



Home Economics

FORUM

**COMPLEMENTARY USES OF QUANTITATIVE AND
QUALITATIVE METHODOLOGIES AND PARADIGMS
IN HOME ECONOMICS**

Norma Bobbitt	3	A Holistic Profession Requires Holistic Research
Scott D. Wright Donald A. Herrin	6	The Epistemology of Family Ecology; A Case for Methodological Pluralism
Eleanor Vaines	10	Quantitative and Qualitative Research Traditions: An Overview
Francine H. Hultgren	14	Phenomenology: The Pursuit of Meaning in Everyday Life
Elizabeth B. Goldsmith	18	The Effect of Women's Em- ployment on Quantitative and Qualitative Time-Use Measure- ments: A Review and Syntheses
Suzanne D. Gyeszly Norma Bobbitt	21	Annotated Bibliography: Complementary Uses of Quan- titative and Qualitative Methodologes and Paradigms in Home Economics



Consolidated Honor Society Launched

Haslett, MI — February 20, 1990 — The National Office of Kappa Omicron Phi and Omicron Nu announced today that the campus and alumni chapters approved a consolidation plan forming a new organization, Kappa Omicron Nu. The consolidated honor society will recognize and promote excellence in scholarship, research, and leadership in home economics.

Membership in Kappa Omicron Nu is a distinct honor conferred by active chapters in 130 colleges and universities. Eligibility criteria for undergraduate and graduate students and professionals include exemplary study and practice related to any of the specialty areas of the field: child and family development, clothing, consumer economics, family economics, fashion merchandising, foods, food service, aerontology, hospitality management, housing, interior design, home economics education, home management, nutrition, and textiles. Fourteen alumni groups support campus chapters and promote the purposes of Kappa Omicron Nu.

According to Gladys Gary Vaughn, president of Kappa Omicron Nu, "The new Society will bring unity to the quest for excellence. It will support a larger scholarly community and encourage critical dialogue and collaboration. The or-

ganization's commitment to scholarship, research, and leadership will ensure knowledge development and utilization to advance the field. Kappa Omicron Nu is poised for a dynamic future through the employment of visionary strategies to accomplish its purpose."

February 21, 1990 marks the operational transition to Kappa Omicron Nu and interim governance by the Consolidation Plan. The August 1991 Conclave will approve the new bylaws and traditions of the Society.

The Board of Directors includes President-Elect Sharon A. Wallace, Humboldt State University; Vice President/Program Treva Mitchell, University of Montevallo; Secretary Katharine B. Hall, Upper Montclair, NJ; Vice President/Finance Shirley Hyman-Hendricks, University of Maryland-Eastern Shore; Vice President/Finance-Elect William H. Marshall, University of Wisconsin; and Student Representatives: Mayda Acevedo - University of Puerto Rico, Tammy Bamlett - University of Wisconsin, Stephanie Blakely - University of North Alabama, Bradley Bishop - Brigham Young University, and Michele Hollis - Hood College.

President's Message

Scholarship and Service — All too often we think of these concepts as separate and distinct rather than connected. Professionals who devote much of their time to *scholarly pursuits* are viewed with a different set of lenses than those who devote their time to activities best described as public service, i.e., efforts for the common good. And often those deemed *scholarly* are accorded different rewards than those who provide service. I propose that the time has come for a re-examination of their relationships rather than their differences.

The efforts of scholars — their research, their writing, their theories — become catalysts for change. Change, as reflected in public law and policy, increasingly uses the results of scholarship as its foundation. Recent documents calling for fundamental change in America's public welfare system and in its treatment of racial and ethnic minorities were crafted by scholars. And think tanks are widely regarded as hotbeds for far-reaching change. Scholars who participate in these activities are well aware of the role they play in developing theory and in shaping a program, an institution, indeed a nation. It is at this juncture that public service and scholarship reveal their kinship.

Society needs scholars to debate the merits of the human condition issues surrounding and attendant to their scholarly pursuits, so that they can better think through the public policy implications of their proposals and their work.

My dream is that Kappa Omicron Nu will increase the opportunities to publish and to share ideas in colloquia, roundtables, and conferences to influence the debate on aspects of the human condition most related to professional practice.

Join with us as we continue the legacy of scholarship that was Omicron Nu and Kappa Omicron Phi, and will be Kappa Omicron Nu.

Gladys Gary Vaughn

Call for Applications for the 1990 Kappa Omicron Nu Election

for the offices of

**President Elect
Vice President/Program
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and for candidates for

**Editorial Committee
Nominating Committee**

Deadline for applications is July 15, 1990. For information about eligibility requirements and to secure an application, contact:

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Announcing
KAPPA OMICRON NU
an honor society dedicated to
**SCHOLARSHIP
RESEARCH
LEADERSHIP**
for
students and professionals
in home economics

**Don't miss the opportunity
in this founding year
to attend the Inaugural Dinner
Tuesday, June 26, 1990 in San Antonio, Texas
held in conjunction with the AHEA Annual Meeting.**

A Holistic Profession Requires Holistic Research

Norma Bobbitt

Home economics by definition deals with humans in interaction with their environments (Richards, 1908). Further analysis reveals a concern for the holistic nature of humans in relation to their physical, psychosocial, intellectual, and aesthetic well-being. These dimensions imply an integrative perspective, which according to Dressel (1958) "assumes the existence of parts which can be so related to make a whole."

Home economics is composed of sub-professions traditionally linked to multiple disciplines—the natural, physical, and biological sciences; the social and psychological sciences; as well as the humanities and aesthetics. Nutritional science, textile science, and food science with primary linkages to either the natural, physical, or biological sciences have a research base which historically reflects the positivist paradigm, quantitative methodologies, and the empirical sciences. The subprofessions that deal with inter- and intra-personal and family relationships, sociocultural and aesthetic environments, and psychosocial development historically have a research foundation that characterizes a phenomenological paradigm with qualitative methodologies associated with the interpretive sciences. Those with a focus on education, service, business, and advocacy have multidisciplinary bases. The research base for these applied subprofessions is more eclectic and based on the nature of the problem. Needs and problems of clients (individuals and families) require an integrative knowledge base because they are multidisciplinary and transdisciplinary in nature. Therefore, the professional practitioner needs to integrate concepts, theories, methodologies, and practices into new paradigms responsive to these needs and problems.

This article compares the characteristics of quantitative and qualitative research and provides an overview of the

series on "Complementary Uses of Quantitative and Qualitative Methodologies and Paradigms in Home Economics." Additionally, the author challenges the profession to increase its tolerance for new ideas and models to enrich the research environment.

Quantitative Paradigms and Methodologies

The positivist paradigm is the basis for quantitative methodologies and the empirical science mode of research. This philosophy assumes facts and causes of phenomena to be objective and separate from subjective views of individuals. The purpose of quantitative research is to seek the explanation of causes primarily through objective measurement and quantitative analysis. The main approach is to use experimental and quasi-experimental designs to reduce error bias and interference. The role of the researcher is to be objective and detached from the research processes (Firestone, 1987). Quantitative research maintains that knowledge is obtained through a deductive approach. In empirical studies, the researcher gains knowledge about how humans interact, function, and transact with their systems and environments and asks specific research questions which generate hypotheses. See Table 1 for additional explanations.

The strength of a quantitative approach depends on how effectively the research questions reflect the reality of the humans, systems, and environments being studied. The empirical view holds that when results are statistically significant the findings may be generalized to larger populations. A criticism of empirical research concerns the capacity of a mechanistic perspective to address the significant issues which emerge from a multiplicity of subject matter areas and reflect diverse foundations in the multiple disciplines.

Qualitative Paradigms and Methodologies

Qualitative research is often based on a phenomenological paradigm. This mode assumes that phenomena can be understood from the individual's perception of

the situation. Its purpose is to understand the perceptions and perspectives of the people involved in the situation with emphasis on the larger picture and the relationship of the micro- and macro-cultural systems (Fetterman, 1982). Thus qualitative approaches to the study of humans and their environments permit expanded perceptions which contribute to greater breadth and depth of study. Research from a qualitative perspective is based upon an organismic view: the sum is greater than the parts. Knowledge is gained through an open-ended approach to data collection. Qualitative research does not impose an a priori research design on the study but notes events as they unfold. The researcher becomes immersed in the study to expand understanding of culture, traditions, values, and interactional patterns. Open-ended observation with analysis and interpretation, interviews with subjects, and mapping of space, time, energy, and networks are among the varied mechanisms of data collection by qualitative researchers (Spradley, 1980; Spradley, 1979). The research is guided by the insider's point of view with content and culture becoming important factors in the perspective. For additional characteristics of qualitative research, see Table 1.

The reliability of qualitative research depends on the ability of the researcher to see the cultural perspective and raise relevant questions, to identify domains for study, and to select appropriate research techniques for the study of those domains. Frequently, those being studied provide both information and direction for the research study. Special attention must be given to the accuracy and completeness of information collected by the researcher as well as to other factors which influence the validity of this approach. The qualitative research perspective is grounded in theory (Glaser and Strauss, 1967) and therefore provides a base for the inductive building of theory and development of research propositions (Reynolds, 1971). At the same time, the home economics professional, recognizing the lack of generalizability for ethnographic research and the difficulties with

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replication, must acknowledge the limitations of the exclusive use of qualitative research methodologies.

Complementary Uses of Quantitative and Qualitative Paradigms and Methodologies

Quantitative and qualitative approaches view the world and the acquisition of The uniqueness of each element within the conceptual and the operational research stages (see Table 1) is evident as one studies the two methodologies. The complementarity of the approaches becomes apparent in the comparative analysis.

The quality or strength of quantitative or qualitative research is not reduced by using them together. The strengths of the quantitative research—generalizability of results, reliability of observation, ability to synthesize complex information into meaningful patterns or explanations—complement the strengths of the qualitative research—concrete depiction of details, portrayal of action, and attention to participant's perspectives (Firestone, 1987).

Louis (1981), acknowledging the need for formalizing the integration of findings across different methodological approaches, proposed four models:

Sequential Model: *This approach is based upon the need for more depth when there is limited knowledge available about a topic or problem. Therefore the qualitative study precedes the development of the quantitative study. The qualitative study yields preliminary insights that enable generation of hypotheses, development of instruments to test hypotheses, and analysis of data for the quantitative study. This model may also be used for designing formative and summative evaluation programs. A qualitative approach may be used for the formative evaluation followed by a quantitative summative evaluation design. For examples of sequential studies, see the Home Economics FORUM (Fall, 1989) for articles by MacCleave, Achterberg, Bissonnette, & Auld; and Lennon & Davis.*

Parallel Model: *This model involves separate and independent but parallel qualitative and quantitative research studies. Neither research study influences the other, so this approach maintains the purity of each research paradigm. A cross review may provide a more comprehensive view. For example, the incidents reported in the qualitative study may explain the outcomes of the hypotheses in the quantitative study. Integration in this model occurs only after the data collection and analysis of both studies are completed.*

Fused Model: *This method involves the combination of valuable features of quantitative methods with those representative of qualitative approaches. Quantitative and qualitative features may include the*

following: standardization of data collection with prespecification of data, documents, and interviewees; standardized reporting format; data collection in the field; emphasis on causality with early data reduction and field analysis; emphasis on analysis of a unit larger than the interviewee; analysis before the second round to facilitate collection of missing data or to observe changes; emphasis on causality within and across data. This model is controversial: purists feel it distorts the intent and value of both, while pragmatists argue that this model maximizes the value of both.

