in preparation for this presentation, I found at least three journals devoted to reporting research and theory about qualitative methods and several journals devoted to computer analysis of qualitative data. The literature also reflected what Les and I had discovered during our discussions -- there is no firm agreement about the definition or application of qualitative research. Indeed, different disciplines squabble about the "correct" approach to executing qualitative studies and data analysis.

There is general agreement that qualitative and quantitative are not dichotomous attributes. Rather, they are viewed as falling along a con-

tinuum. Additionally, as observed by Holsti (1969), whether stated explicitly or not, the most rigorous quantitative studies use non-numerical procedures at various stages of the research process. This fact may best be illustrated by one of the most important steps in the research process -- the literature review.

It is unfortunate that the term "qualitative" is correlated with unscientific research while quantitative research is viewed as scientific (Van Mannen 1983). The artificial dichotomy becomes more interesting when we consider applied vs. theoretical research and observe the almost stereotypical gender-based association. Qualitative methods are at times associated with applied, soft, almost feminine sounding adjectives while quantitative methods are more frequently associated with theoretical, hard, almost masculine sounding adjectives.

Either qualitative or quantitative research methods can be used for developing theory or applied research. Holsti (1969) observed that it should not be assumed that qualitative methods are insightful while quantitative techniques are mechanical methods for checking hypotheses. Yet, quantitative analytical methods are almost always associated with theoretical research, while qualitative analytical methods are seen as applied.

Even a small review of the literature will illustrate how these stereotypes reflect an ignorance about the characteristics and capabilities of either type of data analysis. Furthermore, in terms of qualitative analysis, these myths stunt the development and growth of a qualitative component for research in the social sciences (Taylor and Bogdan 1984). It is true that qualitative studies can be used in an unsystematic way and can be poorly executed. I have personally encountered numerous examples of unsystematic content analyses in the consumer literature (Hayes and Jensen, 1986). But, qualitative studies mirror similar flaws. If a study used regression analysis inappropriately, would blame fall on the analytical technique or the person who misused it?

COMPUTER ANALYSIS

Today, I want to discuss some developments in the field which many believe will change the way we approach qualitative research (Heise 1981). Computer assisted analysis of qualitative data is the logical direction to follow. However, it still has some problem areas that are primarily a result of relatively primitive hardware and software. At least they offer the potential to

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"destigmatize" the area. I am not an expert in this area and I have not yet physically interacted with the programs I am discussing today. I bring them to your attention for the sake of information exchange.

KWIC

Key-Word-In-Context or KWIC list programs are one of the most basic and widely used types of text-processing programs for social science language studies. KWIC is basically a concordance or index program (Wood 1984). Many of you are familiar with Bible concordances or you may use concordances as codebooks for very large data sets. They are widely used for bibliographic searches. This type of system exists at several levels of sophistication and cost, however, it can be given different names in other discipline areas.

Weber (1985) presents a basic use of the KWIC concordance program. A study which examined the content of the party platforms from the 1980 Presidential elections analyzed the word "Rights" as it was used by Regan and Carter. For this study, KWIC was instructed to list a certain number of words to the right and left of the key word. (It could list the entire paragraph or only X number of words after the key word). The program can also be used to analyze themes once it is instructed which key words or phrases represent which themes.

These lists can draw attention to the variation or consistency in word meanings and usage. They provide systematic information that is helpful in determining whether the meaning of particular words is dependent upon their use in certain contexts. Concordances lend themselves to the intensive study of a few specific symbols like "consumer rights" or "marital property reform." Accordingly, investigators must translate hypotheses into concern with the presence, absence or pattern of occurrence of specific symbols. KWIC lists can also be used to generate word frequency counts. Weber (1985) cites a study that compared the content of presidential platforms in 1976 and 1980. Not surprisingly, Reagan's use of words like "Soviet", "military," and "defense" ranked high. While Carter used words like "health," "women," and "education" more frequently.

There are serious problems with using word frequency counts. For example, word frequencies don't reveal much about the associations among words and any one word can have many meanings. Fortunately, there are more sophisticated uses of these programs. Word or phrase counts based on their co-occurrence with other words in a sentence or even a paragraph can be used. Using KWIC lists, factor analysis is often applied to category counts in order to identify themes in a text (Wood, 1984).

These programs could have a number of applications for consumer and family economic concerns. How many consumer issues did political hopefuls address during their election campaigns?

It would be wonderful to have a concordance to the JCA instead of the limited index which currently exists and a concordance to the documents that are housed in the Consumer Historical Document Library.

Consumer research could investigate how certain concepts or theories are being applied by researchers from different disciplines. Another application would be to examine certain words such as "consumerism." Is it changing from a term that meant, "a social movement to protect and enhance the rights of consumers," to a term that means, "a society that values a materialistic lifestyle?" In an historical context, how was the word "consumerism" or the phrase "consumer movement" used from different media sources during the rise and fall of the last consumer era? How do different print media cite Ralph Nader or discuss consumer groups in general?

Commitment to Method

For those researchers who are unfamiliar with qualitative methods, useful research applications with these programs will require two things. First, become familiar with content analysis. In my opinion content analysis is the best starting place because it provides structured, systematic methods. Once, these skills are mastered, consider experiencing the less structured, less systematic qualitative methods.

Simply reading one article that used the method and copying its approach is not sufficient. It could represent misuse of the method. Additionally, relying on one survey article about content analysis provides a shallow level of knowledge. Know the method's standards for the way you are using it. Become familiar with what approaches are available, useful and considered acceptable by other scholars who are knowledgeable about the overall methodology. Especially important are the issues discussed about research design and your dedication to the systematic nature of the method.

Second, try to become acquainted with some of the computer packages and their capabilities. I have spent time discussing KWIC because it is:

1. Widely available;
2. Reliable (you can eliminate many of the coding errors that you experience in hand coding an entire data set); and
3. It is relatively inexpensive to use given the time and cost of hand coding (Weber, 1985).

Additional Computer Programs

I also want to let you know about three computer programs that were specifically developed to be used in the analysis of qualitative data: NUDIST (Richards and Richards 1987), QUALOG (Hiemstra, Essman, Henry and Palumbo 1987) and CATS (Podolefsky and McCarty 1983). These programs were developed with the idea that social scientists will change the way they actually do research by interacting with microcomputers.

Although computers have had a major impact on the analysis of numerical data, they have played a

relatively minor role in the analysis of qualitative information. Part of the problem lies with the fact that we tend to assume that computers always perform computations (Wood, 1984). Unfortunately, as Richards and Richards (1984) point out, methods to analyze numbers, both in a statistical sense and in data management, are more developed than methods to investigate unstructured text. For example, in the past, common strategies for managing field data have been xeroxing records, dividing them into categories and placing them in file folders. This process is also known as the "scissor, circle and file" technique (Podolefsky and McCarty 1983).

The computer programs that I have listed offer at least the potential to not only solve these bothersome and possibly unsystematic methods, but also present a new way of analyzing the data once a data base has been established. Let me give you one small example. Qualitative analysis involves an ongoing process of concept formation, and development of categories. Even with traditional methods of hand coding content analysis it is extremely difficult to keep revising your categories and definitions. This situation is always true if you are working with a data base in which the data are already collected, coded and exist in some machine readable form.

These programs were established with the belief that the investigator must be able to interact with the data, no matter how large or complex the data set. These programs will allow you to set up a new category or a subcategory in a few seconds. They also allow you to keep exact notes and records of what you changed and WHY you decided to change it. Additionally, once you have established a data base (i.e. all of your records are in machine readable form), other researchers can start with a clean slate and either try to replicate what you did or ask other questions of the same data.

After talking with our computer science "experts" and our local library science expert, NUDIST (Richards and Richards 1987) seems to offer the greatest flexibility of these programs. It was developed by a sociologist and computer scientist in Australia to analyze five years worth of semi-structured taped interviews and took seven years to develop. They were exploring the themes of "neighboring, privacy and homeownership."

The program's developers maintain that it can answer questions about patterns that occur in the data almost instantly. Did all of a certain type of comment come from non-white, female, migrant workers? Specific comment categories (e.g. privacy) can also be retrieved using designated respondent characteristics (e.g. female, divorced, with school aged children and employed full time). In other words, as with quantitative analysis, this type of program allows the provisional testing of hypotheses by investigating concomitant variation, ruling out spurious or confounding factors, and assessing conditions that may explain variation (Richards and Richards 1987). Moreover, with all three of these programs, the analyst is not locked into

one exploratory process. Categories and units of analysis can easily be altered.