Interactive Model: *This model fuses elements of both methods in the following ways: merger of qualitative and quantitative data within and across sites; participation by some researchers in both studies; continuous efforts made to triangulate (converge methods or sources of data into a single study) data sources and interpretations; interaction between both methods during the phases of the study—sampling, instrumentation, data collection, analysis, and reporting. Much has been learned about maximization of different approaches as well as about designs that are robust and provide a holistic understanding of processes within the field setting. This model may help to eliminate some topics for study, suggest new ones, and identify relationships between topics (Louis, 1981).*

Benefits of Greater Use of Complementary Research Designs

The qualitative research approach is characterized by induction, the quantitative by deduction. Both are legitimate mechanisms in theory development, ap-

plication, and testing and are appropriate for collecting data and for contributing to a more holistic, detailed framework for understanding humans and their environmental interactions. Thus, the professional takes a legitimate position that the two approaches are mutually supportive. Qualitative knowing can benefit from quantitative knowing, and together they can provide a depth of perception or a binocular vision that neither can provide alone.

A comparative approach permits research to identify the domains for study and allows theory testing using more than one approach. When data are collected using methods from different perspectives, the researcher may have more confidence in the findings. A comparative approach may provide stronger support for theoretical models when propositions are developed and found valid whether from a qualitative-organismic or a quantitative-mechanistic perspective. At the same time, a complementary approach may serve a valuable function in research through identification of additional factors for study.

By acknowledging the value of qualitative and quantitative research, the home economics professional will make a con-

Table 1. Elements of the Research Process

Conceptual Stage	Quantitative	Qualitative
Environmental Context	Controlled/regulated environment Defined/structured boundaries	Open/permeable environment
Perspective	Deductive	Inductive
Orientation	Focused/defined variables Preprogrammed/focused/targeted research direction	Emerging/developing variables Identifying existing/emerging questions that explain why Not pre-determined research direction; results from observations and interpretations
Questions and Hypotheses	Predetermined and pre-selected research questions Purpose is to answer particular research questions or hypotheses Developed to eliminate gaps in previous research Constructs based on previous research findings	Purpose is to understand a situation/event Based upon interpretation of observed information Constructs generated from researchers knowledge base, perceptions, and insights gained via data collection/interpretative processes

Source: Bobbitt & Diana (1988)

Table 1 con't.

Operational Stage Types/Settings	Quantitative Experimental Prognostic	Qualitative Descriptive Reflective Interpretive Ethnographic
Uses	Expand knowledge Develop program direction Provide direction for support programs for families Develop public policy	Expand knowledge Develop program direction Provide support programs for families
Review of Literature	Provide preliminary step to planning research procedures	Provide preliminary step in the evolution of perspective and questions
Strength of Approach	Focus on specific hypothesis emerging from research questions	Generate, themes, concepts, insights
Validity	Know strength of each research technique	Researcher qualifications: i.e., experience and expertise objectivity
Reliability	Based on consistency in data collection and appropriate application of research techniques	Based on the strength of the researcher's ability to see the fit between "what is seen" and "what exists" within the ecology of the setting
Probability	Independence Dependence Exclusiveness	Exhaustive nature of researcher's ability
Data collection	Observations Interviews Testing and Scales Charting Projective Methods Content Analysis Sociometric Analysis Semantic Differential Q-Methodology	Observation Interview Mapping Charting Sociometric Analysis
Sampling	Reflects reality because sample represents normal population distribution	Based on the reflection of reality through perceptions of actual situational setting/environment
Research Techniques	Randomized experiments Quasi-experiments Objective Tests Multivariate Statistical Analysis Surveys	Case Studies Interviews (open/in-depth) Participant observation Interpretative comments about observations
Ability to Generalize Research	Based on adequate sample size/appropriate statistical techniques	Limited because of restriction to "one time" "one place" applicability
Future Implications	To predict what will be or might be To effect change	To understand what is or what might be

tribution toward meaningful data interpretation by "demythologizing" the qualitative-quantitative dichotomy (Fetterman, 1982). Better research decisions regarding methodological issues can be made by reviewing the appropriateness of techniques for the type of research ques-

tions to be answered and the factors such as time, available resources, and types of evaluation procedures.

Compatibility and cooperation between quantitative and qualitative researchers will facilitate dialogue and prevent insulation of the scientific community from

socially important problems. Greater paradigmatic tolerance and allowance for diversity of scholarly approaches to research will encourage an optimal scholarly environment for producing meaningful results and breakthroughs in new methods. There is a need to emphasize practical and human understanding as well as scientific understanding. A focus in home economics on a framework for inquiry may be more fruitful than focusing on rigid research paradigms and methodologies.

Of greatest significance to research is the potential for use of qualitative and quantitative approaches in a dynamic way to increase the relevance and generalizability of findings. Because home economics research is committed to understanding human and environmental interaction, a global approach will contribute to greater breadth and depth of study. Therefore, the premise of this article is that a holistic profession requires a holistic approach. Hopefully, the series of *Home Economics FORUM* issues on "Complementary Uses of Qualitative and Quantitative Research Methodologies and Paradigms in Home Economics" will assist us in achieving these goals.



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The Epistemology of Family Ecology: A Case for Methodological Pluralism

Scott D. Wright and Donald A. Herrin

The purpose of this article is to discuss the strengths and limitations of the different modes of scientific inquiry as they relate to the "knowing" & understanding of family phenomena. We are proposing that more steps must be taken to allow methodological pluralism in home economics and family studies.

The Need for Methodological Pluralism

... the real question is whether there is only one kind of legitimate scientific explanation or whether there are alternative (equally legitimate) types of explanations that are more suitable for the developmental sciences (Kitchener, 1983, p. 22).

We think, as do others (see Bubolz, 1985; Brown, 1985), that this question is very germane to family ecology, home economics, family studies, and related disciplines and that changes in appreciation and use of different types of explanation lies in an ongoing examination of philosophical foundations. Many have noted, (e.g., Brown, 1985; Kitchener, 1983, Thomas & Wilcox, 1987) that positivism is the received view and predominant philosophy of science to be found in disciplines (e.g., sociology, psychology, economics) closely allied with home economics, family studies, and human development.

The task at hand is not to eliminate the positivist approach (also known as empirical-analytic or mechanistic frameworks), for news of its death is certainly exaggerated, but to discuss the *strengths* and *limitations* of the different modes of scientific inquiry that are available to us,

particularly as they relate to the knowing and understanding of family phenomena. We are proposing that more steps must be taken to allow a wider representation of research designs and methods in home economics and family studies. This is especially relevant as it applies to the different levels of ecological perspectives now possible in the domain of *family ecology*.

We maintain that one of the primary means by which the goals of family ecology can be attained is through an integration and convergence of knowledge on family dynamics derived from a diversity of disciplines (Herrin & Wright, 1988; Wright & Herrin, 1988a, 1988b). This knowledge will continue to be enhanced by an ongoing, integrative, and interdisciplinary synthesis of the explanatory powers of various theories as they apply to the study of the family (see Micklin & Choldin, 1984). We agree with Klein (1985) who argues that the concept of interdisciplinarity is crucial to the understanding of social and technological problems. Within this concept is the "inexorable logic that the real problems of society do not come in disciplinary shaped blocks" (Klein, 1985, p. 118). In the case of studying family phenomena, the same logic applies.

Therefore, we propose that the study of family phenomena within a family ecology perspective will be best understood and explained by accepting the use of competing conceptual frameworks and by promoting methodological pluralism. At

the same time, however, we realize that there are strong biases in our disciplines favoring methodological reductionism. We agree that "carefully collected empirical evidence can be a helpful corrective to causal observations and folk wisdom" (Miller, Rollins, & Thomas, 1982, p. 851) when studying family phenomena. But we also argue the importance of pushing ourselves beyond a singular, received view as Galligan (1982, p. 884) has carefully articulated:

While we may be stymied in our present efforts to create patterns for understanding family reality, we must take steps to reach out both to our creative flexibility as scientists and to our kindred disciplines for new theoretical models and methodological innovations that fit well with our sense of reality.

In a similar vein, Doherty (1986) suggested that the interdisciplinary aspects of *complementarity* (a term associated with quantum mechanics) may be the "best prospect for understanding family phenomena" (p. 258). This argues that theories and perspectives from different disciplines may provide simultaneously valid explanations of family phenomena while also being mutually contradictory.

In addition to an interdisciplinary focus, family ecology also emphasizes a pluralistic research perspective that not only incorporates the traditional positivistic paradigm, but new and emerging research paradigms as well (see Brown, 1985; Polkinghorne, 1983). However, given the pragmatics of family research (e.g., apparent need to conduct and publish main-

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stream research, scarce resources, restricted funding opportunities; Larzelere & Klein, 1987), it is highly unlikely that alternative research paradigms will be allowed to compete effectively with traditional research designs unless such competition and inclusion is encouraged and reinforced. We believe this is a critical concern for all fields of study. There is clearly a need for greater tolerance for different modes of scientific inquiry. Larzelere and Klein (1987, p. 125) underscore the import of and need for methodological pluralism in the recent *Handbook of Marriage and Family*:

The optimal methodology for a particular study depends on several factors, including the nature of the topic, the specific research question, what is already known in the literature, and the resources available to the researcher. There is no single best methodology.

From this line of thinking, we agree with Klein, Jorgenson, and Miller (1978, p. 132) that other methods of data collection beyond the traditional survey and observational techniques should be employed in research studies:

... we can make greater use of relatively sophisticated segmented and sequential designs for identifying the sources of variation in developmental change functions. Finally, we can go beyond the conventional dichotomy between survey and direct observational methods and not only employ novel methods such as the retrieval of archival and bibliographic materials, but also combine methods for validation purposes and to provide complementary perspectives.

The continued attention to alternative modes of scientific inquiry is seen as a critical step in the growth of knowledge about family phenomena. But the question then arises, by what means can we organize the different levels of scientific inquiry—particularly as it applies to home economics, family studies, human development, family therapy, and family ecology?