According to Conrad and Reinhartz (1984) these computer-assisted applications of qualitative research offer several other advantages: 1. We can begin to think of new ways of triangulating qualitative and quantitative data analysis; (The "multiple operation" approach to research can become more of a reality); 2. These systems provide documentation for the development of systematic and reliable methods for analysis. (Computers can keep track of the complete evolution of the study -- including all of those "messy" but necessary details and the documentation process should facilitate collaboration and sharing of ideas among researchers); 3. One of the long-range consequences predicted to occur from the integration of computers and qualitative data is the breakdown of the polarization of qualitative and quantitative research.

It's difficult to discuss these programs. Recently, I spoke with an extension specialist about these programs. He said that extension already had access to interactive bibliographic searching services. But, that response is a misunderstanding of these programs. They are capable of providing much more detail than providing a list of references or even summary abstracts. Once the data are entered and the data base has been established, they can be retrieved in many units of analysis -- words, sentences, paragraphs or complete articles. Data retrieval is similar to the "hypertext" idea or, on a less sophisticated level, the "hypercard."

OPTICAL CHARACTER SCANNERS

To create qualitative, computerized data bases, how can we realistically spend hours and hours manually entering records, memos, books, articles -- whatever form that unstructured text data takes? Be patient. Optical Character Scanners are coming. They're dropping in price, becoming more portable and more capable of reading different types of fonts and different character lengths. There is a hand held unit on the market for about \$1,500. I am as yet unsure about its ability to read "typeset" print, but the point to note is that along with software, hardware is also developing which will allow the management and analysis of qualitative data.

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ACHIEVING RELIABILITY AND VALIDITY IN QUALITATIVE RESEARCH

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In Consumer Studies we have traditionally engaged in quantitative research favoring quasi-experiments and survey designs. Quasi-experiments have dominated consumer education research and survey designs have been most evident in measuring consumer response to environmental considerations. We have particularly emphasized the importance of large sample sizes and have become increasingly reliant on randomly sampled secondary data sets as these have given us confidence in the validity and reliability of our results. Sophisticated statistical analyses have enabled us to test researcher developed models on consumer behavior, price effects and predicted response social welfare initiatives. To a discipline so grounded, the idea of qualitative research - a methodology which emphasizes depth of information utilizing small homogeneous or heterogeneous samples is suspect.

Qualitative research techniques such as participant observation and depth interviews are respected and regularly used in the social sciences, particularly sociology and anthropology. These used ethnographic studies to examine conditions of poverty and culture. Observation and field work have been used in educational settings over the past few decades (Bogdan & Biklen (1982). Qualitative research methodologies have also been used in consumer behavior and marketing studies. Within marketing the group depth interview [focus group] is the most common method in use for 25 years. A focus group can be defined as a qualitative tool for collecting information in which a number of respondents simultaneously discuss a given topic under the guidance of a moderator (Fern, 1986).

Uneasiness about focus groups centers around the limitations of generalizability and reproducibility of the method. The methodology appears antithetical to the scientific method. And while this paper will identify limitations of the method, it is essential to recognize that the scientific paradigm has inherent limitations. There is no one best research method. All methods are flawed, but they are flawed differently. A combination of different methods which complement each other should be used to arrive at scientific knowledge (McGrath & Brinberg, 1983). This paper examines focus group as a method for inclusion in consumer studies not as a replacement for current techniques in which we are well grounded.

QUALITATIVE vs QUANTITATIVE METHODS

Qualitative and quantitative research approaches differ substantially in goals and objectives as well as in processes. The underlying goal of qualitative research is to gain a depth of understanding on a phenomenon whereas the goal

for quantitative research is to know the extent to which a phenomenon occurs or can be predicted to occur. The vast differences within research approaches depending on the research design are recognized. However, the explication of experimental vs. survey methods or differences observation and group interview techniques is beyond the scope of this paper.

Table 1 presents a general overview of differences between quantitative and qualitative research. While the table is by no means exhaustive, it highlights the major differences in intention and desired outcomes between the two general approaches while at the same time demonstrating their compatibility. Quantitative studies generally attempt to arrive at some conclusion through the measurement of behaviors, occurrences or conditions of occurrence whereas qualitative research attempts to understand the reasons for the occurrence.

An examination of this table leads to some preliminary assessments on the reliability and validity of this qualitative research. The motive and purpose of qualitative hint at the validity of the method when viewed in terms of the degree to which indicators are measuring the construct or to what extent we are truly measuring what we think we are. By investigating and delving into the attitudes behind behaviors and the relative stability of the behaviors we are better able to design reliable measures for quantitative studies. The sampling techniques for qualitative studies defy reproducibility. The number of group interviews per study depends upon the point at which no more new information is generated. Exploratory focus groups are often conducted for hypothesis generation or pretesting of product concepts, or questionnaires for quantitative study. To this end, the method is a precursor to quantitative research.

RELIABILITY & VALIDITY

Assessments of reliability and validity are the barometers by which we attempt to assess the degree to which the efforts of our research, or scientific inquiry yield knowledge. The induction method of arriving at knowledge has limitations and cannot lead to certainty. Through careful research design including multiple measures and replication we can arrive at some approximation of the truth.

Reliability is a necessary but not sufficient condition to assess the validity of a study. Reliable measures are those which remain stable over time. The three methods typically used to assess reliability are test-retest, alternate forms, and internal consistency of multiple item scales. Reliability of treatment implementation, the way in which a treatment is implemented by one or more persons and differences from time to time in the way the same individual administers

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TABLE 1: QUALITATIVE vs. QUANTITATIVE METHODS

Dimension	Qualitative Research	Quantitative Research
Purpose	identify nature & underlying causes of target group behavior	count to arrive statistically projectable results
Intent	investigatory	conclusion
Knowledge sought	prescientific	scientific if experiment description if survey
Objective	hypothesis generation	hypothesis testing [theory/model testing]
Goal	learn attitudes & motives which direct behavior	learn frequency & distribution
Sample size	8 to 10 per group 2 to 8 groups/ study	1000 common for survey 100+ for experiment
Sample selection	target groups	random selection or random assignment
Representativeness	unknown	probabalistic determination
Data collection	observations recorded on tape	written record; numerically coded
Data analysis	description of how & why responses were generated examined for insights	number of responses generated for statistical tests
Data reporting	narrative discourse	statistical methodology and test results
Implications for future action	leads to quantitative measures	basis for decision

the treatment. Both unstable measures and unstable treatment serve to inflate the error variance and attenuate the true results of the study. Qualitative research or focus groups for exploratory purposes are not designed to test for reliability of measures. However, due to sampling procedures, the premise for conducting the research, and the manner of questioning, achieving reliability is neither desired nor intended. Table 2 contrasts reliability of qualitative to that of quantitative research and delineates the limitations for focus groups as representative of qualitative and survey methodology as representative of quantitative.

The general purpose of focus groups is to explore motives, attitudes, and behaviors. Its goal is to seek out the widest range within a given population segment, albeit a judgement or convenience sample drawn from that segment. A typical focus group study might include as many as eight groups drawn from the same segment with each group giving a slightly differentiated view of the issue under study. Whereas a large survey asks the same questions in the same manner, the measures are more reliable than those of a focus group. In the focus group, similar questions are often asked in a somewhat different manner.

In addition, two moderators might not elicit the same responses. However, it is possible to train people in the methods of qualitative investigation thereby increasing reliability. Interaction among the group participants might alter the responses indiscriminantly. For example, if a dominant participant is not controlled by the moderator, s/he might bias the responses of the remaining participants. The group dynamics inherent in the methodology can and frequently do contribute to instability. Validity may be defined as the informativeness of a specific study for the development and support of hypotheses. Campbell and Stanley (1963) have defined two specific types of validity: internal validity and external validity.

Internal validity refers to whether the relationship between the independent and dependent variables is causal. It asks the question: "did the experimental treatment make a difference?" Eight possible threats to the internal validity of experimental studies have been delineated. (Campbell & Stanley, 1963). Qualitative and correlational [survey design] quantitative research studies to not attempt to identify cause and hence, the issue internal validity is not critical.