A Taxonomy of Ecological Perspectives

In our review (Herrin & Wright, 1988; Wright & Herrin, 1988b) of the literature covering the scope of ecology, it was apparent that there was a need to systematically organize the vast array of conceptual and methodological studies that pur-

ported to be ecological in the social and behavioral sciences and in home economics and family studies. We soon realized, however, that this would not be sufficient because of the different philosophies of science we found represented in the pluralistic literature of ecology (McIntosh, 1987). For example, while the use of ecology (in home economics, family studies, and human development) has almost universally been used to describe studies that emphasize interrelationships among individuals or families and their environments, the use of ecology as a label is usually where the similarity ends. One only has to survey current indices and abstracts to acquire a sense of the popular proliferation of ecology as it is applied to every human phenomenon, event, or situation that can be studied (see Wright & Herrin, 1988b).

Thus, as a result of the pluralism found in human ecology, the literature associated with investigations of human development and family studies in an ecological perspective represents a wide range of scientific modes of inquiry. Some may wish to differentiate the various modes of inquiry into qualitative versus quantitative or subjective versus objective, but we find it more fruitful and insightful to organize the range of ecological studies within the contexts of different world views or a world-view approach.

World views represent "different forms of inquiry, understanding, and theory" (Altman & Rogoff, 1987; p. 36). Each world view provides a different ecological lens for perceiving human phenomena and what is taken to be important and relevant. We can see the value of a world-view approach and methodological pluralism in family therapy. The family therapy field has been very active in scholarly discourse pertaining to both the conceptual and applied issues of an ecological perspective in disciplines related to studying family phenomena (see Auerswald, 1987; Keeney & Sprenkle, 1982). This seems only natural as many family therapists are directly involved in the ways of knowing implicit in the views of the world maintained by therapists and clients alike and

how such views influence their actions and language in the therapeutic setting. Actions and languages are critical in identifying problems, solutions, and the processes necessary to bring about desired changes in the ways things are perceived, actions are taken, and information is communicated. Such views of the world also provide the conceptual contexts in which different theoretical perspectives and methodological designs are conceived and maintained. These concerns are understandable since family therapists are particularly sensitive to "whether a given theory produces useful treatment strategies and desirable results" (Guttman, 1986, p. 19).

We are developing an organizational framework that we believe has great utility in providing an organizational structure and a synthesis to the growing numbers of conceptual and empirical studies purporting to be ecological in family studies and home economics. The framework is based on Altman and Rogoff's proposed world views (or philosophical orientations) in psychology. The four world views are: *trait*, *interactional*, *organismic*, and *transactional*. These world views are differentiated according to

... different assumptions about the nature of person-environment relationships, varying conceptions about the philosophy and goals of science, and potentially different theories, methods, and strategies of research (p. 7).

Altman and Rogoff developed this taxonomy of world views as a way of providing structure to the different conceptual and methodological studies which use various units of analysis and temporal aspects of psychological phenomena. We believe this framework has great potential for facilitating the process of identifying studies that are ecological, as well as the degree to which studies advance ecological principles in theory, methodology, and practice. This organization of world views (and corresponding goals and philosophies of science) may be used to structure the different ecological perspectives in the literature according to the explicit and implicit use of ecology as a conceptual orientation and in the use of eco-



logical methodologies (see Figure 1). We hope this framework will provide guidelines for the ultimate goal of understanding that there are different levels of ecological research in home economics and family studies and that these levels are embedded in different world views.

A unique aspect of our framework is its facility to organize ecological research in terms of different epistemologies of family ecology derived from the levels of each world view. By using the various world-view assumptions within this framework, ecological research can be identified with certain levels by examining how each study considers the role of the environment, units of analysis, temporal factors, philosophies of science (concepts of causation), and the role of observers in describing particular family phenomena.

The fundamental ecological premise in our framework (which relates to Kurt Lewin's classic formula) is that "environmental and situational factors play an important role in human activity, often in combination with person qualities" (Altman & Rogoff, 1987; p. 14). This comprises the basic conditions that any ecological study needs to meet to be organized within our framework: a conceptual base that stresses persons and environments; interrelationships between persons and environments; and a methodology that attempts to measure these elements in order to understand the effects of both on each other. Studies including these components would add to a needed body of research that uses an ecological perspective in a substantive way rather than using ecology merely as a label or part of the title for research studies.

In Figure 1, the reader will note that our taxonomic framework does not include the *trait* level of world views present in Altman and Rogoff's typology. Research that is associated with this level is not considered ecological because the focus is either exclusively centered on the individual (i.e., personality traits, personal characteristics) or the environment (i.e., behaviorist approach) but not both and no attention is given to their interrelated-

ness. At the *interactional* level of ecological perspectives, the positivism-framed focus is objective and centered on elements (i.e., individuals and environments) and relations among elements using linear and unidirectional assumptions (e.g., Polirstok, 1987; Reis, Barbera-Stein, & Bennett, 1986).

The *organismic* level of ecological perspectives focuses on the principles that govern the whole from an objective and holistic perspective, emphasizing reciprocal influences among all elements in a social system or an ecosystem (see Andrews, Bubolz, & Paolucci, 1980; Bronfenbrenner, 1979, 1986; Bubolz & Whiren, 1984). In the phenomenological, ethnographic, and hermeneutic views of the *transactional* level, elements are indistinguishable from the wholes in which they are embedded; they are always in confluence with place and time; and they are changing continuously (see Altman, Werner, Oxley, & Haggard, 1987; Brown, 1985; Sixsmith & Sixsmith, 1987).

We maintain that the systematic application of the criteria associated with each level can help give a taxonomic organization to much of the research that has been and will be a part of a family ecology. Family ecology is not associated with a single theory per se, rather family ecology integrates various conceptual frameworks and empirical studies framed within the interactional, organismic, and transactional world views. And just as there is no one single theory-in-use in other allied fields of emphasis like gerontology, child development, or life-span development (Baltes, 1987), family ecology offers a metatheoretical view of family dynamics instead.

This taxonomic structure also helps identify important problems in the conceptual frameworks and methodological strategies used in ecological research. Many ecological studies of family phenomena mix world views and their respective conceptual and methodological components. This can be easily illustrated using our taxonomy (see Figure 1). Typically this is done by researchers

selecting a methodological strategy representative of one world view that is different than the world view represented in the study's conceptual underpinnings.

It is common for an ecological study to conceptually emphasize the holistic nature of a particular family phenomenon which fits within the organismic world view. For example, the holistic conceptual framework of Urie Bronfenbrenner's "ecology of human development" (Bronfenbrenner, 1979) is frequently mentioned at the beginning of a study as the basis for the study's ecological perspective. The study may also include embellishments found in the works of others who used Bronfenbrenner's conceptual framework as the basis for their initial conceptual underpinnings. Rather than select a methodological strategy that is associated with the organismic world view, the study uses a strategy and statistical techniques (e.g., multiple regression, path analysis) that are associated with the interactional world view (e.g., Kurdek, 1987; Reis, Barbera-Stein, & Bennett, 1986; Young & Gately (1988).

Although this mixing of world-view levels is not recommended, it is fully understandable given that most methodological strategies and data analytic techniques associated with the organismic world view are incapable of handling the reciprocal relationships and teleologic processes so characteristic of holistic and ecosystems perspectives. Spanier, Lerner, & Aquilino observed:

Current statistical techniques, based on linear mathematical models and buttressed by Aristotelian logic, are not fully appropriate to analyze contextual reciprocities. Circular statistical models, based on dialectical logic, and as such, attentive to the unique measurement issues raised by this logic will have to be devised (1978, pp. 329-330).

This lack of appropriate statistical techniques represents a major obstacle to assessing the ecological nature of family interactions at the organismic level. Furthermore, it raises serious questions about the ability of the systems or ecosystems conceptual model to move beyond a frame-

Figure 1. A taxonomy of Family Ecology over three world views and across related conceptual, methodological, and policy domains

World View	Conceptual	Methodological	Policy
Interactional	Identify qualities of persons and environments; qualities treated as separate; interaction between parts.	Focus on elements and relations between elements; observers are separate and objective.	I N T
Organismic	Holistic entities composed of separate parts; relations and interactions yield qualities of the whole; "more than the sum of the parts."	Focus on principles that govern the whole; holistic systems assume change is tentative; system stability; observers are separate and objective.	E G R A
Transactional	Holistic entities, not separate parts, mutually defining temporal qualities.	Confluence events people-place-time; changes occur continuously; emergent, not directional; phenomenological, ethnographic.	T I V E

work for organizing the literature of a particular topic on family behavior (e.g., Belsky, 1980; Garbarino, 1977) or as a general orientative framework for family research and family therapy (see O'Connor & Lubin, 1984; Pence, 1988; Vetere & Gale, 1987). Galligan (1982, p. 883) has aptly articulated part of the problem with the systems approach in studying family phenomena:

For all the "smoke" labeled family systems theory or analysis, there is very little theoretical "fire" that can be applied to research on real family phenomena . . . While we have an exciting vocabulary and an intuitively obvious set of ideas, their worth in understanding real interpersonal dynamics, so that applied disciplines can have a real impact, will be minimal. Instead of a paradigmatic revolution, we will have written another chapter in our history of trendy family theory.

In the world of competitive "theory title fights," we do not believe the systems perspective needs to "throw in the towel" yet just because it currently has methodological limitations (Montgomery & Fewer, 1988). We see the future of ecological research primarily occurring at two levels: the transactional and the interactional. Although the organismic world-view may be limited in producing empirical research (see Sontag & Bubolz, 1986 as the exception) due to these constraints, the conceptual domain of the organismic level will continue to be a viable component of the taxonomy of family ecology.

The Value of Methodological Pluralism

It was previously proposed (see Wright & Herrin, 1988b) that one of the primary goals and important objectives of family ecology was the development of sys-

tematic knowledge about family issues and the subsequent design and implementation of related policy. In this context, policy refers to virtually all government-enacted social policy, business and corporate policy, community sponsored programs or interventions, education programs, or therapeutic interventions and practices that are intended and inacted to benefit individuals, their families, the environments in which they live, and the interactions of these elements. Based on a pluralistic scientific approach to the investigation of family phenomena, the relevant decision-making processes can then provide the appropriate policies, practices, programs, materials, and information for the particular families in need. With this in mind, perhaps it can be argued that an emphasis on policy is the most salient dimension of family ecology because it represents what an ecological perspective can contribute for the direct benefit of families.

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Continued on page 23

Quantitative and Qualitative Research Traditions: An Overview

Eleanor Vaines

This article is an overview of the qualities which both distinguish and bring together quantitative and qualitative research traditions. A more accurate and comprehensive understanding of scientific research related to home economics can facilitate the development of the field as a practical science.