TABLE 2: RELIABILITY OF QUALITATIVE vs QUANTITATIVE RESEARCH

Dimension	Qualitative Research	Quantitative Research
Sample size	small sample size	large sample for projectable results
Sampling Procedure	ignores segments self-selection & interviewer convenience	probability selection self-selection is minimized [non-respondent survey]
Replications	interviews stopped when no new information is generated	sufficient number of observations to assure stability
Instrumentation	interviewer bias - elicit certain response	question bias would be systematic across all respondents
Interpersonal interactions	respondents can be influenced by interaction	no differential influences

External validity refers to generalizability of the findings of a research investigation. It asks the question: "To what populations and settings and these findings be generalized?"

Construct validity, refers to the extent to which our measures of independent and dependent variables are operationally defined to capture the construct. This includes the degree that a measure assesses the magnitude and direction of a representative sample of the characteristics of the construct and the degree that the measure is not contaminated with elements from the domain of other constructs or error. Construct validity can only be inferred; it cannot be assessed directly (Peter, 1981). Construct and external validity are similar in that both deal with generalizations. The former is concerned with generalizations from the sample to the population and the latter with generalization from variables to constructs. Estimates of internal consistency reliability provide support for construct

validity. Table 3 presents a comparison of qualitative and quantitative research on these issues of validity.

When qualitative research is used for exploratory purposes to either generate hypotheses or pretest questionnaires, the ultimate construct validity might be achieved. Latitude in the way questions are phrased and greater flexibility of response contribute to a higher construct validity in focus group than in quantitative survey design. Querying respondents in focus groups will provide the researcher with a clearer understanding of the respondents' view of the world. In designing a research project, it is often easier to use items that have been previously generated because it creates automatic legitimacy and acceptance among members of the academic community (McGrath, Martin & Kulka, 1982). Unfortunately these previously generated items might not represent the construct due to a variety of factors

TABLE 3: VALIDITY IN QUALITATIVE vs. QUANTITATIVE RESEARCH

Validity	Qualitative Research	Quantitative Research
Internal Validity	Not causal; not salient	Controlled by design in experiments. Not salient survey research
Construct Validity	More psychological valid representation of how & why people respond Professional moderator can guide interview & questions Group members interaction leads to candid answers	Uncertain due to manner by which measures were developed Depends in part on the researcher's familiarity with both theory and substantive issues
External Validity	Difficult to generalize beyond the target population to the population	If sample is random, results can be generalized to the entire population

including prior researchers' deficiency in the substantive area under study. For example, in a review of foodstore choices studies from 1969 to 1983, "availability of credit, social class appeal, and ease of return" were found on more than one list. These do not seem to be attributes salient to foodstore shoppers and hence, their inclusion in studies on the topic undoubtedly confounded the results.

The external validity of qualitative research is weak due to limitations imposed by sampling procedures. However, prior experience has shown that survey data often confirm the qualitative results.

ACHIEVING RELIABILITY AND VALIDITY

The previous sections of this paper differentiated qualitative from quantitative research. While qualitative research was shown to be superior in achieving construct validity, its reliability is generally inferior to that of quantitative studies. Attenuations resulting from differential implementation in qualitative studies can be minimized by training moderators and by training analysts to evaluate the transcripts of groups sessions in a consistent manner. In an empirical investigation on focus groups, Fern (1982) obtained a composite reliability coefficient of .75 when two students edited transcripts for major ideas.

Generalizability of results can be enhanced by enumerating all the response categories one wishes to represent such as age, sex, income, and purchase behavior and selecting the number of groups to assure sufficient representation on these variables. Experience indicates that most research issues can be addressed in six to eight groups.

SUMMARY AND CONCLUSIONS

The purpose of this paper was to address the limitations of qualitative research with regard to issues of reliability and validity. Its intent was to propose the qualitative method as an additional research strategy to be used in conjunction with quantitative methods. As stated earlier, all research methods are seriously flawed and as such they must be used in combination if we are to seek knowledge with any degree of certainty. The combination of methods we choose must be selected from classes with different vulnerabilities. "We can never know anything independently of the way we found it out. Empirical knowledge can gain credence only by accumulation of convergent results. Knowledge requires convergence of substantive findings derived from a diversity of methods of study." (McGrath, Martin & Kulka, 1982, p. 105).

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A NUMBER CRUNCHER'S ENCOUNTER WITH QUALITATIVE RESEARCH

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This is a personal account of the Author's experiences in alternative methods of consumer research in contrast to large data sets and number-crunching studies.