The purpose of this article is to explore commonalities and differences between quantitative and qualitative research traditions. Underlying assumptions are that together these traditions provide a rich and more complete view of science, that each tradition has methodologies that are more appropriate to one than to the other, and that for home economics to best utilize these traditions, the qualities which characterize their distinctive natures need to be clarified.

In *Home Economics: A Definition*, Brown & Paolucci (1979) presented the field as a whole. Their position was that the intellectual, pragmatic, and ethical activities are not separate but intimately interrelated. This view suggests there is a need to incorporate and synthesize a broader array of research. Three metascientific perspectives are presented as approaches which together better serve the field's mission. A premise of their definition is that the field's mission is central. Therefore, decisions concerning what to do refer back to this belief statement about the meaning of home economics.

Thus scientific research related to the field encompasses analytic-empirical, interpretive, and critical sciences. Quantitative research traditions are grounded in the analytic-empirical science perspective. Interpretive science seeks ". . . to under-

stand meaning in symbolic interaction" (Brown & Paolucci, 1979, p. 41) while critical science uses the outcomes of analytic-empirical and interpretive science to address normative concerns. These include enlightenment, empowerment, and emancipatory questions grounded in a moral vision of what should be. Thus, the qualitative research tradition reflects a blending of metascientific perspectives to address questions related to building a just society (Paolucci & Bubolz, 1980; Noddings, 1984).

Atkinson, Delamont and Hammersley (1988) suggested that "traditions must be treated not as clearly defined real entities but . . . as loose frameworks for dividing research" (p. 243). Table 1 illustrates some of the commonalities and differences between quantitative and qualitative research traditions. Truth and knowledge are ends of research. These basic aims can be better served and a more complete understanding of the whole of home economics can be clarified by comprehending the unique characteristics of each tradition as well as bridges which connect them.

Quantitative Research Tradition

The quantitative research tradition is deeply embedded in the so-called scientific revolution which began in the 17th century. Over time manifestations of the positivist position evolved as the cultural metaphor of world-as-machine. It remains the dominant reality system of the

Western World and is typified in research as a more mechanistic and reductionistic common sense (Capra, 1983; Auerwald, 1987).

During the 300 years this world-view has evolved, dramatic advances have been made. In the present debate, this research tradition is often rejected. But in the original sense, analytic-empirical science meant seeking to ". . . produce universal generalizations explanatory in nature to predict and control" (Brown & Paolucci, 1979, p. 41). Given the nature of the quantitative research tradition, and if used appropriately, results from this approach appear to be necessary for survival. Yet made central and the only way in which to know and create knowledge, quantitative research tradition contributes to an illusion that humans have control over nature. Perceiving this science as the source of answers to environmental, political, and socioeconomic concerns exacerbates rather than alleviates problems related to the everyday lives of families (Paolucci & Bubolz, 1980; Capra, 1983).

Yet technological advances make it possible for many living systems to enjoy daily life in greater comfort. Another side of such advances, however, deepens disparities among global communities and contributes substantially to long-term imbalances which raise questions about both justice and survival issues (World Commission on Environment and Development, 1987).

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Analytic-empirical science is concerned with what-is. Theory, research, and praxis are separate spheres, and each activity can be formulated and conducted without reference to the other. The data are etic in nature. That is, concepts and categories developed by the researcher are used to observe prescribed phenomenon and, from these, explanations and descriptions are formulated. Validity and reliability are based on the degrees of truthfulness and dependability of controlled observations (Kerlinger, 1979). The primary philosophical question is related to what is true and the guiding metaphor is "world as a clock." Research which is based on the assumptions of the

qualitative research tradition produce a particular kind of knowledge. It is separate from values or meaning criteria with facts and information created which are products of technical rationality (Brown & Paolucci, 1979). These strengths and limitations can be complemented by judiciously integrating the two traditions. Table 1 summarizes some selected features of the quantitative tradition.

Qualitative Research Tradition

The qualitative research tradition is deeply embedded in narrative modes of thought and encompasses two metascientific perspectives: interpretive and critical science (Paolucci & Bubolz, 1980; Bruner, 1986). Each views reality in differ-

ent ways but they are interactive in nature. In fact, if these metascientific perspectives are treated as separate entities they evolve as forms of technical rationality. When the interpretation of subjective meanings becomes the end of interpretive science, for example, the potential of the approach can be lost to radical individualism. However, if interpretive science is interactive with critical science, both fulfill their nature as means of contributing to emancipatory transformation in socially responsible ways (Brown & Paolucci, 1979, pp. 43-45).

Interpretive science is concerned both with **what was** as well as with **what is** as an integrative whole. Through individu-

TABLE 1: A Summary of Quantitative and Qualitative Research Traditions

SCIENCE CONTENT: Ways of knowing which systematically address questions related to people, social, physical, environmental phenomena.								
SCIENTIFIC TRADITIONS (Atkinson, et al., 1988; Jacob, 1988; Bruner, 1986)	META-SCIENTIFIC PERSPECTIVE	TYPE OF THEORY	TYPE OF DATA	EXAMPLES OF APPROPRIATE METHODOLOGY: 1) logic of justification to inform, 2) procedure & technique	PRIMARY PHILOSOPHICAL QUESTION(S)	PRIMARY METAPHOR	TIME SPACE	RESEARCH & CHANGE
Quantitative Research Tradition	Analytic-empirical Science. "To produce universal generalizations explanatory in nature, to predict, to control" (Brown & Paolucci, 1979, p. 41). What is	"Empirical: deductive explanation of explanatory generalization" (Brown & Paolucci, 1979, p. 41). What are the answers? Theory and praxis (separate spheres)	Meanings: Objective. "Etic: Pertaining to the outsider's view of society, using observer's concepts & scientific explanation" (Reading, 1977, p. 80). Concepts Categories	Survey & multi-variant analysis, interviews. Conditions for Validity & Reliability—Confirmability: Tests are truthfulness for specific measures & purposes and dependability (accuracy) of measures for specific sample.	Epistemology: What is true?	World as Machine (Clock) Newtonian)	Linear, Chronemic Time, Measurable and Knowable Time and Space (Reductionist)	Research produces accurate knowledge, facts are separate from values; change can be planned. Change is REFORM of existing language, institutions, politics.
Qualitative Research Tradition	Interpretive Science. "To understand meaning in symbolic interaction" (Brown & Paolucci, 1979, p. 41). What was What is Critical Science. "To enlighten, to build communicative competence to free from inner compulsion & unnecessary social control" (Brown & Paolucci, 1979, p. 41). What was What is What should be	"Analytic, Empirical: Interpretation of subjective" Brown & Paolucci, 1979, p. 41). "Normative" (Brown & Paolucci, 1979, p.41). What are the questions? Theory as praxis	Meanings: In context. "Etic: pertaining to the insider's view of society, using folk concepts (themes) and folk explanations" (Readings, 1977, p. 75). Themes Meanings: global (Citizenship, community, etc.)	phenomenology, ethnomethodology, sociolinguistics, conversations. Conditions for Validity Reliability; Confirmability, interpretations: Tests are ethical in nature, community/global, inclusiveness, for example (Erickson, 1986, 119-161; Lather, 1986, s&b; Smith & Hexhamus, 1986).	Ontology: What is real? To study metaphysic (existence, being) & reality". Epistemology from different traditions Axiology: What is good? To study ethics & aesthetics. Value is central and concerns value of truth, freedom & justice as well as language & technical rules (Brown & Paolucci, 1979, p. 41).	World as an Intelligent Living Organism (Einstein, et al.).	Time and space as Temporal and Relative (Holistic)	Research is discovering our story & basis for just action. Change is enlightenment and TRANSFORMATION of Language, institutions, politics (Bellah, et al., 1985).
Emerging Paradigm: Holism (Berman, 1981; Cohen, 1985)	→ Integration				In what ways is → Integration possible?			(Battista, 1982) →



al and community discourse new understandings of language, institutions, and politics are sought through narrative (Belah, Madsen, Swidler & Sullivan, 1985; Bruner, 1986). The data are emic in nature. That is, "it pertains to an insider's view of society, using folk themes and folk explanations" (Reading, 1977, p. 75). Hermeneutics and ethnomethodology are examples of methods appropriate to this perspective. Validity and reliability are as rigorous as for quantitative research traditions but are of a different nature. For example, because the researcher and researched are both active participants in

the study, emphasis is on the extent to which the story informs and is meaningful to all parties with results open to scrutiny by those who are involved (Lather, 1986a; Lather, 1986b). The primary philosophical question is ontological: What is real? Existence, being in the world, and reality are of central interest. The guiding metaphor is "life as journey." Research is focused on discovering our story as it interrelates with community and the contradictions which are revealed through exploring common themes among the narratives (Hultgren, 1987).

Critical science is concerned with the

bringing together of what was, is, and should be related to beliefs, knowledge, and action. Consistency is sought among these because by living an examined existence humans can better shape a more just and enlightened social order. Critical science can be a means of bringing together quantitative and qualitative research traditions and grounding these in an emancipatory context. This meta-science places living systems in a time and space radically different from a reality perceived as technical in nature. Holism reflects a universe which is self-organizing and intelligent (Barbour, 1966; Battista,

TABLE 2: The Contrasting Nature of Interview and Conversational Questions
INTERVIEW QUESTIONS **CONVERSATIONAL QUESTIONS**

Technical research paradigm: Empirical examination of predefined problems.	Interpretive research paradigm: Analysis of experiences through discourse and dialectic.
A conceptual account. ("truth")	A lived account. ("meaning")
Researcher seeks "truth" and intent is to develop theory.	Researcher and researched are empowered through revelations and intent is emancipatory.
Theory explains, describes, predicts; "world views" conceived of by the researcher.	Theory illuminates the lived experiences of researcher and researched, grounded in the circumstances of everyday life, the struggles which reveal respect and responsibility for intellectual and political capacities of the dispossessed (Lather, 1986a, p. 262).
Thus the focus is to gather information about perceptions or practices which fit categories. The interview is the object of investigation.	Thus the focus implies a revealing of something held in common; the art of the formation of themes as the working out of common meanings (Gadamer, 1975, pp. 330-331).
Sense-making revolves around time and resources of the researcher. Role of researcher is as expert in control of content relevant to the research.	Sense-making revolves around allowing meanings to emerge through shared experiences and language. Researched and researcher are reciprocal, fully participatory.
Transcripts of interviews are made to code content of the interview according to predefined categories related to the problem defined by the researcher (etic data).	Transcripts of conversations are made as records which allow for reflection, and the sequences of mutual questioning process reveals themes (emic data).
Thus interviews are effective technique for data gathering, based on epistemological justification.	Conversations are hermeneutical reflection with practical intent based on ontological justification. Thus dialogue is restored between explanation and understanding.
Consistency measures: validity is extent to which data is "true" for specific purpose and consistent with external criteria. Reliability implies dependability and accuracy of measuring instruments for the specific sample being evaluated and consistent with itself.	Consistency measures: validity is extent to which "story" informs and is meaningful. To establish trustworthiness of data in new paradigm inquiry (Lather, 1986a, p. 260). Reliability: reciprocity used to build more useful theory, thus reflexivity to protect research from researcher's own research; all results open to scrutiny of those involved. Reality (ontology) is more than negotiated accounts (Lather, 1986a, pp. 268-269; Lather, 1986b).
Research and theory, which can inform praxis	Research as praxis

1982). Reality is expanded from earth and its planetary universe to cosmos. The aim of emancipatory action is to bring humans into communities where the interests of all parties are of concern. The long-term valued end is to integrate theory, research, and action to achieve global justice for all living systems. Earth is viewed as a living organism with humans as one among many. Thus, plants, animals, water, air are seen as aspects of the whole.