INTRODUCTION

The overall goal of this session, as proposed by Dr. Dlabay, is to give some exposure to alternative methods of consumer research through "discussion of research designs/approaches you have taken or would use". For my contribution to this session, I will discuss approaches I have used to probe qualitative aspects of a research question. I should state at the outset that I will not be discussing methods of qualitative research; rather I will be touching on the interface of quality and cost factors in research in consumer and family economics. To this extent, "quantitative" to me implies measurability by the measuring rod of money.

My close encounters with quality aspects of research questions are an inevitable consequence of taking a traditional economics background to a consumer sciences department. Economic theory has become so refined that, given the right assumptions, it can be made to predict almost anything [2]. This was particularly evident in the case of the so-called new family economics. Rigorous application of quantitative economic models of choice to the family lead to many predictions which were broadly consistent with key empirical knows.

Yet the application of such models leaves much unexplained. Though a regression equation representation of an economic model of the family or the consumer (the norm for much of the field research) may come up with correct signs and a "reasonable" R-square, typically there is much in the residual that still needs to be accounted for - even beyond any suspected specification errors, errors in measurement, bad proxies or the like. It is here that quality factors enter. The road to explaining the unexplained may well lie in developing adjuncts to the traditional models through research of quality aspects of the problem.

In what follows, I will describe three approaches to research wherein quality and cost aspects of a problem needed to be interfaced. As will become evident, much of the work was "seat of the pants" research. Nevertheless, I hope that description of my experiences will be of some help to others working on analogous problems.

THE AFTER-SCHOOL CHILD CARE PROJECT

This project was reported on last year from point of view of results [4]. I will now add a comment on model and methods.

My involvement in the project was at the request of a colleague in child development, who was researching why parents chose their current child care facility. He had come to realize that economics reared its ugly head, and therefore sought the help of an economist. We set out to develop a model from what each of us knew.

The problem was how to interface child care and economic aspects of the choice facing a parent. The model we developed recognizes that there is a cost aspect to the problem, whereby parents have to assess the time and money they can afford to invest in child care; and at the same time there is a quality aspect to the problem, in terms of the impact of the program on the child's human development. Furthermore, information on all aspects of the decision had to be sought out by the parent, and the information search question has its cost and quality aspects too.

The model attempts to interface these factors in a way which allows their relative impact on parents' decisions to be assessed through survey research. To apply the model, an instrument is required which is so demanding of detail that it can only be administered efficiently by face-to-face interview methods. Therein lies my first lesson in research into quality issues. It is so demanding of data that it does not lend itself well to the collecting of large data sets within the normal research budget. As a consequence, what emerges may be more in the realms of a pilot study than a full-scale hypothesis test. As a consequence, we may be able to make assertions, but not conclusions.

QUALITY OF LIFE IN THE MIDDLE YEARS OF THE FAMILY

Once again, I became involved in a project through the invitation of a colleague - this time in family studies. The project involved the NC 164 "Stress in the Middle Years of the Family" data. The object was to assess the relative impact of economic status of families on life satisfaction.

The research has an obvious tie-in to a family and consumer economics graduate program, as it belongs to the set of on-going research in economic aspects of quality of life. As such, it interested a graduate student at Purdue, and what I'm about to say is based on her work [1].

In this area, the cost-quality interface has been subsumed in a "subjective-objective" dichotomy,

which may well be false [3]. Nevertheless, we followed precedent by using standard regression analysis techniques and canonical correlation to try to investigate which of a series of variables were important to family life satisfaction - and how they grouped together. No hierarchy was placed on these variables beforehand, and data was sought on both cost and quality aspects of family experience. The object was to see if the various standard ways of analysing data would tell the same story.

The results of the study have strong ramifications for the qualitative-quantitative research issue, in that they throw suspicion on the use of regression analysis for this kind of research. An underlying assumption of regression analysis is that change is important in interrelationships among variables (that is, it studies how change in one variable affects change in another). The large amount left unexplained in her equation, and the nature of the grouping of key independent variables, lead Diamond to conclude that it may well be that lack of change is significant, and therefore that the techniques being used for analysis of data are inadequate to the task. Therein lay my second lesson in research on the quality aspects of a question - the learning of new tricks may be required of an old dog.