What is true? (epistemology); what is real? (ontology); and what is good? (axiology) are all of interest in critical science endeavors. Validity and reliability are based on emancipatory criteria. Are the questions being sought ethically oriented? Are the means of seeking answers to the questions grounded in methods which honor the interests of all living systems? Are the results of the investigation emancipatory in intent? Hultgren (1987) illustrated this organic wholeness of critical science by placing story in a context which reveals inconsistencies among personal, community, and politics. These blended accounts lead to actions which address contradictions for the benefit of all interested parties. Qualitative-oriented research places the intent of specific methods within a moral framework. Research questions, therefore, lead to eco-centered ways of knowing and knowledge (Vaines, 1988; Brown and Paolucci, 1979). Table 1 illustrates some qualities of interpretive and critical sciences.

Quantitative and Qualitative Research Traditions: Complementary Uses for Home Economics

Gaining an understanding of quantitative and qualitative research traditions provides a map to guide developments which are of importance to research questions related to home economics. Manifestations of such consistency are reflected in the language used, the project strategy, and the role of the researcher (MacCleave, 1989, p. 3, for example). Table 2 summarizes an example of this by outlining distinctive characteristics between two different ways of gathering data: the interview (quantitative research tradition) and the conversation (qualitative research tradition).

Interviews and conversations can be designed to be complementary. Table 2 illustrates ways in which similar questions can be explored by focusing on the differences inherent in each tradition. In turn, the data informs the researcher as well as the researched about ways in which the results can be interpreted and blended.

The outcomes of scholarly endeavors are distorted when research questions are pursued in limited ways, when knowledge is assumed to consist of discrete territories, and when scientific literacy is sought through inconsistent means. If the nature of quantitative and qualitative research traditions are respected, integration can facilitate more holistic understandings (Howe, 1988).

Home economics struggles with questions appropriate to understanding everyday life. What kinds of data are important to understand family as an environment and family in the near environment (Bubolz & Sontag, 1988)? Many ways of knowing are important in order to view home economics as a practical science and more problem oriented than subject matter centered. A holistic orientation of the field has been seen by some home economics scholars as a way of bringing together theory, research, and praxis.

Thus sense-making should encompass many views of reality where people, ideas, events, and things are perceived as self-organizing and intelligent (Pais, 1988). Such approaches can lead to more inclusive knowledge, essential to understanding home economics (Budewig, 1964). How is knowledge created? What kinds of knowledge can be created? How does knowledge relate to different ways of knowing? In what ways does the complementary nature of knowledge promote emancipatory intent? What knowledge and knowing are appropriate for understanding home economics (Bernstein, 1976; Bernstein, 1983)?

Quantitative and qualitative research traditions provide a rich background from which these and other related questions can be addressed. By seeing the place of each tradition, by using each with thoughtful integrity, and by blending where appropriate, home economics can lead the way to better understanding of

itself and other problem-oriented reflective fields.



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Continued on page 23

Phenomenology:

The Pursuit of Meaning In Everyday Life

Francine H. Hultgren

The position taken in this paper is that the choice of research methodology is not merely one of appropriate fit for a research question but rather it is a consideration of orientation or stance grounded in specific assumptions. The stance of phenomenology is displayed to reveal how the assumptions differ so as not to blur these distinctions in the label of qualitative nor in the mixing of paradigms.

This article is an attempt to clarify the explicit nature of one form of interpretive inquiry, phenomenology, so as to allow its uniqueness to be seen as a particular orientation or research stance. As we work to create more desirable conditions of family life, phenomenology helps us to see the human and political contexts.

What is Phenomenology?

Simply stated, phenomenology attends to the world as we experience it in everyday life. Phenomenology aims for a deeper understanding of what persons go through as they conduct their day-to-day lives in the language of everyday life. The problem with simplicity is that meanings tend to get flattened out or words get used in ways that distort or conceal the original meaning. So we are faced with a dilemma: whether to talk about phenomenology in phenomenological terms or to talk about phenomenology in the language of everyday life. Now we are not only faced with a dilemma but with a contradiction

as well. If phenomenology seeks to understand the everyday life of experience by using the language of this everyday-life world, how is it that there can be a language that is phenomenological and not a language of the everyday life? On the one hand, we are talking about phenomenology as a philosophical position that, to some, appears unnecessarily wordy, complicated, and even alienating due to its special vocabulary. On the other hand, we are talking about the doing of phenomenology, to be engaged in it, that calls for a language to describe what we experience rather than how we conceptualize or theorize about it. It is this very tension between *phenomenology as philosophy* and *phenomenology as a way of inquiring* that is my call to address the meaning of everyday life.

Everyday Life As A Phenomenon

The concept of everyday life is fundamental to phenomenology. It is to be understood as "that province of reality which the wide-awake and normal adult simply takes for granted in the attitude of common sense. By this taken-for-grantedness, we designate everything

which we experience as unquestionable; every state of affairs is for us unproblematic until further notice" (Schutz & Luckmann, 1973, p. 3-4). What is taken for granted is the familiar. People immersed in their day-to-day concerns and activities normally do not give them much conscious attention. Taking for granted a world that is self-evidently *real* comprises what Schutz and Luckmann call the natural attitude. This unexamined world of the natural attitude, however, is called into question when a new or novel experience is incongruent with one's previous experience. When this happens, Schutz and Luckmann say the taken-for-granted nature of experience *explodes*; a jolt or shock is experienced, brought about by a radical change in consciousness of what was previously taken for granted. Berkeley (1985) calls this disruption a *phenomenological epoch* that frees us for a meditation upon the habitual.

Language is something we readily take for granted until we are jolted into seeing a discrepancy in meaning. As we use the term everyday life in reference to the unique contribution of home economics for looking at family, we may have come

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to use that term loosely and may have failed to recognize that there are different orientations for viewing the experience of everyday life. What I seek to do here is to bring forward the phenomenological position by displaying its framework for viewing everyday life (the philosophy) through examples of questioning from those who stand within this orientation (the doing) as contrasted with other orientations.

The Stance of Phenomenology Toward Everyday Life (Philosophical Position)

As we develop an approach for studying everyday life, two questions must be addressed: What is our stance or orientation for viewing the world? What methods of analysis and meaning making will we use? One cannot be addressed without the other because the stance we take toward everyday life is a determinant of how we choose to study it. This is a first departure from the dominant form of empirical/analytic inquiry, wherein the method has been the determinant of one's stance.

Douglas (1970) contrasted three stances for viewing the phenomena of everyday life. In the *absolutist stance*, persons are viewed as objects causally determined by forces outside of self. The assumption is that everyday life can be studied in terms of categories formed prior to the study itself, and the goal is to control phenomena in everyday life in the same way that natural objects would be. The everyday-life phenomena is scientific (artificially constructed categories) rather than studied as the first-order phenomena as experienced. At the extreme of this stance is the *natural stance* that is supposedly taken by persons in everyday life. The experience of everyday life is taken as fact; the world is taken as it exists or as one finds oneself in it (common sense categories of experience) and is not questioned. The third stance as proposed by phenomenologists is that of the *theoretic stance*. In this view of everyday life, one stands back from, reflects upon, and reviews the experience taken for granted in the natural stance. In the earlier work of Husserl (1931) this standing back to look was called *bracketing*, the

purpose of which was to hold in suspension one's common sense taken-for-granted views of the world so as to shift modes of attention to reveal other possibilities. When we look at the ordinary in this way, it becomes possible to see the extraordinary or unique as it comes forward by questioning it or taking it seriously.

What these different stances serve to point out are that the different ways we view phenomena in everyday life have real implications for how we choose to go about studying them. I will use a concrete illustration to display how one might approach the subject of children and divorce from these three different stances. If we stood within the absolutist stance we would tend to see the phenomenon in categories like intact families, broken families, happy children, unhappy children, psychological disturbances, healthy psychological states, aggression, submissiveness, and the list could go on. The variables would be measured, manipulated, and controlled to make predictions or confirm cause and effect about the impact of growing up in broken homes.

To think in terms of the natural attitude, we would have the pervasive cultural perception that marriage is normal and divorce is failure. Within a society there are bound to be those who are successful in marriage and those who are failures, therefore there is not much that can be done about it. Statistics about the successes and failures give an accurate picture of the way the world is. If one takes the theoretic stance of the phenomenological position, one would stand back and look at the basic assumptions of the natural attitude that in this case would be the following: divorce is a life problem for children rather than a life experience; divorce is deviant (Wood, 1983). The special vocabulary that has flourished around the subject of divorce (broken, deviant, nonintact, disorganized, failed, incomplete) would be called into question. It can be seen that the natural attitude lacks a critical questioning and accepts things as they are.

Within the theoretic stance, one undertakes a description of the world as taken for granted and then adopts a critical phenomenological attitude to call into

question the taken-for-granted views. In my view, then, I see the critical and interpretive modes of inquiry merging within the theoretic stance. When one is committed to taking a theoretic stance toward everyday life, the study of the phenomena of everyday life must be met on their own terms, retaining the integrity of the phenomena. This means that they must be studied as experienced in everyday life, as opposed to the phenomena being created or forced through experimental situations removed from the world of everyday life. The way in which phenomena are analyzed or interpreted varies considerably among the stances. To look at the phenomena of everyday life in the theoretic stance calls for a way of inquiring that I would call critical phenomenological. That form of inquiry calls for participation in everyday life with those of whom we wish to inquire by making them partners in the dialogue (Beekman, 1983). As stated by Langweld (1983):

From a phenomenological point of view, we seek the essential meanings in the human encounter, rather than in pure reflection or in speculative theories, which only pretend to have practical impact. If we seek our grounds in a human science and, therefore, as practically engaged social actors, we must enter the human spaces of the encounter in concreto (p. 6).

Everyday life is not a private world but rather an intersubjective one because the social world is experienced through shared meanings with others. "Our social world, the everyday world of human experience, is founded on the belief in shared understanding" (Barritt, Beekman, Bleeker, & Mulderij, 1979, p. 5). Turning to the lived experience, in this way, calls for the doing of phenomenology.

The Doing of Phenomenology: What Are The Questions?

As we turn to everyday life as it is experienced rather than as it is conceptualized or categorized, phenomenology asks the question, What is this or that experience like? It does not seek to explain or control the world but rather to offer more insightful descriptions of the way world is experienced so that we are put



more direct contact with it (van Manen, 1984). Phenomenological research tries to describe an experience from the point of view of the experiencer, and in the process it hopes to achieve awareness of different ways of thinking and acting in its search for new possibilities. As we consider ways to call forth this kind of experienced description, we must ask questions that penetrate to the core of the concerns that are taken for granted. As van Manen suggested, phenomenology "sponsors a certain attentive awareness to the details and seemingly trivial dimensions of our everyday...lives. It makes us thoughtfully aware of the consequential in the inconsequential, the significant in the taken-for-granted" (1984, p. 36).

Mindful of Herrin's (1986) call to home economists to describe what we uniquely see about everyday life in the home and family, I would like to be able to share the research of home economists who have studied the experiences of everyday life from the perspective of phenomenology. But I am hard pressed to find it. If I turn to home economics education research, I can cite several studies in this realm that have sought to understand the everyday life of teachers, students, student teachers, and graduate students (Copa, 1984; Slocum, 1989; Stark, 1989; Whitehead, 1989) including my own work (Hultgren, 1982; 1986; 1987; 1989). In the interest of looking at phenomena of everyday life in families, I will share some of the questions pursued in phenomenological studies by non-home economists, in the hopes of pointing the way to possibilities that such inquiry offers for us.

A journal that is dedicated to studies that maintain a perspective on the lived human experience is *Phenomenology + Pedagogy*, published by Max van Manen, University of Alberta. In reviewing the titles of articles published since its inception in 1983, I found several that demonstrate what we should be looking at in home economics if we want to lay claim to studying the everyday life in families. This is not to say these are the only possible topics but they are targeted on concerns of everyday life that call forth significant questions about how we live in families with children, youth, and adults. I will first identify the titles and then share

some of the questions of these phenomenological investigations. Listen to the call of the everyday life in each of the following: Stepmothering, Naming Our Child, Living With Children, Modes of Waiting, The Experience of Old Age Forgetfulness With People For Whom We Care, Birthing Pain, Toys, The World Through Children's Eyes: Hide and Seek and Peekaboo, The Children's Understanding of Time, The Metaphor of Adolescence, and The Secret Place in the Life of the Child. The questions and themes pursued in these articles reflect the phenomenological intent of revealing the experiences as people have them in everyday living in order that we can understand them and offer alternatives for change if that be desired.

Brophy (1984) asked: How am I to be a stepmother? What is a stepmother anyway? What is the experience of stepmothering? An insightful description of this experience reveals a theme of separateness:

The context, which provides the ground for my relationship with my stepchildren, is one of separateness. It is the moment that holds the expected potential for intimacy that most often reveals our separateness... The children greet us "Good morning, Daddy, Good morning, Verna." I have a sense of there being Dennis and I, Dennis and his children, Dennis and his past, but not of us: Dennis, me, and the children together. (Brophy, 1984, p. 273).

Kelpin (1984) asked: "What do the pains of birth tell us about ourselves, about our sufferings and our joys?... Is it possible that viewing pain-as-lived may reveal the sublimity and joy as well as the agony, the hurtfulness of pain of childbirth?" (p. 178). In the spirit of the theoretic stance, she questioned the following assumptions: (a) The idea that pain should be denied; (b) The idea that pain must be relieved; (c) The assumption that pain is only negative; and (d) The assumption that pain can be explained. After she summarized the themes of the experience, she ended with the following: "As we birth our children, we, in a sense, birth ourselves. We are mothers, like other mothers, and our daughters after us" (p. 186).

Rollins (1984) shared some of the fol-

lowing reflections on old-age forgetfulness.

I read somewhere that we are once an adult but twice a child. We don't remember the events of our early childhood and often don't remember the events of our old age. There must be a connection. Are there things that happen during our beginnings and endings that are too painful to be remembered (p. 154)?

Could using "we" keep me from feeling as alone as I know I am? Do we mask our memories for the comfort necessary to survive (p. 155)?

What do these accounts of everyday life reveal to us? If we are to remain responsive to the commitment of phenomenology, we must allow the knowledge we seek to speak to us through the lived experience rather than through the categorical abstractions of knowledge found in schemas, models, and theories. The human interest comes first, and in listening to that voice we become more aware. The uncritical acceptance of the taken-for-granted attitude can be interrupted or brought out of hiding, and as a result there is a possibility for change and improvement when we are reflectively aware of the barriers and/or contradictions. How might this same commitment to the everyday life through phenomenology be seen in relation to teaching, and what real examples of it do we have in home economics?

The Doing of Phenomenology in the Teaching of Home Economics

A phenomenological focus on the lived experience of teaching has been the basis of my research with student teachers as I have sought to gain access to the life of student teaching. The attempt is to help the student teachers understand their own lives and how they are connected with taking action in the everyday world of teaching. I am pursuing the following phenomenological questions: What does it mean to experience student teaching? What does it mean to be a student teacher? I am concerned with language expressive of what student teachers as person are experiencing as heard in their voices, as opposed to observed in their performance. I am finding many insightful themes expressed in their written ac-

counts of teaching experiences. The following few examples reveal how the ordinary is filled with the extraordinary as the themes represent significant meanings for the student teachers (Hultgren, 1987; 1989).

I don't know whether to commit suicide or go bowling! I really dislike doing things I can't do well!!! I seem to be feeling a sense of annoyance from my cooperating teacher. I am trying to be polite but am feeling a sense of frustration in getting direction from her. I get the feeling she thinks I should just jump in—sink or swim! I will probably have these feelings until I have a structured plan.

And what about higher level questions about casseroles? I just don't know why I can't get excited about the subject matter this week (main dish casseroles)! I find the lessons uninspiring and wonder how to present this very technical topic in an untechnical but interesting way.

It's like falling in love with your doctor. My cooperating teacher and I have had more time together. We seem to have a good rapport and get along well together. I admire her style and ease and find myself copying her. Is that normal? Like falling in love with your doctor?

Today was the day Mr. K paid me a visit! When I was giving my lesson I did not make it a point to look at him. When he got up and left half-way through it rattled me. I initially felt, oh God, I was doing so bad that he couldn't stand to watch any more. When he discussed his observation with me 6th period, his manner was cold and impersonal. . . I feel as if I'm such a burden to him—having to waste his time watching me fulfill a duty he doesn't have time for. He never told me why he left yesterday.

"The Outsider" should be my middle name! It haunts me and taunts me no matter where I am or who I am with. I'm terrified to be the Outsider. The loneliness of this position is almost unbearable.

I'm finding teaching painful lately. Maybe that's why I am so discouraged. Not teaching itself is painful, but thinking about students' lives and problems. I see a lot of pain in their eyes.

In these accounts of the everyday life of teaching, we hear some of the student teachers' secrets and struggles that are constitutive of their experience of lived pedagogy as opposed to that which is conceptualized or theorized. If we take the stance of phenomenology and take a look at the ordinary described in these accounts, what is it about our taken-for-granted view of student teachers that must be questioned? For me what is called into question is our assumption that anxiety is necessarily bad. What

often happens when we hold that assumption is that we seek prescriptive or recipe approaches to relieve that anxiety rather than allow the student teachers to live in that tension and experience what stands behind it. If we look at the mood of anxiety as a positive theme in our work with student teachers, it might be seen as a means for opening the way for them to really know their pedagogical situation in a lived sense. As we provide a pedagogic space for their experiences, where ideas and feelings can arise within their everyday life of teaching, we make it possible for their concealed or unarticulated knowledge to come out of hiding. This then becomes a basis for more enlightened teaching practice.

As a phenomenological hermeneutic researcher, I make use of such insights to improve the conditions for student teachers. This kind of understanding allows me to act in more enlightened ways and allows the same for the student teachers and others who have pedagogic responsibility for them. I do not seek to use another paradigm for my inquiry because I reflect what this paradigm assumes; it is not theory driven but rather it seeks to understand the pretheoretic in order to act more authentically as persons and pedagogues. Others might see opportunity for testing variables in the interest of theory formation. And still others might seek to change the structural elements in schooling and the experience of the institution of student teaching. Applications of the insights may go in different directions but what unites them would be the question: What should be done for and with student teachers to allow for their optimum development? Phenomenology could be described as opening the way to more fully address that question.

Summary

The critical phenomenological research paradigm described here is one alternative for expanding our knowledge of everyday life for individuals and families. The ability to give conscious attention to everyday phenomena will help each experienter to find new possibilities for thinking, acting, and changing. Perhaps the examples of the phenomenological

perspective applied to home economics education and everyday experiences will give rise to other significant questions and encourage further use of this paradigm.

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The Effect of Women's Employment on Quantitative and Qualitative Time-Use Measurements: A Review and Synthesis

Elizabeth B. Goldsmith

As more women join the labor force, home economists in the 1990's need to update their knowledge of individual and family time use. This paper defines and describes quantitative and qualitative time-use methodologies. The author supports the multi-method approach as it provides a system of cross checks and it tells us not only how time is spent but also how satisfied families are with their time use.

One of the most important societal and economic movements of the twentieth century has been the number of women entering the labor market. The traditional family model of the husband as breadwinner and the wife as homemaker has become increasingly rare. Of all married couples in 1986, 55.3 percent of the wives worked outside the home (Hartmann, 1988). It has been forecasted that a female born in 1980 will spend 29.4 years in the labor force compared to 39.4 years for a male. This represents a change of women's worklife expectancy from 32 percent in 1940 to 76 percent presently (Hartmann, 1988).

At the same time that families and the nation as a whole are benefiting from this increased labor-force participation there is growing concern that there are costs to these benefits. In particular, there are concerns that children and marriages are suffering from insufficient attention and that women are overloaded from trying to "do it all." Atkinson, the author of *Women and Fatigue* (1985), says that American women are exhausted. There are simply not enough hours in the day and enough human energy to do all that needs to be done. Fatigue is not a weakness; it is a reality for the modern American woman.

The purpose of this article is to describe the methodologies and findings of previ-

ous research studies in quantitative and qualitative time use and provide implications for future research. The societal issues related to more women working require family resource management theorists to reassess how families allocate their time. This inquiry is not limited to research in the United States as there is increased concern in many industrial and developing countries about the significance of women's contribution to the total economic and social welfare of their populations.