QUALITY OF LIFE IN RURAL FAMILIES - NC 182

At the same time as I was experimenting with NC 164 data, I became involved with the NC 182 Committee, which was also wrestling with the issue of how to interface cost and quality aspects of family life and life satisfaction. The main step forward for this group was to bring in researchers from different disciplines, who would develop survey questions which would probe both the cost and quality dimensions of the problem. From being involved with this procedure, I learned my third lesson in the research of quality aspects of a question: validation is a major problem, and it needs the input of people who have specialist knowledge. One cannot just jump in oneself: the danger of doing bad research is too great.

CLOSING REMARKS

I have mentioned three lessons I learned through being involved in quality dimensions of research questions. I would like to close with one more, which is perhaps the hardest of all.

To make progress in consumer and family economics research, researchers may have to climb down from their prejudices about their own and other parent disciplines. I found out that economics does not have all the answers. But in order to get answers, I had first to convince other people that their disciplines didn't either; and second, that mine had at least some of the answers. Finally, I had to convince people of other disciplines that I recognized that they have some answers too. All of this is time-consuming and stressful, but if it produces better, more

eclectic models of the family and the consumer the effort will be worthwhile.

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APPAREL-SHOPPING PROBLEMS OF THE OLDER CONSUMER

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One of the most notable shifts in the changing demographic composition of the United States is the aging of the American public. Although research interest in the elderly population is growing, relatively little research has focused on the apparel-shopping problems of older consumers. The purpose of this exploratory study was to identify specific problems consumers aged 55 and over encounter when shopping for apparel. The findings indicate that fit is a major problem, followed by the styles available, apparel prices, the sales help and then all other problems. The results have implications for both retailers and apparel manufacturers.

INTRODUCTION

One of the most notable shifts in the changing demographic composition of the United States is the aging of the American public. The nation's median age, which is currently 31.9 years, is expected to be 36.3 by the year 2000. The retirement-age and elderly populations will continue to increase. In 1982, there were 48.9 million people ages 55 and over. This figure is estimated to increase to 54.9 million by 1995 (American Apparel Manufacturers Association 1984).

Although researchers from various fields have shown a growing interest in the elderly population, relatively little research has focused on the shopping behavior and problems of the elderly. Consumer educators/advocates who are interested in identifying and meeting the needs of the elderly in the marketplace, as well as retailers who are interested in reaching older consumers, could benefit from additional insight into this growing market. In particular, identification of specific shopping problems facing older consumers would be helpful.

REVIEW OF LITERATURE

Research on elderly shoppers has explored patronage behavior, shopping orientations, their use of information sources, and store attributes desired by this consumer segment. The research has generally been product specific, with the focus on either apparel or food shopping behavior. The elderly appear to rate all information sources lower in importance than younger age groups. Newspapers and word of mouth were found to be relatively more important sources of information for apparel than radio or television (Lumpkin and Greenberg 1982). Familiarity with, and use of three grocery shopping aids (open-code dating, nutritional labeling and unit pricing) were found to be lower relative to a national sample representing all age groups (Bearden and Mason 1979).

Although older consumers appear to shop less frequently for clothes than other age groups, they do enjoy shopping on the whole. They like to know the store personnel where they

shop, although they do not perceive salespeople to be very important when selecting an apparel retailer (Lumpkin and Greenberg 1982). Price does not appear as a primary consideration when apparel shopping (Lumpkin and Greenberg 1982), although the price-quality relationship offered for clothing and the presence of sales have been identified as desirable store attributes for apparel retailers (Lumpkin, Greenberg and Goldstucker 1985).

From the past research on apparel shopping behavior, store attributes desired by older consumers have been identified, as well as other aspects of their shopping behavior such as use of information sources. However, such information does not provide insight into specific problems that older consumers face in the marketplace. It was with this in mind that the objective of this research was defined as exploring the specific problems older consumers encounter when shopping for apparel.