Definitions

In her dissertation, Goldsmith (1977) defined the concepts of time, time use, and quantitative and qualitative time. The definitions are given in this section along with further statements about the necessity for time-use research.

Time is a system of measuring in which hours and sequential episodes are used as quantifiers. Time use is the placement of an action or event (activity) in time. Quantitative time refers to the number, kind, and duration (i.e., minutes, hours) of activities that occur at specific points in time. Qualitative time refers to the feelings about time spent in activities and types of human interaction taking place in activities. In the past, the majority of the time research has been quantitative in nature. Since the 1970's the emphasis has been on adding qualitative data to the analysis. This has been in response to the growing recognition that simply knowing how many minutes are spent washing dishes or diapering babies does not get at the more meaningful time—use data

derived from knowing how persons performing the task feel or how they interact with others included in the task. Asking qualitative questions also lets the researcher know how the individual feels rather than placing the burden of interpretation on the researcher where obvious bias or perceptual errors can occur. Family specialists are interested in collecting both quantitative and qualitative data as they provide a base for helping families understand their time use and use time more effectively to increase their overall life satisfaction.

Foundations of Time Research

Time has been a source of speculation for centuries. Its meaning in a philosophical sense dates back at least to the Pre-Socratic Age of Greece in the sixth century BC. During this period of history, Heraclitus speculated about the rhythm of events and the order in change as the reason of the universe (Chapin, 1974). In the twentieth century, Albert Einstein and Jean Piaget debated the nature of people's grasp of time which resulted in a book on the subject by Piaget (1969). For a comprehensive overview of time-management concepts see Rice and Tucker (1986, Chapter 8) and for time-management research see the December 1983 issue of the *Home Economics Research Journal*.

In the United States, some of the earliest experiences in using time allocation as a basis for studying human effort came from the studies of factory management by Frederick Taylor (1911). Taylor is considered the pioneer or father of time and motion studies (Chapin, 1974). He in-

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roduced the idea of measuring time precisely in order to examine specific activities with the intent of finding ways to reduce the amount of time used in a particular work activity. Family management researchers adopted the time and motion approach in order to probe the precise amount of time used in household work activities with the intent of increasing household efficiency. Walker (1983) pointed out that, although many social scientists conduct time research, it was home economists who took the early lead in time management in the twentieth century and developed many of the methodologies used today.

A concern for alleviating the work of farm women gave impetus to time-budget studies in the United States which were sponsored by the Home Economics Bureau of the United States Department of Agriculture in the 1920's and 1930's.

These studies focused primarily on the quantitative amount of time spent in household work by farm women. One of the most frequently quoted of these time-budget studies was conducted by Wilson (1929) who investigated the time use of 500 farm homemakers in Oregon. For a recent review of farm families and their time-management practices, see the September 1988 *Home Economics Research Journal* special issue on "Off-Farm Employment: Patterns and Effects."

In the United States, Warren (1938) was the first researcher to demonstrate that household production could be measured in work units. She found that the amount of time spent on each household work activity varied according to such factors as the number of family members, age of the youngest child, or size of dwelling unit. During the same period in Europe, the 1930's, the first time-budget studies were being undertaken in the Soviet Union (Szalai, 1972).

Quantitative Time Use Studies

In the last few decades, there have been numerous time-use studies. This section will focus on the ones most relevant to the family resource-management field.

Quantitative time-use studies employ one or more of the following methods:

1. *The self-report or diary method requires that individuals record their own time-use data on a form provided by the researcher (Walker & Woods, 1976; Natali, 1975).*

2. *The recall method requires the individual to think back (recall) and explain in detail a previous day's activities to an interviewer in person or over*

the telephone or by self-report on a form provided by the researcher.

3. *The observation method has been used extensively in anthropological as well as human ecological studies. In this method, the researcher observes and records the precise way, duration, and sequencing of a subject's activities (Nelson, 1963; Diana, 1983).*

4. *The self-observational control-signalling method is the least used time-data recording method in family resource-management research but is used extensively in business management time-data collection studies. In this method, subjects are asked to record their time use at the sound of a bell or a telephone ring or the flash of a light. In most previous studies the data recording took place at work with the permission of the company's management (Carroll & Taylor, 1968). This method incorporates a self-report just as the diary method does but in the control-signalling method the signals are random and, hence, more unexpected and less time consuming for the subject to respond to than are the lengthy on-going diary self-reports. The sporadic nature of the signal leads some researchers to conclude that you receive more accurate time-use data from the control-signalling method because of the immediacy of response.*

Researchers interested in determining the best methodology for their particular population should consult the research studies noted by each of the methodologies as a beginning step. Generally it is acknowledged that a combination of methods with built in cross-checks is the best way to obtain accurate data (Denzin, 1970; Goldsmith, 1977; Hamilton, 1989). Goldsmith (1977) used interviews and the diary, observation, and the self-observational control-signalling methods (over 300 telephone calls during a one-week period) as well as qualitative measures in her study of ten beginning families with five employed wives and five unemployed wives.

The most extensive quantitative home economics/human ecology time-use studies to date are the 1967-1968 Walker-Telling study of 1,296 families in the Syracuse, New York area (Walker & Woods, 1976) and the eleven-state spinoff studies (Walker, 1983). These studies used the combined methods of 24-hour recall, diary method, and interview. Data collection was conducted across all the days of the week so that each day was sampled an equal number of times. The Walker and Woods (1976) study established the relationship between family size and age of younger child with uses of time in various activities, particularly household production. In the eleven-state portion, the data collection took place from 1977 to 1978. The data tapes from all eleven states are available through Interuniver-

sity Consortium for Political and Social Research, University of Michigan, Ann Arbor, Michigan 48106. Researchers at regional meetings are currently planning the next wave of national time-use data collection to take place in the 1990's.

Qualitative Time Use Studies

Quantitative analysis often serves as a starting point for qualitative analysis. Questions arise in the researcher's mind about why individuals and families allocate time the way they do.

According to MacCleave (1989), knowledge that counts for the qualitative researcher is subjective, context-related, value-full, process-oriented, holistic, relevant, and internally consistent. The participant observer seeks a depth of understanding of the social phenomena under study (in this case, time use) and is particularly interested in imparting an insider's perspective. Nelson (1963) noted that the importance of events is a variable which cannot be calculated directly by clock time since it cannot be assumed that the amount of time spent in activities is synonymous with importance.

The qualitative approach attempts to investigate the meaning or significance of time use as well as how the individual feels about their time use, i.e., the satisfaction it generates. Since the 1970's, researchers have endeavored to explore qualitative time use because of the emphasis in family resource management on the quality of family life and on human potential.

Davey (1971) analyzed the Walker-Telling data to explore family-interaction patterns. She found that mothers shared significantly more time with their children than did fathers. Diana (1983), on the other hand, found more similarities than differences in mother-toddler and father-toddler interactions. Diana's findings leads one to conclude that we need more quantitative and qualitative research on family interactive time use.

Berk (1976) found that married women do most of the household tasks whether employed outside the home or not and that in general they seem resigned to the situation. Younger couples were not any more equitable in their allocation of household tasks than older couples. He found that women felt neutral about housework but they felt mostly positive about caring for children. Goldsmith

(1977) found that employed wives were more similar in their use of time and feelings about time to employed husbands than they were to nonemployed wives. Her study illustrated the importance of not just comparing men and women but comparing employment status as well. Housework evoked mostly neutral feelings for both men and women, and child care evoked mostly positive feelings.

Implications, Conclusions, and Future Research

The comparison of unemployed and employed women is a new trend in time research. It is important to distinguish if nonemployed women are not working outside the home by choice or if they are not working because they have been recently fired or can't find a job. Many previous studies ignored the employment status of women and relied on homemakers for family time-use data and on employed men for on-the-job time-use data. With the growing diversity of roles in our society it behooves time researchers to broaden their sampling to include working women, blended families, minority families, the elderly, and families with the single parent or an unemployed parent (Retherford, Hildreth & Goldsmith, 1988).

There is a definite need for more studies investigating the husband's role in household work and child care, e.g., Diana (1983), and his feelings about such activities. We also need more crossover studies which look at the time transitions between work and family such as the ones by Staines and Pleck (1983) and Richter (1984). Another avenue for future research is longitudinal studies that follow families over time and over generations. Most previous studies analyzed data collected on one day or over one week. These data do not reflect seasonal or life-cycle changes. For example, it would be interesting if Diana (1983) could follow his parent sample as the children move from elementary school years through adolescence.

In terms of methodological issues, we need more qualitative time-use data. The control-signalling method has been underutilized. More needs to be known about the relationship between feelings and activities, feelings and location of activities (situational), and feelings and activity participants.

Family members' use of time and factors which affect their time use are excel-

lent subjects for interdisciplinary team research. For example, combining an organizational behavior (business management) and human development approach would be useful in gaining more insight into the interdependence of family and work. The *work and family* literature shows great promise as a field of significant interdisciplinary research (Goldsmith, 1988).

Time-use data are sorely needed by government planners and legislators. There are over 100 bills confronting Congress regarding national child care policy. Quantitative and qualitative data could provide a basis upon which legislators could make rational decisions about policies affecting families. There are also 50 bills before Congress regarding a national policy on caregiving to the elderly. The preponderance of family interactive research has been on parent-child interactions; we know very little about parent-elderly dependent interactions. As our population ages and as more women work fulltime outside the home, more options will be required regarding who will care for our elderly. Another area of public policy which needs a reexamination is income tax and social security insurance systems which currently treat working wives unfavorably (Hartmann, 1988).

Families' time use has enormous implications for the general economy in terms of what products and services are needed in the marketplace as well as what the government can provide. To conclude, there are multiple directions for the application of both quantitative and qualitative time-use research. The methodologies are in place; they just need to be applied to new populations and settings with a renewed sensitivity to societal trends. In particular, the effect of women's employment on individual and family time use and overall choice making deserves further exploration. If anyone thinks this is not an important issue for family researchers, here is a statistic which provides food for thought: according to Schwartz (1989) in the *Harvard Business Review*, 90 percent of executive men but only 35 percent of executive women have children by age 40.



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Complementary Uses of Quantitative and Qualitative Methodologies and Paradigms in Home Economics

Suzanne D. Gyeszly and Norma Bobbitt

The purpose of this bibliography is to annotate the journal articles, monographs, and research papers, using the combined research strategies in social sciences and home economics. Materials published after 1985 were considered for citation; however, a few essential works published earlier are listed.

Achterberg, C.L. (1988). Qualitative methods in nutrition education evaluation research. *Journal of Nutrition Education*, 20(5), 244-250.

The author describes the differences between the qualitative and quantitative research analysis. Qualitative methods used in nutrition education evaluation research and the result of the research are explained in the article.