SAMPLE AND DATA COLLECTION

For the purposes of this study, individuals ages 55 and over were interviewed. Although elderly consumers, those over age 65, have been the primary focus of previous research, there are several reasons for using a younger age. First, retirement occurs prior to age 65 for some people, resulting in a change in lifestyle that may affect apparel needs, expenditures and shopping patterns. Those older consumers who remain employed are at a stage in the family life cycle in which their earnings are relatively high, while their expenses are relatively low (Engel and Blackwell 1982). Consequently, they represent a sub-segment of the mature market with tremendous spending potential. Finally, in some cases, 55 years is used as the eligibility age for senior citizen discounts which may be used as a retail promotional tool.

The data used in this study were collected in spring 1987 in a medium-sized midwestern town. The mall intercept technique was used to select participants in four different retail locations (Aaker and Day 1983). The retail locations included a downtown business district area, a regional mall, a secondary mall with a national mass merchandise store as the anchor, and a secondary mall with a regional discount store as the anchor. The data were collected at various times of day over a period of one week to help reduce biases that might otherwise arise (Aaker and Day 1983). The questionnaire was administered orally to each respondent.

The questionnaire consisted of open-ended questions regarding problems encountered when shopping for apparel. Additional close-ended questions were asked regarding fashion and shopping interests, media usage, store patronage and demographic characteristics.

A total of 264 questionnaires were completed. Seventeen percent were completed in the central business district, 26% at the regional mall and 57% at the secondary malls (32% at one mall and 25% at another). Table 1 contains descriptive statistics for the sample. The average respondent can be

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described as a white, 59-year-old female of average height and weight. She is married, living with her spouse, and their monthly household income is greater than \$1,000. Although shopping and keeping up with fashion are of moderate interest to her, she has spent \$100 or less on clothes in the previous three months. Her favorite time of day to shop is in the morning. Newspaper and television are the media she uses most often.

TABLE 1. Descriptive Statistics for Selected Consumer Characteristics (n = 264)*

Variable	Frequency	Variable Definition
AGE		Age of the respondent
55-65	153	
66-70	50	
71-75	27	
76-80	18	
81 and >	7	
SEX		Sex of the respondent
Female	197	
Male	66	
INCOME		Monthly household income
<\$1000 per month	68	
>\$1000 per month	185	
EXPEND		Apparel expenditures for self in the past 3 months
\$50 or <	63	
\$51 - \$100	73	
\$101 - \$150	49	
\$151 - \$200	22	
>\$200	23	
WORKING		Working status of the respondent
Yes	94	
No	169	
HHSIZE		Number of people living in household
1	55	
2	173	
3 or >	35	
MARITAL		Marital status of the respondent
Married	194	
Widowed	47	
Divorced	13	
Single	9	
RACE		Race of the respondent
White	250	
Nonwhite	13	
LOCATION		Location where the respondent resides
Live in town	113	
Within 5 miles	45	
5 - 10 miles	21	
11 - 20 miles	17	
>20 miles	66	
SHOPPING		Whether the respondent enjoys clothes shopping
Yes	172	
No	90	

TABLE 1, continued

Variable	Frequency	Variable Definition
FASHION		Whether the respondent is interested in keeping with fashion
Yes	138	
No	124	
CASUAL		Type of store in which casual clothes are purchased
Discount store	45	
Mass merchandiser	82	
Department store	36	
Specialty store	45	
Other	42	
SEW		Whether the respondent sews or not
Yes	114	
No	149	
HEIGHT		Height of the respondent
Short	89	
Average	131	
Tall	44	
WEIGHT		Weight of the respondent
Underweight	19	
Average	184	
Overweight	61	
SHOPTIME		Respondent's preferred time to shop
Morning	133	
Afternoon	98	
Evening	23	
SHOPFREQ		How frequently the respondent shops for clothes for self
<Once a month	156	
>Once a month	106	
MEDIA**		Type of media used most often
Newspaper	136	
TV	173	
Radio	35	
Magazine	41	

* Totals for each variable may not equal 264 due to missing values.

** Total for MEDIA exceeds 264 due to multiple responses.

VARIABLE NAMES AND DEFINITIONS

In this section, the two major groups of variables used in this study are discussed. The first set of variables have been termed "consumer response variables." These are the variables that were created based upon consumer responses to the questions regarding shopping problems. The second set of variables are termed "consumer characteristics variables." These variables represent selected demographic and psychographic characteristics of the respondent.

Consumer Response Variables

Table 2 contains the variable names and frequencies for the consumer response variables used in this study. The variable of initial interest was SHOPROB. The responses