Addis, G. (1987). *What aspects of qualitative and quantitative research might reasonably count towards effective educational research*. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC., ED 283 886.

The paper examines those aspects of qualitative and quantitative research that might reasonably count toward effective educational research. The problem is addressed by examining their philosophical differences, their pursuit of reliability and validity. The possibility of rapprochement between qualitative and quantitative research is considered. The major assumptions in choosing an effective research methodology are discussed. It is concluded that educational researchers must take into consideration the respective characteristics of both qualitative and quantitative research in order to develop an optimal design for the particular problem. The optimal design may use qualitative or quantitative methodologies

or a combination of the two. Ultimately, either type of methodology must effectively address the problem at hand, must contribute to the field of knowledge, and must be both reliable and valid.

Bednarz, D. (1985). Quantity and quality in evaluation research: A divergent view. *Evaluation and Program Planning*, 8(4), 289-306.

Many evaluation researchers are not attempting to synthesize quantitative and qualitative approaches. Although such efforts appear to carry great promise, some subtleties and incompatibilities of these approaches are perhaps being overlooked. Implications for social inquiry are discussed.

Cochran, D.S., & Dolan, J.A. (1984). Qualitative research: An alternative to quantitative research in communication. *Journal of Business Communication*, 21(3), 25-32.

Noting the lack of business communication research, the authors conclude that a mind-set may exist toward quantitative research. They define and advance qualitative research techniques as an alternative.

Cook, T.D., & Reichardt, C.S. (1979). *Qualitative and quantitative methods in evaluation research*. Beverly Hills: Sage publication.

The book is the compilation of eight research projects related to qualitative and quantitative methods in evaluation research. The editors' chapter describes the qualitative and quantitative paradigms and their differences and linkages to the methods.

Firestore, W.A. (1987). Meaning in method: The rhetoric of quantitative and qualitative research. *Educational Researcher*, 16(7), 16-21.

The article focuses on the debate about quantitative and qualitative methods and whether there is a necessary connection between method type and research paradigm.

Gable, R., & Rogers, V. (1987). Taking the terror out of research. *Phi Delta Kappan*, 68(2), 690-95.

The authors define educational research as an asystematic attempt to find answers to puzzling or confusing questions that fall into four categories: descriptions, relations between factors, searches for causes of given phenomena, and searches for consequences. The article illustrates qualitative research by using a case study and quantitative research by describing statistical techniques.

Gephart, R.P. (1988). *Ethnostatistics: Qualitative foundations for quantitative research*. Beverly Hills: Sage Publications. According to the author, the meaning of ethnostatistics is conducting ethnographic studies of groups that routinely produce statistics and testing the technical and operational assumptions that are involved in the production of the statistics. Ethnostatistics is a qualitative foundation for quantitative research.

Greene, J., & McClintok, C. (1985). Triangulation in evaluation: Design and analysis issues. *Evaluation Review*, 9(3), 523-545.

A mixed-method program evaluation, concurrently using both qualitative interview data and a quantitative questionnaire. It illustrates significant design and analysis issues related to integrating quantitative and qualitative methods, specifically between-method and cross-paradigm triangulation.

Guba, E.G. (1987). Naturalistic evaluation. *New Directions for Program Evaluation*, 34(2), 23-43.

Two forms of naturalistic evaluation have appeared within the last decade: (a) a collection of qualitative techniques that are complementary to conventional quantitative methods, and (b) an alternative paradigm that emphasizes the negotiation of multiple socially constructed realities, interdependence of facts and values, and the emergent character of the evaluation process.

Hanley, T.V. (1988). Technological innovation, in the context of special education systems: A qualitative and structured

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research approach. *Journal of Special Education Technology*, 9(4), 98-101.

A multi-method investigation of the integration of computer-assisted instruction into the curriculum for mildly handicapped high school students is being conducted. Preliminary findings support efforts in four areas: needs assessment procedures, software selection, inservice training and technical assistance, and school communications mechanisms.

Hatch, J.A. (1989). The quantoids versus the smoothers: Struggling with methodological rapprochement. *Issues in Education*, 3(3), 58-67.

The author outlines the foundations of the qualitative and quantitative approaches to research and discusses the implications of these two completely different approaches in educational research. The article points out that they are not as complementary as they are separate scientific paradigms.

Howe, K.R. (1985). Two dogmas of educational research. *Educational Researcher*, 14(8), 10-18.

In educational research, rigid distinctions between the relative merits of quantitative research often rest on positivistic dogma. In contrast, post-positivistic thought eliminates the intractable problem engendered by positivistic epistemology of a forced choice between value-laden and value-free research methods.

LaRossa, R., & Wolf, J.H. (1985). On qualitative family research. *Journal of Marriage and the Family*, 47(3), 531-541. Using historical and content analysis, the role of qualitative family research is examined. The argument is made that qualitative as well as quantitative research are indispensable to the progress of family social science.

Lawler, E.E., Mohrman, A.M., Mohrman, S.A., Ledford, G.E., & Cummings, T.G. & Associates. (1985). *Doing research that is useful for theory and practice*. San Francisco: Jossey-Bass.

The authors discuss how to make research approaches useful for theory and practice as well as reveal insights about how to think about research, formulate problems and research strategies, deal with issues, and choose methods.

Although the examples are mostly from organizational research, questions about research methodology and value are confronted by all researchers.

Locke, L.F. (1986). *The question of quality in qualitative research*. Paper presented at the Measurement and Evaluation Symposium, Baton Rouge, LA. ED 283 869.

Qualitative research is a model for systematic, data-based inquiry. It has been used widely in the social sciences, and it has a growing acceptance in educational research. Its purpose is to describe and understand a particular, bounded social setting. The differences between quantitative and qualitative research involve the methods employed at the tactical level and the assumptions held by the investigator at the strategic level. As a model for inquiry, qualitative research is interpretive. A key assumption holds that it is not possible to understand people and their actions unless they are taken within the whole context. Qualitative research sometimes is called "naturalistic" because it is not interventionist, and it involves observations of settings in their natural state. Suggestions for avoiding subject falsification include: (a) being aware of risk and not letting down guard; (b) remembering that most dissembling is triggered by perceived threat; (c) remembering that faking is difficult to sustain over time; and (d) following procedures for cross-checking subject accounts

Marshall, C., & Rossman, G.B. (1989). *Designing quantitative research*. Beverly Hills: Sage Publications.

The book is intended to be a guide for everyone interested in designing qualitative studies. It describes the step-by-step approach of framing the research questions, designing the research, and managing time and resources. Established researchers, graduate students, and policy analysts can use this book for qualitative research.

Miles, M.B., & Huberman, A.M. (1984). *Qualitative data analysis—A sourcebook of new methods*. Beverly Hills: Sage Publications.

The authors define the meaning of the

qualitative analysis and its detailed procedures (e.g., focusing and bounding the collection of data, analysis during the data collection, within-site analysis, cross-site analysis, matrix displays and drawing, and verifying conclusions). The book is a practical resource tool for all researchers who make use of qualitative data.

Patton, M.Q. (1980). *Qualitative evaluation methods*. Beverly Hills: Sage Publications.

The author concentrates on the conceptual issues in the use of qualitative methods for evaluation research, the collection of the quality data, and analysis of data.

Phelan, P. (1987). Compatibility of qualitative and quantitative methods: Studying child sexual abuse in America. *Education and Urban Society*, 20(1), 35-41.

The author illustrated how the combined use of qualitative and quantitative methods were necessary in obtaining a clearer understanding of the process of incest in American society. The article argues that the exclusive use of one methodology would have obscured important information.

Phelan, P. (1986). *The usefulness of qualitative and quantitative methods: Studying incest in America*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA. EJ 381 244.

The purpose of this study is to illustrate how the combined use of qualitative and quantitative methods were necessary in obtaining within this society a clearer understanding of incest. The paper opens with a report of studies carried out on natural father and stepfather incestuous families, and this opens up the issue of the appropriateness of both types of research methodologies. Differences found in the types of incest and responses of families to treatment illustrate findings that would not have been uncovered had either methodology been used to the exclusion of the other. The argument is made that the dichotomization of quantitative and qualitative techniques is both misleading and unnecessary. The methodological issues are rather ones of

judgment about what will yield needed information in a given investigation. The paper also gives some attention to the related issue of which methodological approaches are appropriate when a fresh line of inquiry is beginning in a field, and mention is made of an obvious issue that

arises in dealing with incest — the handling of sensitive research problems.

Smith, J.K., & Heshusius, L. (1986). Closing down the conversation: The end of the quantitative-qualitative debate among educational inquirers. *Educational Researcher*, 15(1), 4-12.

The authors outline the recent transition, within educational research, from conflict to cooperation between quantitative and qualitative approaches. The article asserts that compatibility is based on a confusion between method as technique and method as logic of justification and argues that the claim of compatibility cannot be sustained and blocks an interesting and important conversation between the two approaches.

Splaine, J. (1985). The qualitative versus quantitative debate: A position. *Media Management Journal*, 4(4), 25-30.

The author presents a sampling of commentary about epistemological function, about the diverse research processes that result from a particular philosophical position, and about technical implementation of various attempts to discover knowledge. The article discusses the qualitative versus quantitative research debate highlighting ethnography, controlling for bias, and the quantitative-qualitative nexus.

Stowe, R.C. (1986). *Annotated bibliography of publications dealing with qualitative and quantitative indicators of the quality of science*. A Technical Memorandum of the Quality Indicators Project, Professor Gerald Holton, Jefferson Physical Lab., ED 274 520.

Designed to assist in the study of techniques for and approaches to the evaluation of scientific research, this annotated bibliography of publications deals with qualitative and quantitative indicators of the quality of science. Entries are provided in the following categories: (a) bibliometric indicators of the quality of scientific research, (b) qualitative approaches to and more general works on research evaluation; (c) works dealing with science indicators; (d) forecasting and research priorities; (e) peer review; (f) quality and

quantity in the history of science and philosophy; (g) education; (h) issues involving quantity and quality in particular disciplines (including social indicators, history, health, and policy evaluation); (i) sociology of science; (j) methodological papers and bibliographies; and (k) access of women to participation in scientific research.

Torney-Purta, J. (1986). *Qualitative and quantitative research on the knowledge of global issues, international attitudes, and skills of negotiation among secondary school students*. Paper presented at the Meeting of the Comparative and International Education Society, Toronto, Ontario, Canada, ED 274 581.

This paper suggests a model for looking at research and presents results from two projects which combine qualitative and quantitative measures to examine knowledge of global issues, international attitudes, and skills of negotiation among secondary school students. The model centers on the young person as an individual and pays special attention to the influences of school and family. These three units are shown within a larger cultural/community context which may be thought of as setting the boundaries within which the family and the school exert their influences.

Continued from page 9

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